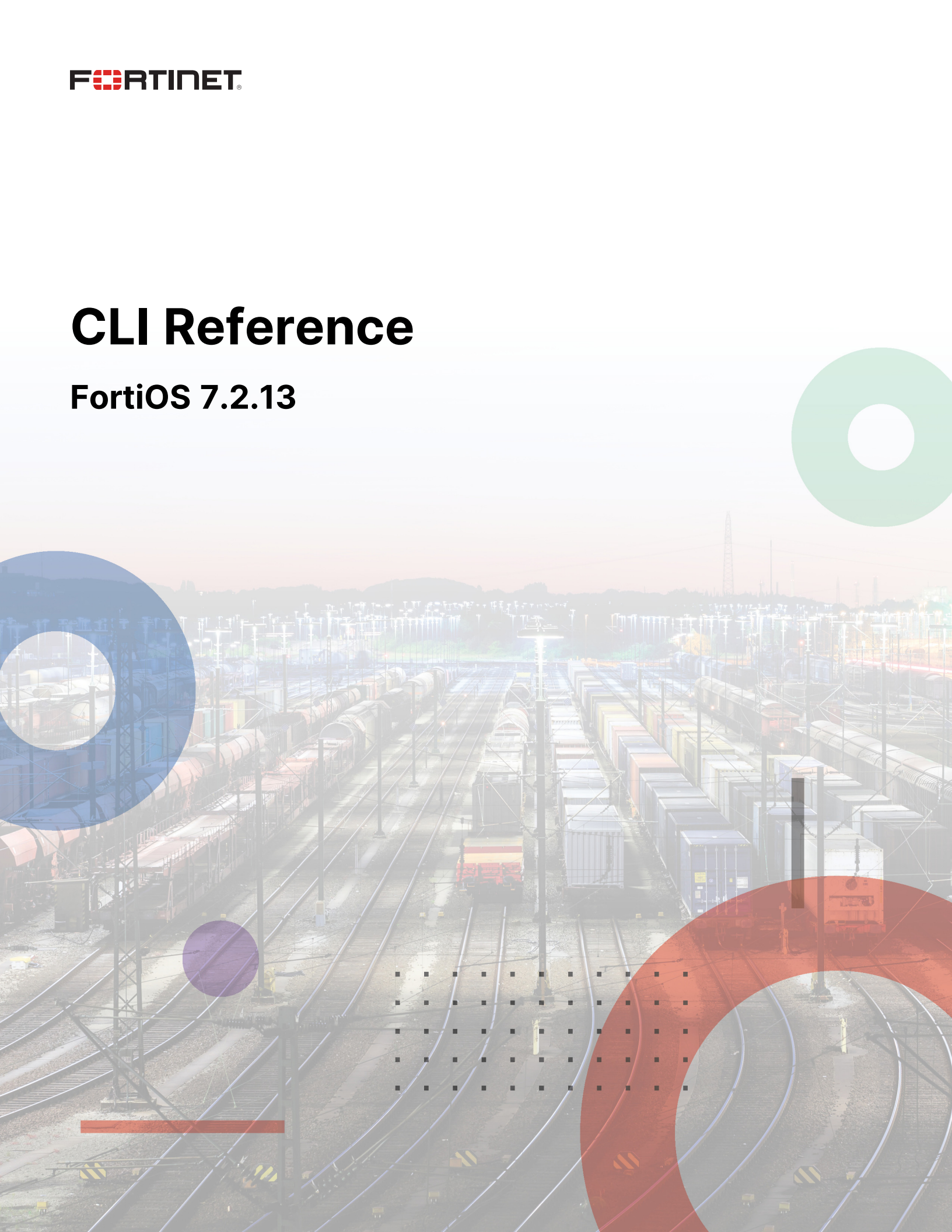


CLI Reference

FortiOS 7.2.13



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FortiOS 7.2.13 CLI Reference

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Change Log

Date	Change Description
2026-01-29	Initial release of the FortiOS 7.2.13 CLI Reference.

FortiOS CLI reference

This document describes FortiOS 7.2.13 CLI commands used to configure and manage a FortiGate unit from the command line interface (CLI). For information on using the CLI, see the [FortiOS 7.2.13 Administration Guide](#), which contains information such as:

- [Connecting to the CLI](#)
- [CLI basics](#)
- [Command syntax](#)
- [Subcommands](#)
- [Permissions](#)

Availability of commands and options

Some FortiOS CLI commands and options are not available on all FortiGate units. The CLI displays an error message if you attempt to enter a command or option that is not available. You can use the question mark '?' to verify the commands and options that are available.

Commands and options may not be available for the following reasons:

FortiGate model

All commands are not available on all FortiGate models. For example, a hardware switch can be configured only on models which have the corresponding hardware switch chipset.

Hardware configuration

For example, settings like `mediatype` would only be available on units with SFPs.

FortiOS Carrier, FortiGate 5K/6K/7K, FortiGate with LTE, etc.

Commands for extended functionality are not available on all FortiGate models. The CLI Reference may not include all commands.

Command tree

Enter `tree` to display the entire FortiOS CLI command tree. To capture the full output, connect to your device using a terminal emulation program, such as PuTTY, and capture the output to a log file.

- To view all available commands, enter `tree`.
- To view a specific configuration branch of a tree, enter `tree <branch>`, for example: `tree system`.

- To view all available diagnose commands, enter `tree diagnose`.
- To view all available execute commands, enter `tree execute`.

CLI configuration commands

Use configuration commands to configure and manage a FortiGate unit from the command line interface (CLI).

alertemail

This section includes syntax for the following commands:

- [config alertemail setting on page 115](#)

config alertemail setting

Configure alert email settings.

```
config alertemail setting
  Description: Configure alert email settings.
  set FDS-license-expiring-days {integer}
  set FDS-license-expiring-warning [enable|disable]
  set FDS-update-logs [enable|disable]
  set FIPS-CC-errors [enable|disable]
  set FSSO-disconnect-logs [enable|disable]
  set HA-logs [enable|disable]
  set IPS-logs [enable|disable]
  set IPsec-errors-logs [enable|disable]
  set PPP-errors-logs [enable|disable]
  set admin-login-logs [enable|disable]
  set alert-interval {integer}
  set amc-interface-bypass-mode [enable|disable]
  set antivirus-logs [enable|disable]
  set configuration-changes-logs [enable|disable]
  set critical-interval {integer}
  set debug-interval {integer}
  set email-interval {integer}
  set emergency-interval {integer}
  set error-interval {integer}
  set filter-mode [category|threshold]
  set firewall-authentication-failure-logs [enable|disable]
  set fortiguard-log-quota-warning [enable|disable]
  set information-interval {integer}
  set local-disk-usage {integer}
  set log-disk-usage-warning [enable|disable]
  set mailto1 {string}
  set mailto2 {string}
  set mailto3 {string}
  set notification-interval {integer}
  set severity [emergency|alert|...]
  set ssh-logs [enable|disable]
  set sslvpn-authentication-errors-logs [enable|disable]
  set username {string}
  set violation-traffic-logs [enable|disable]
```

```

set warning-interval {integer}
set webfilter-logs [enable|disable]
end

```

config alertemail setting

Parameter	Description	Type	Size	Default						
FDS-license-expiring-days	Number of days to send alert email prior to FortiGuard license expiration (1 - 100 days, default = 15).	integer	Minimum value: 1 Maximum value: 100	15						
FDS-license-expiring-warning	Enable/disable FortiGuard license expiration warnings in alert email.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable FortiGuard license expiration warnings in alert email.</td></tr><tr><td>disable</td><td>Disable FortiGuard license expiration warnings in alert email.</td></tr></table>	Option	Description	enable	Enable FortiGuard license expiration warnings in alert email.	disable	Disable FortiGuard license expiration warnings in alert email.			
Option	Description									
enable	Enable FortiGuard license expiration warnings in alert email.									
disable	Disable FortiGuard license expiration warnings in alert email.									
FDS-update-logs	Enable/disable FortiGuard update logs in alert email.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable FortiGuard update logs in alert email.</td></tr><tr><td>disable</td><td>Disable FortiGuard update logs in alert email.</td></tr></table>	Option	Description	enable	Enable FortiGuard update logs in alert email.	disable	Disable FortiGuard update logs in alert email.			
Option	Description									
enable	Enable FortiGuard update logs in alert email.									
disable	Disable FortiGuard update logs in alert email.									
FIPS-CC-errors	Enable/disable FIPS and Common Criteria error logs in alert email.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable FIPS and Common Criteria error logs in alert email.</td></tr><tr><td>disable</td><td>Disable FIPS and Common Criteria error logs in alert email.</td></tr></table>	Option	Description	enable	Enable FIPS and Common Criteria error logs in alert email.	disable	Disable FIPS and Common Criteria error logs in alert email.			
Option	Description									
enable	Enable FIPS and Common Criteria error logs in alert email.									
disable	Disable FIPS and Common Criteria error logs in alert email.									
FSSO-disconnect-logs	Enable/disable logging of FSSO collector agent disconnect.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable logging of FSSO collector agent disconnect.</td></tr><tr><td>disable</td><td>Disable logging of FSSO collector agent disconnect.</td></tr></table>	Option	Description	enable	Enable logging of FSSO collector agent disconnect.	disable	Disable logging of FSSO collector agent disconnect.			
Option	Description									
enable	Enable logging of FSSO collector agent disconnect.									
disable	Disable logging of FSSO collector agent disconnect.									
HA-logs	Enable/disable HA logs in alert email.	option	-	disable						

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>enable</i>	Enable HA logs in alert email.		
	<i>disable</i>	Disable HA logs in alert email.		
IPS-logs	Enable/disable IPS logs in alert email.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable IPS logs in alert email.		
	<i>disable</i>	Disable IPS logs in alert email.		
IPsec-errors-logs	Enable/disable IPsec error logs in alert email.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable IPsec error logs in alert email.		
	<i>disable</i>	Disable IPsec error logs in alert email.		
PPP-errors-logs	Enable/disable PPP error logs in alert email.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable PPP error logs in alert email.		
	<i>disable</i>	Disable PPP error logs in alert email.		
admin-login-logs	Enable/disable administrator login/logout logs in alert email.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable administrator login/logout logs in alert email.		
	<i>disable</i>	Disable administrator login/logout logs in alert email.		
alert-interval	Alert alert interval in minutes.	integer	Minimum value: 1 Maximum value: 99999	2
amc-interface-bypass-mode	Enable/disable Fortinet Advanced Mezzanine Card (AMC) interface bypass mode logs in alert email.	option	-	disable

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>enable</i>	Enable Fortinet Advanced Mezzanine Card (AMC) interface bypass mode logs in alert email.		
	<i>disable</i>	Disable Fortinet Advanced Mezzanine Card (AMC) interface bypass mode logs in alert email.		
antivirus-logs	Enable/disable antivirus logs in alert email.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable antivirus logs in alert email.		
	<i>disable</i>	Disable antivirus logs in alert email.		
configuration-changes-logs	Enable/disable configuration change logs in alert email.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable configuration change logs in alert email.		
	<i>disable</i>	Disable configuration change logs in alert email.		
critical-interval	Critical alert interval in minutes.	integer	Minimum value: 1 Maximum value: 99999	3
debug-interval	Debug alert interval in minutes.	integer	Minimum value: 1 Maximum value: 99999	60
email-interval	Interval between sending alert emails (1 - 99999 min, default = 5).	integer	Minimum value: 1 Maximum value: 99999	5
emergency-interval	Emergency alert interval in minutes.	integer	Minimum value: 1 Maximum value: 99999	1

Parameter	Description	Type	Size	Default						
error-interval	Error alert interval in minutes.	integer	Minimum value: 1 Maximum value: 99999	5						
filter-mode	How to filter log messages that are sent to alert emails.	option	-	category						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>category</td><td>Filter based on category.</td></tr><tr><td>threshold</td><td>Filter based on severity.</td></tr></table>	Option	Description	category	Filter based on category.	threshold	Filter based on severity.			
Option	Description									
category	Filter based on category.									
threshold	Filter based on severity.									
firewall-authentication-failure-logs	Enable/disable firewall authentication failure logs in alert email.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable firewall authentication failure logs in alert email.</td></tr><tr><td>disable</td><td>Disable firewall authentication failure logs in alert email.</td></tr></table>	Option	Description	enable	Enable firewall authentication failure logs in alert email.	disable	Disable firewall authentication failure logs in alert email.			
Option	Description									
enable	Enable firewall authentication failure logs in alert email.									
disable	Disable firewall authentication failure logs in alert email.									
fortiguard-log-quota-warning	Enable/disable FortiCloud log quota warnings in alert email.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable FortiCloud log quota warnings in alert email.</td></tr><tr><td>disable</td><td>Disable FortiCloud log quota warnings in alert email.</td></tr></table>	Option	Description	enable	Enable FortiCloud log quota warnings in alert email.	disable	Disable FortiCloud log quota warnings in alert email.			
Option	Description									
enable	Enable FortiCloud log quota warnings in alert email.									
disable	Disable FortiCloud log quota warnings in alert email.									
information-interval	Information alert interval in minutes.	integer	Minimum value: 1 Maximum value: 99999	30						
local-disk-usage	Disk usage percentage at which to send alert email (1 - 99 percent, default = 75).	integer	Minimum value: 1 Maximum value: 99	75						
log-disk-usage-warning	Enable/disable disk usage warnings in alert email.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable disk usage warnings in alert email.</td></tr></table>	Option	Description	enable	Enable disk usage warnings in alert email.					
Option	Description									
enable	Enable disk usage warnings in alert email.									

Parameter	Description	Type	Size	Default																		
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>disable</i></td><td>Disable disk usage warnings in alert email.</td></tr></table>	Option	Description	<i>disable</i>	Disable disk usage warnings in alert email.																	
	Option	Description																				
<i>disable</i>	Disable disk usage warnings in alert email.																					
mailto1	Email address to send alert email to (usually a system administrator) (max. 63 characters).	string	Maximum length: 63																			
mailto2	Optional second email address to send alert email to (max. 63 characters).	string	Maximum length: 63																			
mailto3	Optional third email address to send alert email to (max. 63 characters).	string	Maximum length: 63																			
notification-interval	Notification alert interval in minutes.	integer	Minimum value: 1 Maximum value: 99999	20																		
severity	Lowest severity level to log.	option	-	alert																		
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>emergency</i></td><td>Emergency level.</td></tr><tr><td><i>alert</i></td><td>Alert level.</td></tr><tr><td><i>critical</i></td><td>Critical level.</td></tr><tr><td><i>error</i></td><td>Error level.</td></tr><tr><td><i>warning</i></td><td>Warning level.</td></tr><tr><td><i>notification</i></td><td>Notification level.</td></tr><tr><td><i>information</i></td><td>Information level.</td></tr><tr><td><i>debug</i></td><td>Debug level.</td></tr></table>	Option	Description	<i>emergency</i>	Emergency level.	<i>alert</i>	Alert level.	<i>critical</i>	Critical level.	<i>error</i>	Error level.	<i>warning</i>	Warning level.	<i>notification</i>	Notification level.	<i>information</i>	Information level.	<i>debug</i>	Debug level.			
	Option	Description																				
	<i>emergency</i>	Emergency level.																				
	<i>alert</i>	Alert level.																				
	<i>critical</i>	Critical level.																				
	<i>error</i>	Error level.																				
	<i>warning</i>	Warning level.																				
	<i>notification</i>	Notification level.																				
	<i>information</i>	Information level.																				
<i>debug</i>	Debug level.																					
ssh-logs	Enable/disable SSH logs in alert email.	option	-	disable																		
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable SSH logs in alert email.</td></tr><tr><td><i>disable</i></td><td>Disable SSH logs in alert email.</td></tr></table>	Option	Description	<i>enable</i>	Enable SSH logs in alert email.	<i>disable</i>	Disable SSH logs in alert email.															
	Option	Description																				
	<i>enable</i>	Enable SSH logs in alert email.																				
<i>disable</i>	Disable SSH logs in alert email.																					
sslvpn-authentication-errors-logs	Enable/disable SSL-VPN authentication error logs in alert email.	option	-	disable																		

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>enable</i>	Enable SSL-VPN authentication error logs in alert email.		
	<i>disable</i>	Disable SSL-VPN authentication error logs in alert email.		
username	Name that appears in the From: field of alert emails (max. 63 characters).	string	Maximum length: 63	
violation-traffic-logs	Enable/disable violation traffic logs in alert email.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable violation traffic logs in alert email.		
	<i>disable</i>	Disable violation traffic logs in alert email.		
warning-interval	Warning alert interval in minutes.	integer	Minimum value: 1 Maximum value: 99999	10
webfilter-logs	Enable/disable web filter logs in alert email.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable web filter logs in alert email.		
	<i>disable</i>	Disable web filter logs in alert email.		

antivirus

This section includes syntax for the following commands:

- [config antivirus exempt-list on page 122](#)
- [config antivirus profile on page 123](#)
- [config antivirus quarantine on page 154](#)
- [config antivirus settings on page 159](#)

config antivirus exempt-list

Configure a list of hashes to be exempt from AV scanning.

```
config antivirus exempt-list
  Description: Configure a list of hashes to be exempt from AV scanning.
  edit <name>
    set comment {var-string}
    set hash {string}
    set hash-type [md5|sha1|...]
    set status [disable|enable]
  next
end
```

config antivirus exempt-list

Parameter	Description	Type	Size	Default
comment	Comment.	var-string	Maximum length: 255	
hash	Hash value to be matched.	string	Maximum length: 64	
hash-type	Hash type.	option	-	sha1
	Option	Description		
	<i>md5</i>	MD5 hash value (32 characters in length).		
	<i>sha1</i>	SHA1 hash value (40 characters in length).		
	<i>sha256</i>	SHA256 hash value (64 characters in length).		
name	Table entry name.	string	Maximum length: 35	

Parameter	Description	Type	Size	Default
status	Enable/disable table entry.	option	-	enable
	Option	Description		
	<i>disable</i>	Disable AV exempt-list table entry.		
	<i>enable</i>	Enable AV exempt-list table entry.		

config antivirus profile

Configure AntiVirus profiles.

```

config antivirus profile
  Description: Configure AntiVirus profiles.
  edit <name>
    set analytics-accept-filetype {integer}
    set analytics-db [disable|enable]
    set analytics-ignore-filetype {integer}
    set av-block-log [enable|disable]
    set av-virus-log [enable|disable]
    config cifs
      Description: Configure CIFS AntiVirus options.
      set archive-block {option1}, {option2}, ...
      set archive-log {option1}, {option2}, ...
      set av-scan [disable|block|...]
      set emulator [enable|disable]
      set external-blocklist [disable|block|...]
      set fortindr [disable|block|...]
      set fortisandbox [disable|block|...]
      set outbreak-prevention [disable|block|...]
      set quarantine [disable|enable]
    end
    set comment {var-string}
    config content-disarm
      Description: AV Content Disarm and Reconstruction settings.
      set cover-page [disable|enable]
      set detect-only [disable|enable]
      set error-action [block|log-only|...]
      set office-action [disable|enable]
      set office-dde [disable|enable]
      set office-embed [disable|enable]
      set office-hylink [disable|enable]
      set office-linked [disable|enable]
      set office-macro [disable|enable]
      set original-file-destination [fortisandbox|quarantine|...]
      set pdf-act-form [disable|enable]
      set pdf-act-gotor [disable|enable]
      set pdf-act-java [disable|enable]
      set pdf-act-launch [disable|enable]
  
```

```

    set pdf-act-movie [disable|enable]
    set pdf-act-sound [disable|enable]
    set pdf-embedfile [disable|enable]
    set pdf-hyperlink [disable|enable]
    set pdf-javacode [disable|enable]
end
set ems-threat-feed [disable|enable]
set extended-log [enable|disable]
set external-blocklist <name1>, <name2>, ...
set external-blocklist-enable-all [disable|enable]
set feature-set [flow|proxy]
set fortindr-error-action [log-only|block|...]
set fortindr-timeout-action [log-only|block|...]
set fortisandbox-error-action [log-only|block|...]
set fortisandbox-max-upload {integer}
set fortisandbox-mode [inline|analytics-suspicious|...]
set fortisandbox-timeout-action [log-only|block|...]
config ftp
    Description: Configure FTP AntiVirus options.
    set archive-block {option1}, {option2}, ...
    set archive-log {option1}, {option2}, ...
    set av-scan [disable|block|...]
    set emulator [enable|disable]
    set external-blocklist [disable|block|...]
    set fortindr [disable|block|...]
    set fortisandbox [disable|block|...]
    set outbreak-prevention [disable|block|...]
    set quarantine [disable|enable]
end
config http
    Description: Configure HTTP AntiVirus options.
    set archive-block {option1}, {option2}, ...
    set archive-log {option1}, {option2}, ...
    set av-scan [disable|block|...]
    set content-disarm [disable|enable]
    set emulator [enable|disable]
    set external-blocklist [disable|block|...]
    set fortindr [disable|block|...]
    set fortisandbox [disable|block|...]
    set outbreak-prevention [disable|block|...]
    set quarantine [disable|enable]
end
config imap
    Description: Configure IMAP AntiVirus options.
    set archive-block {option1}, {option2}, ...
    set archive-log {option1}, {option2}, ...
    set av-scan [disable|block|...]
    set content-disarm [disable|enable]
    set emulator [enable|disable]
    set executables [default|virus]
    set external-blocklist [disable|block|...]
    set fortindr [disable|block|...]

```

```

    set fortisandbox [disable|block|...]
    set outbreak-prevention [disable|block|...]
    set quarantine [disable|enable]
end
config mapi
    Description: Configure MAPI AntiVirus options.
    set archive-block {option1}, {option2}, ...
    set archive-log {option1}, {option2}, ...
    set av-scan [disable|block|...]
    set emulator [enable|disable]
    set executables [default|virus]
    set external-blocklist [disable|block|...]
    set fortindr [disable|block|...]
    set fortisandbox [disable|block|...]
    set outbreak-prevention [disable|block|...]
    set quarantine [disable|enable]
end
set mobile-malware-db [disable|enable]
config nac-quar
    Description: Configure AntiVirus quarantine settings.
    set expiry {user}
    set infected [none|quar-src-ip]
    set log [enable|disable]
end
config nntp
    Description: Configure NNTP AntiVirus options.
    set archive-block {option1}, {option2}, ...
    set archive-log {option1}, {option2}, ...
    set av-scan [disable|block|...]
    set emulator [enable|disable]
    set external-blocklist [disable|block|...]
    set fortindr [disable|block|...]
    set fortisandbox [disable|block|...]
    set outbreak-prevention [disable|block|...]
    set quarantine [disable|enable]
end
set outbreak-prevention-archive-scan [disable|enable]
config pop3
    Description: Configure POP3 AntiVirus options.
    set archive-block {option1}, {option2}, ...
    set archive-log {option1}, {option2}, ...
    set av-scan [disable|block|...]
    set content-disarm [disable|enable]
    set emulator [enable|disable]
    set executables [default|virus]
    set external-blocklist [disable|block|...]
    set fortindr [disable|block|...]
    set fortisandbox [disable|block|...]
    set outbreak-prevention [disable|block|...]
    set quarantine [disable|enable]
end
set replacemsg-group {string}

```

```

set scan-mode [default|legacy]
config smtp
  Description: Configure SMTP AntiVirus options.
  set archive-block {option1}, {option2}, ...
  set archive-log {option1}, {option2}, ...
  set av-scan [disable|block|...]
  set content-disarm [disable|enable]
  set emulator [enable|disable]
  set executables [default|virus]
  set external-blocklist [disable|block|...]
  set fortindr [disable|block|...]
  set fortisandbox [disable|block|...]
  set outbreak-prevention [disable|block|...]
  set quarantine [disable|enable]
end
config ssh
  Description: Configure SFTP and SCP AntiVirus options.
  set archive-block {option1}, {option2}, ...
  set archive-log {option1}, {option2}, ...
  set av-scan [disable|block|...]
  set emulator [enable|disable]
  set external-blocklist [disable|block|...]
  set fortindr [disable|block|...]
  set fortisandbox [disable|block|...]
  set outbreak-prevention [disable|block|...]
  set quarantine [disable|enable]
end
next
end

```

config antivirus profile

Parameter	Description	Type	Size	Default						
analytics-accept-filetype	Only submit files matching this DLP file-pattern to FortiSandbox (post-transfer scan only).	integer	Minimum value: 0 Maximum value: 4294967295	0						
analytics-db	Enable/disable using the FortiSandbox signature database to supplement the AV signature databases.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Use only the standard AV signature databases.</td></tr><tr><td>enable</td><td>Also use the FortiSandbox signature database.</td></tr></table>				Option	Description	disable	Use only the standard AV signature databases.	enable	Also use the FortiSandbox signature database.
Option	Description									
disable	Use only the standard AV signature databases.									
enable	Also use the FortiSandbox signature database.									

Parameter	Description	Type	Size	Default
analytics-ignore-filetype	Do not submit files matching this DLP file-pattern to FortiSandbox (post-transfer scan only).	integer	Minimum value: 0 Maximum value: 4294967295	0
av-block-log	Enable/disable logging for AntiVirus file blocking.	option	-	enable
	Option	Description		
	enable	Enable setting.		
	disable	Disable setting.		
av-virus-log	Enable/disable AntiVirus logging.	option	-	enable
	Option	Description		
	enable	Enable setting.		
	disable	Disable setting.		
comment	Comment.	var-string	Maximum length: 255	
ems-threat-feed	Enable/disable use of EMS threat feed when performing AntiVirus scan. Analyzes files including the content of archives.	option	-	disable
	Option	Description		
	disable	Disable use of EMS threat feed when performing AntiVirus scan.		
	enable	Enable use of EMS threat feed when performing AntiVirus scan.		
extended-log	Enable/disable extended logging for antivirus.	option	-	disable
	Option	Description		
	enable	Enable setting.		
	disable	Disable setting.		
external-blocklist <name>	One or more external malware block lists. External blocklist.	string	Maximum length: 79	
external-blocklist-enable-all	Enable/disable all external blocklists.	option	-	disable

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>disable</i>	Use configured external blocklists.		
	<i>enable</i>	Enable all external blocklists.		
feature-set	Flow/proxy feature set.	option	-	flow
	Option	Description		
	<i>flow</i>	Flow feature set.		
	<i>proxy</i>	Proxy feature set.		
fortindr-error-action	Action to take if FortiNDR encounters an error.	option	-	log-only
	Option	Description		
	<i>log-only</i>	Log FortiNDR error, but allow the file.		
	<i>block</i>	Block the file on FortiNDR error.		
	<i>ignore</i>	Do nothing on FortiNDR error.		
fortindr-timeout-action	Action to take if FortiNDR encounters a scan timeout.	option	-	log-only
	Option	Description		
	<i>log-only</i>	Log FortiNDR scan timeout, but allow the file.		
	<i>block</i>	Block the file on FortiNDR scan timeout.		
	<i>ignore</i>	Do nothing on FortiNDR scan timeout.		
fortisandbox-error-action	Action to take if FortiSandbox inline scan encounters an error.	option	-	log-only
	Option	Description		
	<i>log-only</i>	Log FortiSandbox inline scan error, but allow the file.		
	<i>block</i>	Block the file on FortiSandbox inline scan error.		
	<i>ignore</i>	Do nothing on FortiSandbox inline scan error.		
fortisandbox-max-upload	Maximum size of files that can be uploaded to FortiSandbox.	integer	Minimum value: 10 1 Maximum value: 1606 **	
fortisandbox-mode	FortiSandbox scan modes.	option	-	analytics-everything

Parameter	Description	Type	Size	Default								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>inline</i></td><td>FortiSandbox inline scan.</td></tr><tr><td><i>analytics-suspicious</i></td><td>FortiSandbox post-transfer scan: submit supported files if heuristics or other methods determine they are suspicious.</td></tr><tr><td><i>analytics-everything</i></td><td>FortiSandbox post-transfer scan: submit supported files and known infected files.</td></tr></table>	Option	Description	<i>inline</i>	FortiSandbox inline scan.	<i>analytics-suspicious</i>	FortiSandbox post-transfer scan: submit supported files if heuristics or other methods determine they are suspicious.	<i>analytics-everything</i>	FortiSandbox post-transfer scan: submit supported files and known infected files.			
	Option	Description										
	<i>inline</i>	FortiSandbox inline scan.										
	<i>analytics-suspicious</i>	FortiSandbox post-transfer scan: submit supported files if heuristics or other methods determine they are suspicious.										
<i>analytics-everything</i>	FortiSandbox post-transfer scan: submit supported files and known infected files.											
fortisandbox-timeout-action	Action to take if FortiSandbox inline scan encounters a scan timeout.	option	-	log-only								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>log-only</i></td><td>Log FortiSandbox inline scan timeout, but allow the file.</td></tr><tr><td><i>block</i></td><td>Block the file on FortiSandbox inline scan timeout.</td></tr><tr><td><i>ignore</i></td><td>Do nothing on FortiSandbox inline scan timeout.</td></tr></table>	Option	Description	<i>log-only</i>	Log FortiSandbox inline scan timeout, but allow the file.	<i>block</i>	Block the file on FortiSandbox inline scan timeout.	<i>ignore</i>	Do nothing on FortiSandbox inline scan timeout.			
	Option	Description										
	<i>log-only</i>	Log FortiSandbox inline scan timeout, but allow the file.										
	<i>block</i>	Block the file on FortiSandbox inline scan timeout.										
<i>ignore</i>	Do nothing on FortiSandbox inline scan timeout.											
mobile-malware-db	Enable/disable using the mobile malware signature database.	option	-	enable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>disable</i></td><td>Do not use the mobile malware signature database.</td></tr><tr><td><i>enable</i></td><td>Also use the mobile malware signature database.</td></tr></table>	Option	Description	<i>disable</i>	Do not use the mobile malware signature database.	<i>enable</i>	Also use the mobile malware signature database.					
	Option	Description										
	<i>disable</i>	Do not use the mobile malware signature database.										
<i>enable</i>	Also use the mobile malware signature database.											
name	Profile name.	string	Maximum length: 35									
outbreak-prevention-archive-scan	Enable/disable outbreak-prevention archive scanning.	option	-	enable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>disable</i></td><td>Analyze files as sent, not the content of archives.</td></tr><tr><td><i>enable</i></td><td>Analyze files including the content of archives.</td></tr></table>	Option	Description	<i>disable</i>	Analyze files as sent, not the content of archives.	<i>enable</i>	Analyze files including the content of archives.					
	Option	Description										
	<i>disable</i>	Analyze files as sent, not the content of archives.										
<i>enable</i>	Analyze files including the content of archives.											
replacemsg-group	Replacement message group customized for this profile.	string	Maximum length: 35									
scan-mode	Configure scan mode (default or legacy).	option	-	default								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>default</i></td><td>On the fly decompression and scanning of certain archive files.</td></tr><tr><td><i>legacy</i></td><td>Scan archive files only after the entire file is received.</td></tr></table>	Option	Description	<i>default</i>	On the fly decompression and scanning of certain archive files.	<i>legacy</i>	Scan archive files only after the entire file is received.					
	Option	Description										
	<i>default</i>	On the fly decompression and scanning of certain archive files.										
<i>legacy</i>	Scan archive files only after the entire file is received.											

** Values may differ between models.

config cifs

Parameter	Description	Type	Size	Default																		
archive-block	Select the archive types to block.	option	-																			
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>encrypted</i></td><td>Block encrypted archives.</td></tr><tr><td><i>corrupted</i></td><td>Block corrupted archives.</td></tr><tr><td><i>partiallycorrupted</i></td><td>Block partially corrupted archives.</td></tr><tr><td><i>multipart</i></td><td>Block multipart archives.</td></tr><tr><td><i>nested</i></td><td>Block nested archives that exceed uncompressed nest limit.</td></tr><tr><td><i>mailbomb</i></td><td>Block mail bomb archives.</td></tr><tr><td><i>timeout</i></td><td>Block scan timeout.</td></tr><tr><td><i>unhandled</i></td><td>Block archives that FortiOS cannot open.</td></tr></table>	Option	Description	<i>encrypted</i>	Block encrypted archives.	<i>corrupted</i>	Block corrupted archives.	<i>partiallycorrupted</i>	Block partially corrupted archives.	<i>multipart</i>	Block multipart archives.	<i>nested</i>	Block nested archives that exceed uncompressed nest limit.	<i>mailbomb</i>	Block mail bomb archives.	<i>timeout</i>	Block scan timeout.	<i>unhandled</i>	Block archives that FortiOS cannot open.			
Option	Description																					
<i>encrypted</i>	Block encrypted archives.																					
<i>corrupted</i>	Block corrupted archives.																					
<i>partiallycorrupted</i>	Block partially corrupted archives.																					
<i>multipart</i>	Block multipart archives.																					
<i>nested</i>	Block nested archives that exceed uncompressed nest limit.																					
<i>mailbomb</i>	Block mail bomb archives.																					
<i>timeout</i>	Block scan timeout.																					
<i>unhandled</i>	Block archives that FortiOS cannot open.																					
archive-log	Select the archive types to log.	option	-																			
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>encrypted</i></td><td>Log encrypted archives.</td></tr><tr><td><i>corrupted</i></td><td>Log corrupted archives.</td></tr><tr><td><i>partiallycorrupted</i></td><td>Log partially corrupted archives.</td></tr><tr><td><i>multipart</i></td><td>Log multipart archives.</td></tr><tr><td><i>nested</i></td><td>Log nested archives that exceed uncompressed nest limit.</td></tr><tr><td><i>mailbomb</i></td><td>Log mail bomb archives.</td></tr><tr><td><i>timeout</i></td><td>Log scan timeout.</td></tr><tr><td><i>unhandled</i></td><td>Log archives that FortiOS cannot open.</td></tr></table>	Option	Description	<i>encrypted</i>	Log encrypted archives.	<i>corrupted</i>	Log corrupted archives.	<i>partiallycorrupted</i>	Log partially corrupted archives.	<i>multipart</i>	Log multipart archives.	<i>nested</i>	Log nested archives that exceed uncompressed nest limit.	<i>mailbomb</i>	Log mail bomb archives.	<i>timeout</i>	Log scan timeout.	<i>unhandled</i>	Log archives that FortiOS cannot open.			
Option	Description																					
<i>encrypted</i>	Log encrypted archives.																					
<i>corrupted</i>	Log corrupted archives.																					
<i>partiallycorrupted</i>	Log partially corrupted archives.																					
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<i>nested</i>	Log nested archives that exceed uncompressed nest limit.																					
<i>mailbomb</i>	Log mail bomb archives.																					
<i>timeout</i>	Log scan timeout.																					
<i>unhandled</i>	Log archives that FortiOS cannot open.																					
av-scan	Enable AntiVirus scan service.	option	-	disable																		
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>disable</i></td><td>Disable.</td></tr><tr><td><i>block</i></td><td>Block the virus infected files.</td></tr><tr><td><i>monitor</i></td><td>Log the virus infected files.</td></tr></table>	Option	Description	<i>disable</i>	Disable.	<i>block</i>	Block the virus infected files.	<i>monitor</i>	Log the virus infected files.													
Option	Description																					
<i>disable</i>	Disable.																					
<i>block</i>	Block the virus infected files.																					
<i>monitor</i>	Log the virus infected files.																					
emulator	Enable/disable the virus emulator.	option	-	enable																		

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>enable</i>	Enable the virus emulator.		
	<i>disable</i>	Disable the virus emulator.		
external-blocklist	Enable external-blocklist. Analyzes files including the content of archives.	option	-	disable
	Option	Description		
	<i>disable</i>	Disable.		
	<i>block</i>	Block the matched files.		
	<i>monitor</i>	Log the matched files.		
fortindr	Enable scanning of files by FortiNDR.	option	-	disable
	Option	Description		
	<i>disable</i>	Disable.		
	<i>block</i>	Block the FortiNDR detected infections.		
	<i>monitor</i>	Log the FortiNDR detected infections.		
fortisandbox	Enable scanning of files by FortiSandbox.	option	-	disable
	Option	Description		
	<i>disable</i>	Disable.		
	<i>block</i>	Block the FortiSandbox detected infections.		
	<i>monitor</i>	Log the FortiSandbox detected infections.		
outbreak-prevention	Enable virus outbreak prevention service.	option	-	disable
	Option	Description		
	<i>disable</i>	Disable.		
	<i>block</i>	Block the matched files.		
	<i>monitor</i>	Log the matched files.		
quarantine	Enable/disable quarantine for infected files.	option	-	disable
	Option	Description		
	<i>disable</i>	Disable quarantine for infected files.		
	<i>enable</i>	Enable quarantine for infected files.		

config content-disarm

Parameter	Description	Type	Size	Default								
cover-page	Enable/disable inserting a cover page into the disarmed document.	option	-	enable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>disable</i></td><td>Disable this Content Disarm and Reconstruction feature.</td></tr><tr><td><i>enable</i></td><td>Enable this Content Disarm and Reconstruction feature.</td></tr></table>	Option	Description	<i>disable</i>	Disable this Content Disarm and Reconstruction feature.	<i>enable</i>	Enable this Content Disarm and Reconstruction feature.					
Option	Description											
<i>disable</i>	Disable this Content Disarm and Reconstruction feature.											
<i>enable</i>	Enable this Content Disarm and Reconstruction feature.											
detect-only	Enable/disable only detect disarmable files, do not alter content.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>disable</i></td><td>Disable this Content Disarm and Reconstruction feature.</td></tr><tr><td><i>enable</i></td><td>Enable this Content Disarm and Reconstruction feature.</td></tr></table>	Option	Description	<i>disable</i>	Disable this Content Disarm and Reconstruction feature.	<i>enable</i>	Enable this Content Disarm and Reconstruction feature.					
Option	Description											
<i>disable</i>	Disable this Content Disarm and Reconstruction feature.											
<i>enable</i>	Enable this Content Disarm and Reconstruction feature.											
error-action	Action to be taken if CDR engine encounters an unrecoverable error.	option	-	log-only								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>block</i></td><td>Block file on CDR error.</td></tr><tr><td><i>log-only</i></td><td>Log CDR error, but allow file.</td></tr><tr><td><i>ignore</i></td><td>Do nothing on CDR error.</td></tr></table>	Option	Description	<i>block</i>	Block file on CDR error.	<i>log-only</i>	Log CDR error, but allow file.	<i>ignore</i>	Do nothing on CDR error.			
Option	Description											
<i>block</i>	Block file on CDR error.											
<i>log-only</i>	Log CDR error, but allow file.											
<i>ignore</i>	Do nothing on CDR error.											
office-action	Enable/disable stripping of PowerPoint action events in Microsoft Office documents.	option	-	enable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>disable</i></td><td>Disable this Content Disarm and Reconstruction feature.</td></tr><tr><td><i>enable</i></td><td>Enable this Content Disarm and Reconstruction feature.</td></tr></table>	Option	Description	<i>disable</i>	Disable this Content Disarm and Reconstruction feature.	<i>enable</i>	Enable this Content Disarm and Reconstruction feature.					
Option	Description											
<i>disable</i>	Disable this Content Disarm and Reconstruction feature.											
<i>enable</i>	Enable this Content Disarm and Reconstruction feature.											
office-dde	Enable/disable stripping of Dynamic Data Exchange events in Microsoft Office documents.	option	-	enable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>disable</i></td><td>Disable this Content Disarm and Reconstruction feature.</td></tr><tr><td><i>enable</i></td><td>Enable this Content Disarm and Reconstruction feature.</td></tr></table>	Option	Description	<i>disable</i>	Disable this Content Disarm and Reconstruction feature.	<i>enable</i>	Enable this Content Disarm and Reconstruction feature.					
Option	Description											
<i>disable</i>	Disable this Content Disarm and Reconstruction feature.											
<i>enable</i>	Enable this Content Disarm and Reconstruction feature.											
office-embed	Enable/disable stripping of embedded objects in Microsoft Office documents.	option	-	enable								

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>disable</i>	Disable this Content Disarm and Reconstruction feature.		
	<i>enable</i>	Enable this Content Disarm and Reconstruction feature.		
office-hylink	Enable/disable stripping of hyperlinks in Microsoft Office documents.	option	-	enable
	Option	Description		
	<i>disable</i>	Disable this Content Disarm and Reconstruction feature.		
	<i>enable</i>	Enable this Content Disarm and Reconstruction feature.		
office-linked	Enable/disable stripping of linked objects in Microsoft Office documents.	option	-	enable
	Option	Description		
	<i>disable</i>	Disable this Content Disarm and Reconstruction feature.		
	<i>enable</i>	Enable this Content Disarm and Reconstruction feature.		
office-macro	Enable/disable stripping of macros in Microsoft Office documents.	option	-	enable
	Option	Description		
	<i>disable</i>	Disable this Content Disarm and Reconstruction feature.		
	<i>enable</i>	Enable this Content Disarm and Reconstruction feature.		
original-file-destination	Destination to send original file if active content is removed.	option	-	discard
	Option	Description		
	<i>fortisandbox</i>	Send original file to configured FortiSandbox.		
	<i>quarantine</i>	Send original file to quarantine.		
	<i>discard</i>	Original file will be discarded after content disarm.		
pdf-act-form	Enable/disable stripping of PDF document actions that submit data to other targets.	option	-	enable
	Option	Description		
	<i>disable</i>	Disable this Content Disarm and Reconstruction feature.		
	<i>enable</i>	Enable this Content Disarm and Reconstruction feature.		

Parameter	Description	Type	Size	Default						
pdf-act-gotor	Enable/disable stripping of PDF document actions that access other PDF documents.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Disable this Content Disarm and Reconstruction feature.</td></tr><tr><td>enable</td><td>Enable this Content Disarm and Reconstruction feature.</td></tr></table>	Option	Description	disable	Disable this Content Disarm and Reconstruction feature.	enable	Enable this Content Disarm and Reconstruction feature.			
Option	Description									
disable	Disable this Content Disarm and Reconstruction feature.									
enable	Enable this Content Disarm and Reconstruction feature.									
pdf-act-java	Enable/disable stripping of PDF document actions that execute JavaScript code.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Disable this Content Disarm and Reconstruction feature.</td></tr><tr><td>enable</td><td>Enable this Content Disarm and Reconstruction feature.</td></tr></table>	Option	Description	disable	Disable this Content Disarm and Reconstruction feature.	enable	Enable this Content Disarm and Reconstruction feature.			
Option	Description									
disable	Disable this Content Disarm and Reconstruction feature.									
enable	Enable this Content Disarm and Reconstruction feature.									
pdf-act-launch	Enable/disable stripping of PDF document actions that launch other applications.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Disable this Content Disarm and Reconstruction feature.</td></tr><tr><td>enable</td><td>Enable this Content Disarm and Reconstruction feature.</td></tr></table>	Option	Description	disable	Disable this Content Disarm and Reconstruction feature.	enable	Enable this Content Disarm and Reconstruction feature.			
Option	Description									
disable	Disable this Content Disarm and Reconstruction feature.									
enable	Enable this Content Disarm and Reconstruction feature.									
pdf-act-movie	Enable/disable stripping of PDF document actions that play a movie.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Disable this Content Disarm and Reconstruction feature.</td></tr><tr><td>enable</td><td>Enable this Content Disarm and Reconstruction feature.</td></tr></table>	Option	Description	disable	Disable this Content Disarm and Reconstruction feature.	enable	Enable this Content Disarm and Reconstruction feature.			
Option	Description									
disable	Disable this Content Disarm and Reconstruction feature.									
enable	Enable this Content Disarm and Reconstruction feature.									
pdf-act-sound	Enable/disable stripping of PDF document actions that play a sound.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Disable this Content Disarm and Reconstruction feature.</td></tr><tr><td>enable</td><td>Enable this Content Disarm and Reconstruction feature.</td></tr></table>	Option	Description	disable	Disable this Content Disarm and Reconstruction feature.	enable	Enable this Content Disarm and Reconstruction feature.			
Option	Description									
disable	Disable this Content Disarm and Reconstruction feature.									
enable	Enable this Content Disarm and Reconstruction feature.									
pdf-embedfile	Enable/disable stripping of embedded files in PDF documents.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Disable this Content Disarm and Reconstruction feature.</td></tr><tr><td>enable</td><td>Enable this Content Disarm and Reconstruction feature.</td></tr></table>	Option	Description	disable	Disable this Content Disarm and Reconstruction feature.	enable	Enable this Content Disarm and Reconstruction feature.			
Option	Description									
disable	Disable this Content Disarm and Reconstruction feature.									
enable	Enable this Content Disarm and Reconstruction feature.									

Parameter	Description	Type	Size	Default
pdf-hyperlink	Enable/disable stripping of hyperlinks from PDF documents.	option	-	enable
	Option	Description		
	<i>disable</i>	Disable this Content Disarm and Reconstruction feature.		
	<i>enable</i>	Enable this Content Disarm and Reconstruction feature.		
pdf-javacode	Enable/disable stripping of JavaScript code in PDF documents.	option	-	enable
	Option	Description		
	<i>disable</i>	Disable this Content Disarm and Reconstruction feature.		
	<i>enable</i>	Enable this Content Disarm and Reconstruction feature.		

config ftp

Parameter	Description	Type	Size	Default
archive-block	Select the archive types to block.	option	-	
	Option	Description		
	<i>encrypted</i>	Block encrypted archives.		
	<i>corrupted</i>	Block corrupted archives.		
	<i>partiallycorrupted</i>	Block partially corrupted archives.		
	<i>multipart</i>	Block multipart archives.		
	<i>nested</i>	Block nested archives that exceed uncompressed nest limit.		
	<i>mailbomb</i>	Block mail bomb archives.		
	<i>timeout</i>	Block scan timeout.		
	<i>unhandled</i>	Block archives that FortiOS cannot open.		
archive-log	Select the archive types to log.	option	-	
	Option	Description		
	<i>encrypted</i>	Log encrypted archives.		
	<i>corrupted</i>	Log corrupted archives.		
	<i>partiallycorrupted</i>	Log partially corrupted archives.		
	<i>multipart</i>	Log multipart archives.		
	<i>nested</i>	Log nested archives that exceed uncompressed nest limit.		

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>mailbomb</i>	Log mail bomb archives.		
	<i>timeout</i>	Log scan timeout.		
	<i>unhandled</i>	Log archives that FortiOS cannot open.		
av-scan	Enable AntiVirus scan service.	option	-	disable
	Option	Description		
	<i>disable</i>	Disable.		
	<i>block</i>	Block the virus infected files.		
	<i>monitor</i>	Log the virus infected files.		
emulator	Enable/disable the virus emulator.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable the virus emulator.		
	<i>disable</i>	Disable the virus emulator.		
external-blocklist	Enable external-blocklist. Analyzes files including the content of archives.	option	-	disable
	Option	Description		
	<i>disable</i>	Disable.		
	<i>block</i>	Block the matched files.		
	<i>monitor</i>	Log the matched files.		
fortindr	Enable scanning of files by FortiNDR.	option	-	disable
	Option	Description		
	<i>disable</i>	Disable.		
	<i>block</i>	Block the FortiNDR detected infections.		
	<i>monitor</i>	Log the FortiNDR detected infections.		
fortisandbox	Enable scanning of files by FortiSandbox.	option	-	disable
	Option	Description		
	<i>disable</i>	Disable.		
	<i>block</i>	Block the FortiSandbox detected infections.		

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>monitor</i>	Log the FortiSandbox detected infections.		
outbreak-prevention	Enable virus outbreak prevention service.	option	-	disable
	Option	Description		
	<i>disable</i>	Disable.		
	<i>block</i>	Block the matched files.		
	<i>monitor</i>	Log the matched files.		
quarantine	Enable/disable quarantine for infected files.	option	-	disable
	Option	Description		
	<i>disable</i>	Disable quarantine for infected files.		
	<i>enable</i>	Enable quarantine for infected files.		

config http

Parameter	Description	Type	Size	Default
archive-block	Select the archive types to block.	option	-	
	Option	Description		
	<i>encrypted</i>	Block encrypted archives.		
	<i>corrupted</i>	Block corrupted archives.		
	<i>partiallycorrupted</i>	Block partially corrupted archives.		
	<i>multipart</i>	Block multipart archives.		
	<i>nested</i>	Block nested archives that exceed uncompressed nest limit.		
	<i>mailbomb</i>	Block mail bomb archives.		
	<i>timeout</i>	Block scan timeout.		
	<i>unhandled</i>	Block archives that FortiOS cannot open.		
archive-log	Select the archive types to log.	option	-	
	Option	Description		
	<i>encrypted</i>	Log encrypted archives.		

Parameter	Description	Type	Size	Default																
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>corrupted</i></td><td>Log corrupted archives.</td></tr><tr><td><i>partiallycorrupted</i></td><td>Log partially corrupted archives.</td></tr><tr><td><i>multipart</i></td><td>Log multipart archives.</td></tr><tr><td><i>nested</i></td><td>Log nested archives that exceed uncompressed nest limit.</td></tr><tr><td><i>mailbomb</i></td><td>Log mail bomb archives.</td></tr><tr><td><i>timeout</i></td><td>Log scan timeout.</td></tr><tr><td><i>unhandled</i></td><td>Log archives that FortiOS cannot open.</td></tr></table>	Option	Description	<i>corrupted</i>	Log corrupted archives.	<i>partiallycorrupted</i>	Log partially corrupted archives.	<i>multipart</i>	Log multipart archives.	<i>nested</i>	Log nested archives that exceed uncompressed nest limit.	<i>mailbomb</i>	Log mail bomb archives.	<i>timeout</i>	Log scan timeout.	<i>unhandled</i>	Log archives that FortiOS cannot open.			
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content-disarm	Enable/disable Content Disarm and Reconstruction when performing AntiVirus scan.	option	-	disable																
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>disable</i></td><td>Disable Content Disarm and Reconstruction when performing AntiVirus scan.</td></tr><tr><td><i>enable</i></td><td>Enable Content Disarm and Reconstruction when performing AntiVirus scan.</td></tr></table>	Option	Description	<i>disable</i>	Disable Content Disarm and Reconstruction when performing AntiVirus scan.	<i>enable</i>	Enable Content Disarm and Reconstruction when performing AntiVirus scan.													
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emulator	Enable/disable the virus emulator.	option	-	enable																
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external-blocklist	Enable external-blocklist. Analyzes files including the content of archives.	option	-	disable																
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>disable</i></td><td>Disable.</td></tr><tr><td><i>block</i></td><td>Block the matched files.</td></tr><tr><td><i>monitor</i></td><td>Log the matched files.</td></tr></table>	Option	Description	<i>disable</i>	Disable.	<i>block</i>	Block the matched files.	<i>monitor</i>	Log the matched files.											
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Parameter	Description	Type	Size	Default								
fortindr	Enable scanning of files by FortiNDR.	option	-	disable								
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fortisandbox	Enable scanning of files by FortiSandbox.	option	-	disable								
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<i>block</i>	Block the FortiSandbox detected infections.											
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outbreak-prevention	Enable virus outbreak prevention service.	option	-	disable								
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Option	Description											
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<i>monitor</i>	Log the matched files.											
quarantine	Enable/disable quarantine for infected files.	option	-	disable								
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config imap

Parameter	Description	Type	Size	Default								
archive-block	Select the archive types to block.	option	-									
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>encrypted</i></td><td>Block encrypted archives.</td></tr><tr><td><i>corrupted</i></td><td>Block corrupted archives.</td></tr><tr><td><i>partiallycorrupted</i></td><td>Block partially corrupted archives.</td></tr></table>	Option	Description	<i>encrypted</i>	Block encrypted archives.	<i>corrupted</i>	Block corrupted archives.	<i>partiallycorrupted</i>	Block partially corrupted archives.			
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<i>encrypted</i>	Block encrypted archives.											
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Parameter	Description	Type	Size	Default																		
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archive-log	Select the archive types to log.	option	-																			
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av-scan	Enable AntiVirus scan service.	option	-	disable																		
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content-disarm	Enable/disable Content Disarm and Reconstruction when performing AntiVirus scan.	option	-	disable																		
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<i>enable</i>	Enable Content Disarm and Reconstruction when performing AntiVirus scan.																					
emulator	Enable/disable the virus emulator.	option	-	enable																		

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>enable</i>	Enable the virus emulator.		
	<i>disable</i>	Disable the virus emulator.		
executables	Treat Windows executable files as viruses for the purpose of blocking or monitoring.	option	-	default
	Option	Description		
	<i>default</i>	Perform standard AntiVirus scanning of Windows executable files.		
	<i>virus</i>	Treat Windows executables as viruses.		
external-blocklist	Enable external-blocklist. Analyzes files including the content of archives.	option	-	disable
	Option	Description		
	<i>disable</i>	Disable.		
	<i>block</i>	Block the matched files.		
	<i>monitor</i>	Log the matched files.		
fortindr	Enable scanning of files by FortiNDR.	option	-	disable
	Option	Description		
	<i>disable</i>	Disable.		
	<i>block</i>	Block the FortiNDR detected infections.		
	<i>monitor</i>	Log the FortiNDR detected infections.		
fortisandbox	Enable scanning of files by FortiSandbox.	option	-	disable
	Option	Description		
	<i>disable</i>	Disable.		
	<i>block</i>	Block the FortiSandbox detected infections.		
	<i>monitor</i>	Log the FortiSandbox detected infections.		
outbreak-prevention	Enable virus outbreak prevention service.	option	-	disable
	Option	Description		
	<i>disable</i>	Disable.		

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>block</i>	Block the matched files.		
	<i>monitor</i>	Log the matched files.		
quarantine	Enable/disable quarantine for infected files.	option	-	disable
	Option	Description		
	<i>disable</i>	Disable quarantine for infected files.		
	<i>enable</i>	Enable quarantine for infected files.		

config mapi

Parameter	Description	Type	Size	Default
archive-block	Select the archive types to block.	option	-	
	Option	Description		
	<i>encrypted</i>	Block encrypted archives.		
	<i>corrupted</i>	Block corrupted archives.		
	<i>partiallycorrupted</i>	Block partially corrupted archives.		
	<i>multipart</i>	Block multipart archives.		
	<i>nested</i>	Block nested archives that exceed uncompressed nest limit.		
	<i>mailbomb</i>	Block mail bomb archives.		
	<i>timeout</i>	Block scan timeout.		
	<i>unhandled</i>	Block archives that FortiOS cannot open.		
archive-log	Select the archive types to log.	option	-	
	Option	Description		
	<i>encrypted</i>	Log encrypted archives.		
	<i>corrupted</i>	Log corrupted archives.		
	<i>partiallycorrupted</i>	Log partially corrupted archives.		
	<i>multipart</i>	Log multipart archives.		
	<i>nested</i>	Log nested archives that exceed uncompressed nest limit.		
	<i>mailbomb</i>	Log mail bomb archives.		

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>timeout</i>	Log scan timeout.		
	<i>unhandled</i>	Log archives that FortiOS cannot open.		
av-scan	Enable AntiVirus scan service.	option	-	disable
	Option	Description		
	<i>disable</i>	Disable.		
	<i>block</i>	Block the virus infected files.		
	<i>monitor</i>	Log the virus infected files.		
emulator	Enable/disable the virus emulator.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable the virus emulator.		
	<i>disable</i>	Disable the virus emulator.		
executables	Treat Windows executable files as viruses for the purpose of blocking or monitoring.	option	-	default
	Option	Description		
	<i>default</i>	Perform standard AntiVirus scanning of Windows executable files.		
	<i>virus</i>	Treat Windows executables as viruses.		
external-blocklist	Enable external-blocklist. Analyzes files including the content of archives.	option	-	disable
	Option	Description		
	<i>disable</i>	Disable.		
	<i>block</i>	Block the matched files.		
	<i>monitor</i>	Log the matched files.		
fortindr	Enable scanning of files by FortiNDR.	option	-	disable
	Option	Description		
	<i>disable</i>	Disable.		
	<i>block</i>	Block the FortiNDR detected infections.		
	<i>monitor</i>	Log the FortiNDR detected infections.		

Parameter	Description	Type	Size	Default								
fortisandbox	Enable scanning of files by FortiSandbox.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>disable</i></td><td>Disable.</td></tr><tr><td><i>block</i></td><td>Block the FortiSandbox detected infections.</td></tr><tr><td><i>monitor</i></td><td>Log the FortiSandbox detected infections.</td></tr></table>	Option	Description	<i>disable</i>	Disable.	<i>block</i>	Block the FortiSandbox detected infections.	<i>monitor</i>	Log the FortiSandbox detected infections.			
Option	Description											
<i>disable</i>	Disable.											
<i>block</i>	Block the FortiSandbox detected infections.											
<i>monitor</i>	Log the FortiSandbox detected infections.											
outbreak-prevention	Enable virus outbreak prevention service.	option	-	disable								
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Option	Description											
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quarantine	Enable/disable quarantine for infected files.	option	-	disable								
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Option	Description											
<i>disable</i>	Disable quarantine for infected files.											
<i>enable</i>	Enable quarantine for infected files.											

config nac-quar

Parameter	Description	Type	Size	Default						
expiry	Duration of quarantine.	user	Not Specified	5m						
infected	Enable/Disable quarantining infected hosts to the banned user list.	option	-	none						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>none</i></td><td>Do not quarantine infected hosts.</td></tr><tr><td><i>quar-src-ip</i></td><td>Quarantine all traffic from the infected hosts source IP.</td></tr></table>	Option	Description	<i>none</i>	Do not quarantine infected hosts.	<i>quar-src-ip</i>	Quarantine all traffic from the infected hosts source IP.			
Option	Description									
<i>none</i>	Do not quarantine infected hosts.									
<i>quar-src-ip</i>	Quarantine all traffic from the infected hosts source IP.									
log	Enable/disable AntiVirus quarantine logging.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable AntiVirus quarantine logging.</td></tr><tr><td><i>disable</i></td><td>Disable AntiVirus quarantine logging.</td></tr></table>	Option	Description	<i>enable</i>	Enable AntiVirus quarantine logging.	<i>disable</i>	Disable AntiVirus quarantine logging.			
Option	Description									
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<i>disable</i>	Disable AntiVirus quarantine logging.									

config nntp

Parameter	Description	Type	Size	Default																		
archive-block	Select the archive types to block.	option	-																			
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emulator	Enable/disable the virus emulator.	option	-	enable																		

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>enable</i>	Enable the virus emulator.		
	<i>disable</i>	Disable the virus emulator.		
external-blocklist	Enable external-blocklist. Analyzes files including the content of archives.	option	-	disable
	Option	Description		
	<i>disable</i>	Disable.		
	<i>block</i>	Block the matched files.		
	<i>monitor</i>	Log the matched files.		
fortindr	Enable scanning of files by FortiNDR.	option	-	disable
	Option	Description		
	<i>disable</i>	Disable.		
	<i>block</i>	Block the FortiNDR detected infections.		
	<i>monitor</i>	Log the FortiNDR detected infections.		
fortisandbox	Enable scanning of files by FortiSandbox.	option	-	disable
	Option	Description		
	<i>disable</i>	Disable.		
	<i>block</i>	Block the FortiSandbox detected infections.		
	<i>monitor</i>	Log the FortiSandbox detected infections.		
outbreak-prevention	Enable virus outbreak prevention service.	option	-	disable
	Option	Description		
	<i>disable</i>	Disable.		
	<i>block</i>	Block the matched files.		
	<i>monitor</i>	Log the matched files.		
quarantine	Enable/disable quarantine for infected files.	option	-	disable
	Option	Description		
	<i>disable</i>	Disable quarantine for infected files.		
	<i>enable</i>	Enable quarantine for infected files.		

config pop3

Parameter	Description	Type	Size	Default																		
archive-block	Select the archive types to block.	option	-																			
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archive-log	Select the archive types to log.	option	-																			
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av-scan	Enable AntiVirus scan service.	option	-	disable																		
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<i>disable</i>	Disable.																					
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<i>monitor</i>	Log the virus infected files.																					
content-disarm	Enable/disable Content Disarm and Reconstruction when performing AntiVirus scan.	option	-	disable																		

Parameter	Description	Type	Size	Default
	Option Description			
	<i>disable</i>	Disable Content Disarm and Reconstruction when performing AntiVirus scan.		
	<i>enable</i>	Enable Content Disarm and Reconstruction when performing AntiVirus scan.		
emulator	Enable/disable the virus emulator.	option	-	enable
	Option Description			
	<i>enable</i>	Enable the virus emulator.		
	<i>disable</i>	Disable the virus emulator.		
executables	Treat Windows executable files as viruses for the purpose of blocking or monitoring.	option	-	default
	Option Description			
	<i>default</i>	Perform standard AntiVirus scanning of Windows executable files.		
	<i>virus</i>	Treat Windows executables as viruses.		
external-blocklist	Enable external-blocklist. Analyzes files including the content of archives.	option	-	disable
	Option Description			
	<i>disable</i>	Disable.		
	<i>block</i>	Block the matched files.		
	<i>monitor</i>	Log the matched files.		
fortindr	Enable scanning of files by FortiNDR.	option	-	disable
	Option Description			
	<i>disable</i>	Disable.		
	<i>block</i>	Block the FortiNDR detected infections.		
	<i>monitor</i>	Log the FortiNDR detected infections.		
fortisandbox	Enable scanning of files by FortiSandbox.	option	-	disable
	Option Description			
	<i>disable</i>	Disable.		
	<i>block</i>	Block the FortiSandbox detected infections.		

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>monitor</i>	Log the FortiSandbox detected infections.		
outbreak-prevention	Enable virus outbreak prevention service.	option	-	disable
	Option	Description		
	<i>disable</i>	Disable.		
	<i>block</i>	Block the matched files.		
	<i>monitor</i>	Log the matched files.		
quarantine	Enable/disable quarantine for infected files.	option	-	disable
	Option	Description		
	<i>disable</i>	Disable quarantine for infected files.		
	<i>enable</i>	Enable quarantine for infected files.		

config smtp

Parameter	Description	Type	Size	Default
archive-block	Select the archive types to block.	option	-	
	Option	Description		
	<i>encrypted</i>	Block encrypted archives.		
	<i>corrupted</i>	Block corrupted archives.		
	<i>partiallycorrupted</i>	Block partially corrupted archives.		
	<i>multipart</i>	Block multipart archives.		
	<i>nested</i>	Block nested archives that exceed uncompressed nest limit.		
	<i>mailbomb</i>	Block mail bomb archives.		
	<i>timeout</i>	Block scan timeout.		
	<i>unhandled</i>	Block archives that FortiOS cannot open.		
archive-log	Select the archive types to log.	option	-	
	Option	Description		
	<i>encrypted</i>	Log encrypted archives.		

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>corrupted</i>	Log corrupted archives.		
	<i>partiallycorrupted</i>	Log partially corrupted archives.		
	<i>multipart</i>	Log multipart archives.		
	<i>nested</i>	Log nested archives that exceed uncompressed nest limit.		
	<i>mailbomb</i>	Log mail bomb archives.		
	<i>timeout</i>	Log scan timeout.		
	<i>unhandled</i>	Log archives that FortiOS cannot open.		
av-scan	Enable AntiVirus scan service.	option	-	disable
	Option	Description		
	<i>disable</i>	Disable.		
	<i>block</i>	Block the virus infected files.		
	<i>monitor</i>	Log the virus infected files.		
content-disarm	Enable/disable Content Disarm and Reconstruction when performing AntiVirus scan.	option	-	disable
	Option	Description		
	<i>disable</i>	Disable Content Disarm and Reconstruction when performing AntiVirus scan.		
	<i>enable</i>	Enable Content Disarm and Reconstruction when performing AntiVirus scan.		
emulator	Enable/disable the virus emulator.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable the virus emulator.		
	<i>disable</i>	Disable the virus emulator.		
executables	Treat Windows executable files as viruses for the purpose of blocking or monitoring.	option	-	default
	Option	Description		
	<i>default</i>	Perform standard AntiVirus scanning of Windows executable files.		
	<i>virus</i>	Treat Windows executables as viruses.		

Parameter	Description	Type	Size	Default								
external-blocklist	Enable external-blocklist. Analyzes files including the content of archives.	option	-	disable								
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fortindr	Enable scanning of files by FortiNDR.	option	-	disable								
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fortisandbox	Enable scanning of files by FortiSandbox.	option	-	disable								
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outbreak-prevention	Enable virus outbreak prevention service.	option	-	disable								
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quarantine	Enable/disable quarantine for infected files.	option	-	disable								
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config ssh

Parameter	Description	Type	Size	Default																		
archive-block	Select the archive types to block.	option	-																			
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emulator	Enable/disable the virus emulator.	option	-	enable																		

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	Option	Description		
	<i>enable</i>	Enable the virus emulator.		
	<i>disable</i>	Disable the virus emulator.		
external-blocklist	Enable external-blocklist. Analyzes files including the content of archives.	option	-	disable
	Option	Description		
	<i>disable</i>	Disable.		
	<i>block</i>	Block the matched files.		
	<i>monitor</i>	Log the matched files.		
fortindr	Enable scanning of files by FortiNDR.	option	-	disable
	Option	Description		
	<i>disable</i>	Disable.		
	<i>block</i>	Block the FortiNDR detected infections.		
	<i>monitor</i>	Log the FortiNDR detected infections.		
fortisandbox	Enable scanning of files by FortiSandbox.	option	-	disable
	Option	Description		
	<i>disable</i>	Disable.		
	<i>block</i>	Block the FortiSandbox detected infections.		
	<i>monitor</i>	Log the FortiSandbox detected infections.		
outbreak-prevention	Enable virus outbreak prevention service.	option	-	disable
	Option	Description		
	<i>disable</i>	Disable.		
	<i>block</i>	Block the matched files.		
	<i>monitor</i>	Log the matched files.		
quarantine	Enable/disable quarantine for infected files.	option	-	disable
	Option	Description		
	<i>disable</i>	Disable quarantine for infected files.		
	<i>enable</i>	Enable quarantine for infected files.		

config antivirus quarantine

Configure quarantine options.

```
config antivirus quarantine
  Description: Configure quarantine options.
  set agelimit {integer}
  set destination [NULL|disk|...]
  set drop-blocked {option1}, {option2}, ...
  set drop-infected {option1}, {option2}, ...
  set drop-machine-learning {option1}, {option2}, ...
  set lowspace [drop-new|ovrw-old]
  set maxfilesize {integer}
  set quarantine-quota {integer}
  set store-blocked {option1}, {option2}, ...
  set store-infected {option1}, {option2}, ...
  set store-machine-learning {option1}, {option2}, ...
end
```

config antivirus quarantine

Parameter	Description	Type	Size	Default								
agelimit	Age limit for quarantined files (0 - 479 hours, 0 means forever).	integer	Minimum value: 0 0 Maximum value: 479	0								
destination	Choose whether to quarantine files to the FortiGate disk or to FortiAnalyzer or to delete them instead of quarantining them.	option	-	disk **								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>NULL</i></td><td>Files that would be quarantined are deleted.</td></tr><tr><td><i>disk</i></td><td>Quarantine files to the FortiGate hard disk.</td></tr><tr><td><i>FortiAnalyzer</i></td><td>FortiAnalyzer</td></tr></table>				Option	Description	<i>NULL</i>	Files that would be quarantined are deleted.	<i>disk</i>	Quarantine files to the FortiGate hard disk.	<i>FortiAnalyzer</i>	FortiAnalyzer
Option	Description											
<i>NULL</i>	Files that would be quarantined are deleted.											
<i>disk</i>	Quarantine files to the FortiGate hard disk.											
<i>FortiAnalyzer</i>	FortiAnalyzer											
drop-blocked	Do not quarantine dropped files found in sessions using the selected protocols. Dropped files are deleted instead of being quarantined.	option	-									
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>imap</i></td><td>IMAP.</td></tr><tr><td><i>smtp</i></td><td>SMTP.</td></tr><tr><td><i>pop3</i></td><td>POP3.</td></tr></table>				Option	Description	<i>imap</i>	IMAP.	<i>smtp</i>	SMTP.	<i>pop3</i>	POP3.
Option	Description											
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<i>pop3</i>	POP3.											

Parameter	Description	Type	Size	Default																														
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>http</i></td><td>HTTP.</td></tr><tr><td><i>ftp</i></td><td>FTP.</td></tr><tr><td><i>nntp</i></td><td>NNTP.</td></tr><tr><td><i>imaps</i></td><td>IMAPS.</td></tr><tr><td><i>smtps</i></td><td>SMTPS.</td></tr><tr><td><i>pop3s</i></td><td>POP3S.</td></tr><tr><td><i>ftps</i></td><td>FTPS.</td></tr><tr><td><i>mapi</i></td><td>MAPI.</td></tr><tr><td><i>cifs</i></td><td>CIFS.</td></tr><tr><td><i>ssh</i></td><td>SSH.</td></tr></table>	Option	Description	<i>http</i>	HTTP.	<i>ftp</i>	FTP.	<i>nntp</i>	NNTP.	<i>imaps</i>	IMAPS.	<i>smtps</i>	SMTPS.	<i>pop3s</i>	POP3S.	<i>ftps</i>	FTPS.	<i>mapi</i>	MAPI.	<i>cifs</i>	CIFS.	<i>ssh</i>	SSH.											
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drop-infected	Do not quarantine infected files found in sessions using the selected protocols. Dropped files are deleted instead of being quarantined.	option	-																															
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	<i>cifs</i>	CIFS.																																
<i>ssh</i>	SSH.																																	

Parameter	Description	Type	Size	Default																														
drop-machine-learning	Do not quarantine files detected by machine learning found in sessions using the selected protocols. Dropped files are deleted instead of being quarantined.	option	-																															
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ssh	SSH.																																	
lowspace	Select the method for handling additional files when running low on disk space.	option	-	ovrw-old																														
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>drop-new</td><td>Drop (delete) the most recently quarantined files.</td></tr><tr><td>ovrw-old</td><td>Overwrite the oldest quarantined files. That is, the files that are closest to being deleted from the quarantine.</td></tr></table>	Option	Description	drop-new	Drop (delete) the most recently quarantined files.	ovrw-old	Overwrite the oldest quarantined files. That is, the files that are closest to being deleted from the quarantine.																											
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ovrw-old	Overwrite the oldest quarantined files. That is, the files that are closest to being deleted from the quarantine.																																	
maxfilesize	Maximum file size to quarantine (0 - 500 Mbytes, 0 means unlimited).	integer	Minimum value: 0 0 Maximum value: 500																															
quarantine-quota	The amount of disk space to reserve for quarantining files (0 - 4294967295 Mbytes, depends on disk space).	integer	Minimum value: 0 0 Maximum value: 4294967295																															

Parameter	Description	Type	Size	Default																												
store-blocked	Quarantine blocked files found in sessions using the selected protocols.	option	-	imap smtp pop3 http ftp nntp imaps smtps pop3s ftps mapi cifs ssh																												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>imap</td><td>IMAP.</td></tr><tr><td>smtp</td><td>SMTP.</td></tr><tr><td>pop3</td><td>POP3.</td></tr><tr><td>http</td><td>HTTP.</td></tr><tr><td>ftp</td><td>FTP.</td></tr><tr><td>nntp</td><td>NNTP.</td></tr><tr><td>imaps</td><td>IMAPS.</td></tr><tr><td>smtps</td><td>SMTPS.</td></tr><tr><td>pop3s</td><td>POP3S.</td></tr><tr><td>ftps</td><td>FTPS.</td></tr><tr><td>mapi</td><td>MAPI.</td></tr><tr><td>cifs</td><td>CIFS.</td></tr><tr><td>ssh</td><td>SSH.</td></tr></table>	Option	Description	imap	IMAP.	smtp	SMTP.	pop3	POP3.	http	HTTP.	ftp	FTP.	nntp	NNTP.	imaps	IMAPS.	smtps	SMTPS.	pop3s	POP3S.	ftps	FTPS.	mapi	MAPI.	cifs	CIFS.	ssh	SSH.			
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store-infected	Quarantine infected files found in sessions using the selected protocols.	option	-	imap smtp pop3 http ftp nntp imaps smtps pop3s https ftps mapi cifs ssh																												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>imap</td><td>IMAP.</td></tr><tr><td>smtp</td><td>SMTP.</td></tr></table>	Option	Description	imap	IMAP.	smtp	SMTP.																									
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Parameter	Description	Type	Size	Default																										
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store-machine-learning	Quarantine files detected by machine learning found in sessions using the selected protocols.	option	-	imap smtp pop3 http ftp nntp imaps smtps pop3s https ftps mapi cifs ssh																										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>imap</i></td><td>IMAP.</td></tr><tr><td><i>smtp</i></td><td>SMTP.</td></tr><tr><td><i>pop3</i></td><td>POP3.</td></tr><tr><td><i>http</i></td><td>HTTP.</td></tr><tr><td><i>ftp</i></td><td>FTP.</td></tr><tr><td><i>nntp</i></td><td>NNTP.</td></tr><tr><td><i>imaps</i></td><td>IMAPS.</td></tr><tr><td><i>smtps</i></td><td>SMTPS.</td></tr><tr><td><i>pop3s</i></td><td>POP3S.</td></tr></table>	Option	Description	<i>imap</i>	IMAP.	<i>smtp</i>	SMTP.	<i>pop3</i>	POP3.	<i>http</i>	HTTP.	<i>ftp</i>	FTP.	<i>nntp</i>	NNTP.	<i>imaps</i>	IMAPS.	<i>smtps</i>	SMTPS.	<i>pop3s</i>	POP3S.									
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Parameter	Description	Type	Size	Default
	Option	Description		
	<i>https</i>	HTTPS.		
	<i>ftps</i>	FTPS.		
	<i>mapi</i>	MAPI.		
	<i>cifs</i>	CIFS.		
	<i>ssh</i>	SSH.		

** Values may differ between models.

config antivirus settings

Configure AntiVirus settings.

```
config antivirus settings
  Description: Configure AntiVirus settings.
  set cache-infected-result [enable|disable]
  set grayware [enable|disable]
  set machine-learning-detection [enable|monitor|...]
  set override-timeout {integer}
  set use-extreme-db [enable|disable]
end
```

config antivirus settings

Parameter	Description	Type	Size	Default
cache-infected-result	Enable/disable cache of infected scan results (default = enable).	option	-	enable
	Option	Description		
	<i>enable</i>	Enable cache of infected scan results.		
	<i>disable</i>	Disable cache of infected scan results.		
grayware	Enable/disable grayware detection when an AntiVirus profile is applied to traffic.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable grayware detection.		
	<i>disable</i>	Disable grayware detection.		

Parameter	Description	Type	Size	Default								
machine-learning-detection	Use machine learning based malware detection.	option	-	enable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable machine learning based malware detection.</td></tr><tr><td><i>monitor</i></td><td>Enable machine learning based malware detection for monitoring only.</td></tr><tr><td><i>disable</i></td><td>Disable machine learning based malware detection.</td></tr></table>	Option	Description	<i>enable</i>	Enable machine learning based malware detection.	<i>monitor</i>	Enable machine learning based malware detection for monitoring only.	<i>disable</i>	Disable machine learning based malware detection.			
Option	Description											
<i>enable</i>	Enable machine learning based malware detection.											
<i>monitor</i>	Enable machine learning based malware detection for monitoring only.											
<i>disable</i>	Disable machine learning based malware detection.											
override-timeout	Override the large file scan timeout value in seconds (30 - 3600). Zero is the default value and is used to disable this command. When disabled, the daemon adjusts the large file scan timeout based on the file size.	integer	Minimum value: 30 Maximum value: 3600	0								
use-extreme-db	Enable/disable the use of Extreme AVDB.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable extreme AVDB.</td></tr><tr><td><i>disable</i></td><td>Disable extreme AVDB.</td></tr></table>	Option	Description	<i>enable</i>	Enable extreme AVDB.	<i>disable</i>	Disable extreme AVDB.					
Option	Description											
<i>enable</i>	Enable extreme AVDB.											
<i>disable</i>	Disable extreme AVDB.											

application

This section includes syntax for the following commands:

- [config application custom on page 161](#)
- [config application group on page 162](#)
- [config application list on page 163](#)
- [config application name on page 172](#)
- [config application rule-settings on page 174](#)

config application custom

Configure custom application signatures.

```
config application custom
  Description: Configure custom application signatures.
  edit <tag>
    set behavior {user}
    set category {integer}
    set comment {string}
    set id {integer}
    set protocol {user}
    set signature {var-string}
    set technology {user}
    set vendor {user}
  next
end
```

config application custom

Parameter	Description	Type	Size	Default
behavior	Custom application signature behavior.	user	Not Specified	
category	Custom application category ID (use ? to view available options).	integer	Minimum value: 0 Maximum value: 4294967295	
comment	Comment.	string	Maximum length: 63	

Parameter	Description	Type	Size	Default
id	Custom application category ID (use ? to view available options). Read-only.	integer	Minimum value: 0 Maximum value: 4294967295	0
protocol	Custom application signature protocol.	user	Not Specified	
signature	The text that makes up the actual custom application signature.	var-string	Maximum length: 4095	
tag	Signature tag.	string	Maximum length: 63	
technology	Custom application signature technology.	user	Not Specified	
vendor	Custom application signature vendor.	user	Not Specified	

config application group

Configure firewall application groups.

```

config application group
  Description: Configure firewall application groups.
  edit <name>
    set application <id1>, <id2>, ...
    set behavior {user}
    set category <id1>, <id2>, ...
    set comment {var-string}
    set popularity {option1}, {option2}, ...
    set protocols {user}
    set risk <level1>, <level2>, ...
    set technology {user}
    set type [application|filter]
    set vendor {user}
  next
end

```

config application group

Parameter	Description	Type	Size	Default
application <id>	Application ID list. Application IDs.	integer	Minimum value: 0 Maximum value: 4294967295	
behavior	Application behavior filter.	user	Not Specified	all

Parameter	Description	Type	Size	Default												
category <id>	Application category ID list. Category IDs.	integer	Minimum value: 0 Maximum value: 4294967295													
comment	Comments.	var-string	Maximum length: 255													
name	Application group name.	string	Maximum length: 63													
popularity	Application popularity filter (1 - 5, from least to most popular).	option	-	1 2 3 4 5												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>1</td><td>Popularity level 1.</td></tr><tr><td>2</td><td>Popularity level 2.</td></tr><tr><td>3</td><td>Popularity level 3.</td></tr><tr><td>4</td><td>Popularity level 4.</td></tr><tr><td>5</td><td>Popularity level 5.</td></tr></table>				Option	Description	1	Popularity level 1.	2	Popularity level 2.	3	Popularity level 3.	4	Popularity level 4.	5	Popularity level 5.
Option	Description															
1	Popularity level 1.															
2	Popularity level 2.															
3	Popularity level 3.															
4	Popularity level 4.															
5	Popularity level 5.															
protocols	Application protocol filter.	user	Not Specified	all												
risk <level>	Risk, or impact, of allowing traffic from this application to occur (1 - 5; Low, Elevated, Medium, High, and Critical). Risk, or impact, of allowing traffic from this application to occur (1 - 5; Low, Elevated, Medium, High, and Critical).	integer	Minimum value: 0 Maximum value: 4294967295													
technology	Application technology filter.	user	Not Specified	all												
type	Application group type.	option	-	application												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>application</td><td>Application ID.</td></tr><tr><td>filter</td><td>Application filter.</td></tr></table>				Option	Description	application	Application ID.	filter	Application filter.						
Option	Description															
application	Application ID.															
filter	Application filter.															
vendor	Application vendor filter.	user	Not Specified	all												

config application list

Configure application control lists.

```

config application list
    Description: Configure application control lists.
    edit <name>
        set app-replacemsg [disable|enable]
        set comment {var-string}
        set control-default-network-services [disable|enable]
        set deep-app-inspection [disable|enable]
        config default-network-services
            Description: Default network service entries.
            edit <id>
                set port {integer}
                set services {option1}, {option2}, ...
                set violation-action [pass|monitor|...]
            next
        end
    set enforce-default-app-port [disable|enable]
    config entries
        Description: Application list entries.
        edit <id>
            set action [pass|block|...]
            set application <id1>, <id2>, ...
            set behavior {user}
            set category <id1>, <id2>, ...
            set exclusion <id1>, <id2>, ...
            set log [disable|enable]
            set log-packet [disable|enable]
            config parameters
                Description: Application parameters.
                edit <id>
                    config members
                        Description: Parameter tuple members.
                        edit <id>
                            set name {string}
                            set value {string}
                        next
                    end
                next
            end
        set per-ip-shaper {string}
        set popularity {option1}, {option2}, ...
        set protocols {user}
        set quarantine [none|attacker]
        set quarantine-expiry {user}
        set quarantine-log [disable|enable]
        set rate-count {integer}
        set rate-duration {integer}
        set rate-mode [periodical|continuous]
        set rate-track [none|src-ip|...]
        set risk <level1>, <level2>, ...
        set session-ttl {integer}
        set shaper {string}
        set shaper-reverse {string}

```

```

        set technology {user}
        set vendor {user}
    next
end
set extended-log [enable|disable]
set force-inclusion-ssl-di-sigs [disable|enable]
set options {option1}, {option2}, ...
set other-application-action [pass|block]
set other-application-log [disable|enable]
set p2p-block-list {option1}, {option2}, ...
set replacemsg-group {string}
set unknown-application-action [pass|block]
set unknown-application-log [disable|enable]
next
end

```

config application list

Parameter	Description	Type	Size	Default						
app-replacemsg	Enable/disable replacement messages for blocked applications.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Disable replacement messages for blocked applications.</td></tr><tr><td>enable</td><td>Enable replacement messages for blocked applications.</td></tr></table>	Option	Description	disable	Disable replacement messages for blocked applications.	enable	Enable replacement messages for blocked applications.			
Option	Description									
disable	Disable replacement messages for blocked applications.									
enable	Enable replacement messages for blocked applications.									
comment	Comments.	var-string	Maximum length: 255							
control-default-network-services	Enable/disable enforcement of protocols over selected ports.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Disable protocol enforcement over selected ports.</td></tr><tr><td>enable</td><td>Enable protocol enforcement over selected ports.</td></tr></table>	Option	Description	disable	Disable protocol enforcement over selected ports.	enable	Enable protocol enforcement over selected ports.			
Option	Description									
disable	Disable protocol enforcement over selected ports.									
enable	Enable protocol enforcement over selected ports.									
deep-app-inspection	Enable/disable deep application inspection.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Disable deep application inspection.</td></tr><tr><td>enable</td><td>Enable deep application inspection.</td></tr></table>	Option	Description	disable	Disable deep application inspection.	enable	Enable deep application inspection.			
Option	Description									
disable	Disable deep application inspection.									
enable	Enable deep application inspection.									

Parameter	Description	Type	Size	Default										
enforce-default-app-port	Enable/disable default application port enforcement for allowed applications.	option	-	disable										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Disable default application port enforcement.</td></tr><tr><td>enable</td><td>Enable default application port enforcement.</td></tr></table>	Option	Description	disable	Disable default application port enforcement.	enable	Enable default application port enforcement.							
Option	Description													
disable	Disable default application port enforcement.													
enable	Enable default application port enforcement.													
extended-log	Enable/disable extended logging.	option	-	disable										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable setting.</td></tr><tr><td>disable</td><td>Disable setting.</td></tr></table>	Option	Description	enable	Enable setting.	disable	Disable setting.							
Option	Description													
enable	Enable setting.													
disable	Disable setting.													
force-inclusion-ssl-di-sigs	Enable/disable forced inclusion of SSL deep inspection signatures.	option	-	disable										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Disable forced inclusion of signatures which normally require SSL deep inspection.</td></tr><tr><td>enable</td><td>Enable forced inclusion of signatures which normally require SSL deep inspection.</td></tr></table>	Option	Description	disable	Disable forced inclusion of signatures which normally require SSL deep inspection.	enable	Enable forced inclusion of signatures which normally require SSL deep inspection.							
Option	Description													
disable	Disable forced inclusion of signatures which normally require SSL deep inspection.													
enable	Enable forced inclusion of signatures which normally require SSL deep inspection.													
name	List name.	string	Maximum length: 35											
options	Basic application protocol signatures allowed by default.	option	-	allow-dns										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>allow-dns</td><td>Allow DNS.</td></tr><tr><td>allow-icmp</td><td>Allow ICMP.</td></tr><tr><td>allow-http</td><td>Allow generic HTTP web browsing.</td></tr><tr><td>allow-ssl</td><td>Allow generic SSL communication.</td></tr></table>	Option	Description	allow-dns	Allow DNS.	allow-icmp	Allow ICMP.	allow-http	Allow generic HTTP web browsing.	allow-ssl	Allow generic SSL communication.			
Option	Description													
allow-dns	Allow DNS.													
allow-icmp	Allow ICMP.													
allow-http	Allow generic HTTP web browsing.													
allow-ssl	Allow generic SSL communication.													
other-application-action	Action for other applications.	option	-	pass										

Parameter	Description	Type	Size	Default
	Option Description			
	<i>pass</i>	Allow sessions matching an application in this application list.		
	<i>block</i>	Block sessions matching an application in this application list.		
other-application-log	Enable/disable logging for other applications.	option	-	disable
	Option Description			
	<i>disable</i>	Disable logging for other applications.		
	<i>enable</i>	Enable logging for other applications.		
p2p-block-list	P2P applications to be block listed.	option	-	
	Option Description			
	<i>skype</i>	Skype.		
	<i>edonkey</i>	Edonkey.		
	<i>bittorrent</i>	Bit torrent.		
replacemsg-group	Replacement message group.	string	Maximum length: 35	
unknown-application-action	Pass or block traffic from unknown applications.	option	-	pass
	Option Description			
	<i>pass</i>	Pass or allow unknown applications.		
	<i>block</i>	Drop or block unknown applications.		
unknown-application-log	Enable/disable logging for unknown applications.	option	-	disable
	Option Description			
	<i>disable</i>	Disable logging for unknown applications.		
	<i>enable</i>	Enable logging for unknown applications.		

config default-network-services

Parameter	Description	Type	Size	Default
id	Entry ID.	integer	Minimum value: 0 0 Maximum value: 4294967295	0
port	Port number.	integer	Minimum value: 0 0 Maximum value: 65535	0
services	Network protocols.	option	-	
	Option Description			
	http	HTTP.		
	ssh	SSH.		
	telnet	TELNET.		
	ftp	FTP.		
	dns	DNS.		
	smtp	SMTP.		
	pop3	POP3.		
	imap	IMAP.		
	snmp	SNMP.		
	nntp	NNTP.		
	https	HTTPS.		
	violation-action	Action for protocols not in the allowlist for selected port.	option	-
	Option Description			
	pass	Allow protocols not in the allowlist for selected port.		
	monitor	Monitor protocols not in the allowlist for selected port.		
	block	Block protocols not in the allowlist for selected port.		

config entries

Parameter	Description	Type	Size	Default
action	Pass or block traffic, or reset connection for traffic from this application.	option	-	block

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>pass</i>	Pass or allow matching traffic.		
	<i>block</i>	Block or drop matching traffic.		
	<i>reset</i>	Reset sessions for matching traffic.		
application <id>	ID of allowed applications. Application IDs.	integer	Minimum value: 0 Maximum value: 4294967295	
behavior	Application behavior filter.	user	Not Specified	all
category <id>	Category ID list. Application category ID.	integer	Minimum value: 0 Maximum value: 4294967295	
exclusion <id>	ID of excluded applications. Excluded application IDs.	integer	Minimum value: 0 Maximum value: 4294967295	
id	Entry ID.	integer	Minimum value: 0 Maximum value: 4294967295	0
log	Enable/disable logging for this application list.	option	-	enable
	Option	Description		
	<i>disable</i>	Disable logging.		
	<i>enable</i>	Enable logging.		
log-packet	Enable/disable packet logging.	option	-	disable
	Option	Description		
	<i>disable</i>	Disable packet logging.		
	<i>enable</i>	Enable packet logging.		
per-ip-shaper	Per-IP traffic shaper.	string	Maximum length: 35	
popularity	Application popularity filter (1 - 5, from least to most popular).	option	-	1 2 3 4 5

Parameter	Description	Type	Size	Default												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>1</td><td>Popularity level 1.</td></tr><tr><td>2</td><td>Popularity level 2.</td></tr><tr><td>3</td><td>Popularity level 3.</td></tr><tr><td>4</td><td>Popularity level 4.</td></tr><tr><td>5</td><td>Popularity level 5.</td></tr></table>	Option	Description	1	Popularity level 1.	2	Popularity level 2.	3	Popularity level 3.	4	Popularity level 4.	5	Popularity level 5.			
	Option	Description														
	1	Popularity level 1.														
	2	Popularity level 2.														
	3	Popularity level 3.														
	4	Popularity level 4.														
5	Popularity level 5.															
protocols	Application protocol filter.	user	Not Specified	all												
quarantine	Quarantine method.	option	-	none												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>none</td><td>Quarantine is disabled.</td></tr><tr><td>attacker</td><td>Block all traffic sent from attacker's IP address. The attacker's IP address is also added to the banned user list. The target's address is not affected.</td></tr></table>	Option	Description	none	Quarantine is disabled.	attacker	Block all traffic sent from attacker's IP address. The attacker's IP address is also added to the banned user list. The target's address is not affected.									
	Option	Description														
	none	Quarantine is disabled.														
attacker	Block all traffic sent from attacker's IP address. The attacker's IP address is also added to the banned user list. The target's address is not affected.															
quarantine-expiry	Duration of quarantine. (Format ####d##h##m, minimum 1m, maximum 364d23h59m, default = 5m). Requires quarantine set to attacker.	user	Not Specified	5m												
quarantine-log	Enable/disable quarantine logging.	option	-	enable												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Disable quarantine logging.</td></tr><tr><td>enable</td><td>Enable quarantine logging.</td></tr></table>	Option	Description	disable	Disable quarantine logging.	enable	Enable quarantine logging.									
	Option	Description														
	disable	Disable quarantine logging.														
enable	Enable quarantine logging.															
rate-count	Count of the rate.	integer	Minimum value: 0 0 Maximum value: 65535													
rate-duration	Duration (sec) of the rate.	integer	Minimum value: 60 1 Maximum value: 65535													
rate-mode	Rate limit mode.	option	-	continuous												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>periodical</td><td>Allow configured number of packets every rate-duration.</td></tr><tr><td>continuous</td><td>Block packets once the rate is reached.</td></tr></table>	Option	Description	periodical	Allow configured number of packets every rate-duration.	continuous	Block packets once the rate is reached.									
	Option	Description														
	periodical	Allow configured number of packets every rate-duration.														
continuous	Block packets once the rate is reached.															

Parameter	Description	Type	Size	Default
rate-track	Track the packet protocol field.	option	-	none
	Option	Description		
	<i>none</i>	none		
	<i>src-ip</i>	Source IP.		
	<i>dest-ip</i>	Destination IP.		
	<i>dhcp-client-mac</i>	DHCP client.		
	<i>dns-domain</i>	DNS domain.		
	risk <level>	Risk, or impact, of allowing traffic from this application to occur (1 - 5; Low, Elevated, Medium, High, and Critical). Risk, or impact, of allowing traffic from this application to occur (1 - 5; Low, Elevated, Medium, High, and Critical).	integer	Minimum value: 0 Maximum value: 4294967295
session-ttl	Session TTL (0 = default).	integer	Minimum value: 0 Maximum value: 4294967295	
shaper	Traffic shaper.	string	Maximum length: 35	
shaper-reverse	Reverse traffic shaper.	string	Maximum length: 35	
technology	Application technology filter.	user	Not Specified	all
vendor	Application vendor filter.	user	Not Specified	all

config parameters

Parameter	Description	Type	Size	Default
id	Parameter tuple ID.	integer	Minimum value: 0 Maximum value: 4294967295	

config members

Parameter	Description	Type	Size	Default
id	Parameter.	integer	Minimum value: 0 Maximum value: 4294967295	0
name	Parameter name.	string	Maximum length: 31	
value	Parameter value.	string	Maximum length: 199	

config application name

Configure application signatures. Read-only.

```
config application name
  Description: Configure application signatures. Read-only.
  edit <name>
    set behavior {user}
    set category {integer}
    set id {integer}
    config metadata
      Description: Meta data. Read-only.
      edit <id>
        set metaid {integer}
        set valueid {integer}
      next
    end
  config parameters
    Description: Application parameters. Read-only.
    edit <name>
      set default value {string}
    next
  end
  set popularity {integer}
  set protocol {user}
  set risk {integer}
  set technology {user}
  set vendor {user}
  set weight {integer}
next
end
```

config application name

Parameter	Description	Type	Size	Default
behavior	Application behavior. Read-only.	user	Not Specified	
category	Application category ID. Read-only.	integer	Minimum value: 0 0 Maximum value: 4294967295	
id	Application ID. Read-only.	integer	Minimum value: 0 0 Maximum value: 4294967295	
name	Application name.	string	Maximum length: 63	
popularity	Application popularity. Read-only.	integer	Minimum value: 0 0 Maximum value: 255	
protocol	Application protocol. Read-only.	user	Not Specified	
risk	Application risk. Read-only.	integer	Minimum value: 0 0 Maximum value: 255	
technology	Application technology. Read-only.	user	Not Specified	
vendor	Application vendor. Read-only.	user	Not Specified	
weight	Application weight. Read-only.	integer	Minimum value: 0 0 Maximum value: 255	

config metadata

Parameter	Description	Type	Size	Default
id	ID. Read-only.	integer	Minimum value: 0 0 Maximum value: 4294967295	
metaid	Meta ID. Read-only.	integer	Minimum value: 0 0 Maximum value: 4294967295	

Parameter	Description	Type	Size	Default
valueid	Value ID. Read-only.	integer	Minimum value: 0 0 Maximum value: 4294967295	0

config parameters

Parameter	Description	Type	Size	Default
default value	Parameter default value. Read-only.	string	Maximum length: 199	
name	Parameter name. Read-only.	string	Maximum length: 31	

config application rule-settings

Configure application rule settings. Read-only.

```
config application rule-settings
    Description: Configure application rule settings. Read-only.
    edit <id>
        next
    end
```

config application rule-settings

Parameter	Description	Type	Size	Default
id	Rule ID.	integer	Minimum value: 0 0 Maximum value: 4294967295	0

authentication

This section includes syntax for the following commands:

- [config authentication rule on page 175](#)
- [config authentication scheme on page 177](#)
- [config authentication setting on page 179](#)

config authentication rule

Configure Authentication Rules.

```
config authentication rule
  Description: Configure Authentication Rules.
  edit <name>
    set active-auth-method {string}
    set comments {var-string}
    set dstaddr <name1>, <name2>, ...
    set dstaddr6 <name1>, <name2>, ...
    set ip-based [enable|disable]
    set protocol [http|ftp|...]
    set srcaddr <name1>, <name2>, ...
    set srcaddr6 <name1>, <name2>, ...
    set srcintf <name1>, <name2>, ...
    set sso-auth-method {string}
    set status [enable|disable]
    set transaction-based [enable|disable]
    set web-auth-cookie [enable|disable]
    set web-portal [enable|disable]
  next
end
```

config authentication rule

Parameter	Description	Type	Size	Default
active-auth-method	Select an active authentication method.	string	Maximum length: 35	
comments	Comment.	var-string	Maximum length: 1023	

Parameter	Description	Type	Size	Default										
dstaddr <name>	Select an IPv4 destination address from available options. Required for web proxy authentication. Address name.	string	Maximum length: 79											
dstaddr6 <name>	Select an IPv6 destination address from available options. Required for web proxy authentication. Address name.	string	Maximum length: 79											
ip-based	Enable/disable IP-based authentication. When enabled, previously authenticated users from the same IP address will be exempted.	option	-	enable										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable IP-based authentication.</td></tr><tr><td>disable</td><td>Disable IP-based authentication.</td></tr></table>	Option	Description	enable	Enable IP-based authentication.	disable	Disable IP-based authentication.							
Option	Description													
enable	Enable IP-based authentication.													
disable	Disable IP-based authentication.													
name	Authentication rule name.	string	Maximum length: 35											
protocol	Authentication is required for the selected protocol (default = HTTP).	option	-	http										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>http</td><td>HTTP traffic is matched and authentication is required.</td></tr><tr><td>ftp</td><td>FTP traffic is matched and authentication is required.</td></tr><tr><td>socks</td><td>SOCKS traffic is matched and authentication is required.</td></tr><tr><td>ssh</td><td>SSH traffic is matched and authentication is required.</td></tr></table>	Option	Description	http	HTTP traffic is matched and authentication is required.	ftp	FTP traffic is matched and authentication is required.	socks	SOCKS traffic is matched and authentication is required.	ssh	SSH traffic is matched and authentication is required.			
Option	Description													
http	HTTP traffic is matched and authentication is required.													
ftp	FTP traffic is matched and authentication is required.													
socks	SOCKS traffic is matched and authentication is required.													
ssh	SSH traffic is matched and authentication is required.													
srcaddr <name>	Authentication is required for the selected IPv4 source address. Address name.	string	Maximum length: 79											
srcaddr6 <name>	Authentication is required for the selected IPv6 source address. Address name.	string	Maximum length: 79											
srcintf <name>	Incoming (ingress) interface. Interface name.	string	Maximum length: 79											
sso-auth-method	Select a single-sign on (SSO) authentication method.	string	Maximum length: 35											
status	Enable/disable this authentication rule.	option	-	enable										

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>enable</i>	Enable this authentication rule.		
	<i>disable</i>	Disable this authentication rule.		
transaction-based	Enable/disable transaction based authentication (default = disable).	option	-	disable
	Option	Description		
	<i>enable</i>	Enable transaction based authentication.		
	<i>disable</i>	Disable transaction based authentication.		
web-auth-cookie	Enable/disable Web authentication cookies (default = disable).	option	-	disable
	Option	Description		
	<i>enable</i>	Enable Web authentication cookie.		
	<i>disable</i>	Disable Web authentication cookie.		
web-portal	Enable/disable web portal for proxy transparent policy (default = enable).	option	-	enable
	Option	Description		
	<i>enable</i>	Enable web-portal.		
	<i>disable</i>	Disable web-portal.		

config authentication scheme

Configure Authentication Schemes.

```

config authentication scheme
  Description: Configure Authentication Schemes.
  edit <name>
    set domain-controller {string}
    set fsso-agent-for-ntlm {string}
    set fsso-guest [enable|disable]
    set kerberos-keytab {string}
    set method {option1}, {option2}, ...
    set negotiate-ntlm [enable|disable]
    set require-tfa [enable|disable]
    set saml-server {string}
    set saml-timeout {integer}
    set ssh-ca {string}

```



```

    set user-cert [enable|disable]
    set user-database <name1>, <name2>, ...
next
end

```

config authentication scheme

Parameter	Description	Type	Size	Default																						
domain-controller	Domain controller setting.	string	Maximum length: 35																							
fsso-agent-for-ntlm	FSSO agent to use for NTLM authentication.	string	Maximum length: 35																							
fsso-guest	Enable/disable user fsso-guest authentication (default = disable).	option	-	disable																						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable user fsso-guest authentication.</td></tr><tr><td><i>disable</i></td><td>Disable user fsso-guest authentication.</td></tr></table>				Option	Description	<i>enable</i>	Enable user fsso-guest authentication.	<i>disable</i>	Disable user fsso-guest authentication.																
	Option	Description																								
	<i>enable</i>	Enable user fsso-guest authentication.																								
<i>disable</i>	Disable user fsso-guest authentication.																									
kerberos-keytab	Kerberos keytab setting.	string	Maximum length: 35																							
method	Authentication methods (default = basic).	option	-																							
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>ntlm</i></td><td>NTLM authentication.</td></tr><tr><td><i>basic</i></td><td>Basic HTTP authentication.</td></tr><tr><td><i>digest</i></td><td>Digest HTTP authentication.</td></tr><tr><td><i>form</i></td><td>Form-based HTTP authentication.</td></tr><tr><td><i>negotiate</i></td><td>Negotiate authentication.</td></tr><tr><td><i>fsso</i></td><td>Fortinet Single Sign-On (FSSO) authentication.</td></tr><tr><td><i>rsso</i></td><td>RADIUS Single Sign-On (RSSO) authentication.</td></tr><tr><td><i>ssh-publickey</i></td><td>Public key based SSH authentication.</td></tr><tr><td><i>cert</i></td><td>Client certificate authentication.</td></tr><tr><td><i>saml</i></td><td>SAML authentication.</td></tr></table>				Option	Description	<i>ntlm</i>	NTLM authentication.	<i>basic</i>	Basic HTTP authentication.	<i>digest</i>	Digest HTTP authentication.	<i>form</i>	Form-based HTTP authentication.	<i>negotiate</i>	Negotiate authentication.	<i>fsso</i>	Fortinet Single Sign-On (FSSO) authentication.	<i>rsso</i>	RADIUS Single Sign-On (RSSO) authentication.	<i>ssh-publickey</i>	Public key based SSH authentication.	<i>cert</i>	Client certificate authentication.	<i>saml</i>	SAML authentication.
	Option	Description																								
	<i>ntlm</i>	NTLM authentication.																								
	<i>basic</i>	Basic HTTP authentication.																								
	<i>digest</i>	Digest HTTP authentication.																								
	<i>form</i>	Form-based HTTP authentication.																								
	<i>negotiate</i>	Negotiate authentication.																								
	<i>fsso</i>	Fortinet Single Sign-On (FSSO) authentication.																								
	<i>rsso</i>	RADIUS Single Sign-On (RSSO) authentication.																								
	<i>ssh-publickey</i>	Public key based SSH authentication.																								
	<i>cert</i>	Client certificate authentication.																								
<i>saml</i>	SAML authentication.																									
name	Authentication scheme name.	string	Maximum length: 35																							

Parameter	Description	Type	Size	Default						
negotiate-ntlm	Enable/disable negotiate authentication for NTLM (default = disable).	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable negotiate authentication for NTLM.</td></tr><tr><td><i>disable</i></td><td>Disable negotiate authentication for NTLM.</td></tr></table>	Option	Description	<i>enable</i>	Enable negotiate authentication for NTLM.	<i>disable</i>	Disable negotiate authentication for NTLM.			
Option	Description									
<i>enable</i>	Enable negotiate authentication for NTLM.									
<i>disable</i>	Disable negotiate authentication for NTLM.									
require-tfa	Enable/disable two-factor authentication (default = disable).	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable two-factor authentication.</td></tr><tr><td><i>disable</i></td><td>Disable two-factor authentication.</td></tr></table>	Option	Description	<i>enable</i>	Enable two-factor authentication.	<i>disable</i>	Disable two-factor authentication.			
Option	Description									
<i>enable</i>	Enable two-factor authentication.									
<i>disable</i>	Disable two-factor authentication.									
saml-server	SAML configuration.	string	Maximum length: 35							
saml-timeout	SAML authentication timeout in seconds.	integer	Minimum value: 30 Maximum value: 1200	120						
ssh-ca	SSH CA name.	string	Maximum length: 35							
user-cert	Enable/disable authentication with user certificate (default = disable).	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable client certificate field authentication.</td></tr><tr><td><i>disable</i></td><td>Disable client certificate field authentication.</td></tr></table>	Option	Description	<i>enable</i>	Enable client certificate field authentication.	<i>disable</i>	Disable client certificate field authentication.			
Option	Description									
<i>enable</i>	Enable client certificate field authentication.									
<i>disable</i>	Disable client certificate field authentication.									
user-database <name>	Authentication server to contain user information; "local" (default) or "123" (for LDAP). Authentication server name.	string	Maximum length: 79							

config authentication setting

Configure authentication setting.

```
config authentication setting
  Description: Configure authentication setting.
  set active-auth-scheme {string}
  set auth-https [enable|disable]
  set captive-portal {string}
```

```

set captive-portal-ip {ipv4-address-any}
set captive-portal-ip6 {ipv6-address}
set captive-portal-port {integer}
set captive-portal-ssl-port {integer}
set captive-portal-type [fqdn|ip]
set captive-portal6 {string}
set cert-auth [enable|disable]
set cert-captive-portal {string}
set cert-captive-portal-ip {ipv4-address-any}
set cert-captive-portal-port {integer}
set cookie-max-age {integer}
set cookie-refresh-div {integer}
set dev-range <name1>, <name2>, ...
set ip-auth-cookie [enable|disable]
set persistent-cookie [enable|disable]
set sso-auth-scheme {string}
set update-time {user}
set user-cert-ca <name1>, <name2>, ...
end

```

config authentication setting

Parameter	Description	Type	Size	Default
active-auth-scheme	Active authentication method (scheme name).	string	Maximum length: 35	
auth-https	Enable/disable redirecting HTTP user authentication to HTTPS.	option	-	enable
	Option	Description		
	enable	Enable setting.		
	disable	Disable setting.		
captive-portal	Captive portal host name.	string	Maximum length: 255	
captive-portal-ip	Captive portal IP address.	ipv4-address-any	Not Specified	0.0.0.0
captive-portal-ip6	Captive portal IPv6 address.	ipv6-address	Not Specified	::
captive-portal-port	Captive portal port number (1 - 65535, default = 7830).	integer	Minimum value: 1 Maximum value: 65535	7830

Parameter	Description	Type	Size	Default						
captive-portal-ssl-port	Captive portal SSL port number (1 - 65535, default = 7831).	integer	Minimum value: 1 Maximum value: 65535	7831						
captive-portal-type	Captive portal type.	option	-	fqdn						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>fqdn</td><td>Use FQDN for captive portal.</td></tr><tr><td>ip</td><td>Use an IP address for captive portal.</td></tr></table>				Option	Description	fqdn	Use FQDN for captive portal.	ip	Use an IP address for captive portal.
Option	Description									
fqdn	Use FQDN for captive portal.									
ip	Use an IP address for captive portal.									
captive-portal6	IPv6 captive portal host name.	string	Maximum length: 255							
cert-auth	Enable/disable redirecting certificate authentication to HTTPS portal.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable setting.</td></tr><tr><td>disable</td><td>Disable setting.</td></tr></table>				Option	Description	enable	Enable setting.	disable	Disable setting.
Option	Description									
enable	Enable setting.									
disable	Disable setting.									
cert-captive-portal	Certificate captive portal host name.	string	Maximum length: 255							
cert-captive-portal-ip	Certificate captive portal IP address.	ipv4-address-any	Not Specified	0.0.0.0						
cert-captive-portal-port	Certificate captive portal port number (1 - 65535, default = 7832).	integer	Minimum value: 1 Maximum value: 65535	7832						
cookie-max-age	Persistent web portal cookie maximum age in minutes (30 - 10080 (1 week), default = 480 (8 hours)).	integer	Minimum value: 30 Maximum value: 10080	480						
cookie-refresh-div	Refresh rate divider of persistent web portal cookie (default = 2). Refresh value = cookie-max-age/cookie-refresh-div.	integer	Minimum value: 2 Maximum value: 4	2						

Parameter	Description	Type	Size	Default						
dev-range <name>	Address range for the IP based device query. Address name.	string	Maximum length: 79							
ip-auth- cookie	Enable/disable persistent cookie on IP based web portal authentication (default = disable).	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable persistent cookie for IP-based authentication.</td></tr><tr><td><i>disable</i></td><td>Disable persistent cookie for IP-based authentication.</td></tr></table>	Option	Description	<i>enable</i>	Enable persistent cookie for IP-based authentication.	<i>disable</i>	Disable persistent cookie for IP-based authentication.			
Option	Description									
<i>enable</i>	Enable persistent cookie for IP-based authentication.									
<i>disable</i>	Disable persistent cookie for IP-based authentication.									
persistent- cookie	Enable/disable persistent cookie on web portal authentication (default = enable).	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable persistent cookie.</td></tr><tr><td><i>disable</i></td><td>Disable persistent cookie.</td></tr></table>	Option	Description	<i>enable</i>	Enable persistent cookie.	<i>disable</i>	Disable persistent cookie.			
Option	Description									
<i>enable</i>	Enable persistent cookie.									
<i>disable</i>	Disable persistent cookie.									
sso-auth- scheme	Single-Sign-On authentication method (scheme name).	string	Maximum length: 35							
update-time	Time of the last update.	user	Not Specified							
user-cert-ca <name>	CA certificate used for client certificate verification. CA certificate list.	string	Maximum length: 79							

automation

This section includes syntax for the following commands:

- [config automation setting on page 183](#)

config automation setting

Automation setting configuration.

```
config automation setting
  Description: Automation setting configuration.
  set fabric-sync [enable|disable]
  set max-concurrent-stitches {integer}
end
```

config automation setting

Parameter	Description	Type	Size	Default						
fabric-sync	Enable/disable synchronization of automation settings with security fabric.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Synchronize automation setting with security fabric.</td></tr><tr><td><i>disable</i></td><td>Do not synchronize automation setting with security fabric.</td></tr></table>	Option	Description	<i>enable</i>	Synchronize automation setting with security fabric.	<i>disable</i>	Do not synchronize automation setting with security fabric.			
Option	Description									
<i>enable</i>	Synchronize automation setting with security fabric.									
<i>disable</i>	Do not synchronize automation setting with security fabric.									
max-concurrent-stitches	Maximum number of automation stitches that are allowed to run concurrently.	integer	Minimum value: 32 Maximum value: 1024 **	512 **						

** Values may differ between models.

aws

This section includes syntax for the following commands:

- [config aws vpce on page 184](#)

config aws vpce



This command is available for model(s): FortiGate-VM64 AWS.

It is not available for: FortiGate 1000D, FortiGate 1000F, FortiGate 1001F, FortiGate 100EF, FortiGate 100E, FortiGate 100F, FortiGate 101F, FortiGate 1100E, FortiGate 1101E, FortiGate 140E-POE, FortiGate 140E, FortiGate 1500DT, FortiGate 1500D, FortiGate 1800F, FortiGate 1801F, FortiGate 2000E, FortiGate 200E, FortiGate 200F, FortiGate 201E, FortiGate 201F, FortiGate 2201E, FortiGate 2500E, FortiGate 2600F, FortiGate 2601F, FortiGate 3000D, FortiGate 3000F, FortiGate 3001F, FortiGate 300E, FortiGate 301E, FortiGate 3100D, FortiGate 3200D, FortiGate 3200F, FortiGate 3201F, FortiGate 3300E, FortiGate 3301E, FortiGate 3400E, FortiGate 3401E, FortiGate 3501F, FortiGate 3600E, FortiGate 3601E, FortiGate 3700D, FortiGate 3700F, FortiGate 3701F, FortiGate 3960E, FortiGate 3980E, FortiGate 400E Bypass, FortiGate 400E, FortiGate 400F, FortiGate 401E, FortiGate 401F, FortiGate 40F 3G4G, FortiGate 4200F, FortiGate 4201F, FortiGate 4400F, FortiGate 4401F, FortiGate 5001E1, FortiGate 5001E, FortiGate 500E, FortiGate 501E, FortiGate 600E, FortiGate 601E, FortiGate 60E-POE, FortiGate 60E, FortiGate 60F, FortiGate 61E, FortiGate 70F, FortiGate 71F, FortiGate 800D, FortiGate 80E-POE, FortiGate 80E, FortiGate 80F Bypass, FortiGate 80F DSL, FortiGate 80F-POE, FortiGate 80F, FortiGate 81E-POE, FortiGate 81E, FortiGate 81F-POE, FortiGate 81F, FortiGate 900D, FortiGate 90E, FortiGate 91E, FortiGate-VM64 Aliyun, FortiGate-VM64 Azure, FortiGate-VM64 GCP, FortiGate-VM64 OPC, FortiGate-VM64, FortiGateRugged 60F 3G4G, FortiGateRugged 60F, FortiGateRugged 70F 3G4G, FortiGateRugged 70F, FortiWiFi 40F 3G4G, FortiWiFi 40F, FortiWiFi 60E, FortiWiFi 60F, FortiWiFi 61E, FortiWiFi 61F, FortiWiFi 80F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G-POE, FortiWiFi 81F 2R-POE, FortiWiFi 81F 2R.

Configure AWS VPC endpoint.

```
config aws vpce
  Description: Configure AWS VPC endpoint.
  edit <id>
    set endpoint-id {string}
    set name {string}
    set vdom {string}
  next
end
```

config aws vpce

Parameter	Description	Type	Size	Default
endpoint-id	VPC endpoint ID.	string	Maximum length: 32	
id	Entry ID.	integer	Minimum value: 0 Maximum value: 4294967295	
name	VPC endpoint name.	string	Maximum length: 63	
vdom	VDOM name.	string	Maximum length: 31	

certificate

This section includes syntax for the following commands:

- [config certificate ca](#) on page 186
- [config certificate crl](#) on page 188
- [config certificate local](#) on page 189
- [config certificate remote](#) on page 193

config certificate ca

CA certificate.

```
config certificate ca
  Description: CA certificate.
  edit <name>
    set auto-update-days {integer}
    set auto-update-days-warning {integer}
    set ca {user}
    set ca-identifier {string}
    set obsolete [disable|enable]
    set range [global|vdom]
    set scep-url {string}
    set source [factory|user|...]
    set source-ip {ipv4-address}
    set ssl-inspection-trusted [enable|disable]
  next
end
```

config certificate ca

Parameter	Description	Type	Size	Default
auto-update-days	Number of days to wait before requesting an updated CA certificate (0 - 4294967295, 0 = disabled).	integer	Minimum value: 0 Maximum value: 4294967295	0
auto-update-days-warning	Number of days before an expiry-warning message is generated (0 - 4294967295, 0 = disabled).	integer	Minimum value: 0 Maximum value: 4294967295	0

Parameter	Description	Type	Size	Default
ca	CA certificate as a PEM file.	user	Not Specified	
ca-identifier	CA identifier of the SCEP server.	string	Maximum length: 255	
name	Name.	string	Maximum length: 79	
obsolete	Enable/disable this CA as obsoleted.	option	-	disable
	Option		Description	
	disable	Alive.		
	enable	Obsolete.		
range	Either global or VDOM IP address range for the CA certificate.	option	-	global
	Option		Description	
	global	Global range.		
	vdom	VDOM IP address range.		
scep-url	URL of the SCEP server.	string	Maximum length: 255	
source	CA certificate source type.	option	-	user
	Option		Description	
	factory	Factory installed certificate.		
	user	User generated certificate.		
	bundle	Bundle file certificate.		
source-ip	Source IP address for communications to the SCEP server.	ipv4-address	Not Specified	0.0.0.0
ssl-inspection-trusted	Enable/disable this CA as a trusted CA for SSL inspection.	option	-	enable
	Option		Description	
	enable	Trusted CA for SSL inspection.		
	disable	Untrusted CA for SSL inspection.		

config certificate crl

Certificate Revocation List as a PEM file.

```
config certificate crl
  Description: Certificate Revocation List as a PEM file.
  edit <name>
    set crl {user}
    set http-url {string}
    set ldap-password {password}
    set ldap-server {string}
    set ldap-username {string}
    set range [global|vdom]
    set scep-cert {string}
    set scep-url {string}
    set source [factory|user|...]
    set source-ip {ipv4-address}
    set update-interval {integer}
    set update-vdom {string}
  next
end
```

config certificate crl

Parameter	Description	Type	Size	Default
crl	Certificate Revocation List as a PEM file.	user	Not Specified	
http-url	HTTP server URL for CRL auto-update.	string	Maximum length: 255	
ldap-password	LDAP server user password.	password	Not Specified	
ldap-server	LDAP server name for CRL auto-update.	string	Maximum length: 35	
ldap-username	LDAP server user name.	string	Maximum length: 63	
name	Name.	string	Maximum length: 35	
range	Either global or VDOM IP address range for the certificate.	option	-	global
		Option	Description	
		global	Global range.	
		vdom	VDOM IP address range.	

Parameter	Description	Type	Size	Default								
scep-cert	Local certificate for SCEP communication for CRL auto-update.	string	Maximum length: 35	Fortinet_CA_SSL								
scep-url	SCEP server URL for CRL auto-update.	string	Maximum length: 255									
source	Certificate source type.	option	-	user								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>factory</td><td>Factory installed certificate.</td></tr><tr><td>user</td><td>User generated certificate.</td></tr><tr><td>bundle</td><td>Bundle file certificate.</td></tr></table>				Option	Description	factory	Factory installed certificate.	user	User generated certificate.	bundle	Bundle file certificate.
Option	Description											
factory	Factory installed certificate.											
user	User generated certificate.											
bundle	Bundle file certificate.											
source-ip	Source IP address for communications to a HTTP or SCEP CA server.	ipv4-address	Not Specified	0.0.0.0								
update-interval	Time in seconds before the FortiGate checks for an updated CRL. Set to 0 to update only when it expires.	integer	Minimum value: 0 Maximum value: 4294967295	0								
update-vdom	VDOM for CRL update.	string	Maximum length: 31	root								

config certificate local

Local keys and certificates.

```

config certificate local
  Description: Local keys and certificates.
  edit <name>
    set acme-ca-url {string}
    set acme-domain {string}
    set acme-email {string}
    set acme-renew-window {integer}
    set acme-rsa-key-size {integer}
    set auto-regenerate-days {integer}
    set auto-regenerate-days-warning {integer}
    set ca-identifier {string}
    set certificate {user}
    set cmp-path {string}
    set cmp-regeneration-method [keyupdate|renewal]
    set cmp-server {string}
    set cmp-server-cert {string}
    set comments {string}
    set csr {user}
    set enroll-protocol [none|scep|...]
  
```

```

set ike-localid {string}
set ike-localid-type [asn1dn|fqdn]
set name-encoding [printable|utf8]
set password {password}
set private-key {user}
set private-key-retain [enable|disable]
set range [global|vdom]
set scep-password {password}
set scep-url {string}
set source [factory|user|...]
set source-ip {ipv4-address}
set state {user}
next
end

```

config certificate local

Parameter	Description	Type	Size	Default
acme-ca-url	The URL for the ACME CA server (Let's Encrypt is the default provider).	string	Maximum length: 255	https://acme-v02.api.letsencrypt.org/directory
acme-domain	A valid domain that resolves to this FortiGate unit.	string	Maximum length: 255	
acme-email	Contact email address that is required by some CAs like LetsEncrypt.	string	Maximum length: 255	
acme-renew-window	Beginning of the renewal window (in days before certificate expiration, 30 by default).	integer	Minimum value: 30 1 Maximum value: 100	
acme-rsa-key-size	Length of the RSA private key of the generated cert (Minimum 2048 bits).	integer	Minimum value: 2048 2048 Maximum value: 4096	

Parameter	Description	Type	Size	Default						
auto-regenerate-days	Number of days to wait before expiry of an updated local certificate is requested (0 = disabled).	integer	Minimum value: 0 Maximum value: 4294967295	0						
auto-regenerate-days-warning	Number of days to wait before an expiry warning message is generated (0 = disabled).	integer	Minimum value: 0 Maximum value: 4294967295	0						
ca-identifier	CA identifier of the CA server for signing via SCEP.	string	Maximum length: 255							
certificate	PEM format certificate.	user	Not Specified							
cmp-path	Path location inside CMP server.	string	Maximum length: 255							
cmp-regeneration-method	CMP auto-regeneration method.	option	-	keyupate						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>keyupate</i></td><td>Key Update.</td></tr><tr><td><i>renewal</i></td><td>Renewal.</td></tr></table>				Option	Description	<i>keyupate</i>	Key Update.	<i>renewal</i>	Renewal.
Option	Description									
<i>keyupate</i>	Key Update.									
<i>renewal</i>	Renewal.									
cmp-server	Address and port for CMP server (format = address:port).	string	Maximum length: 63							
cmp-server-cert	CMP server certificate.	string	Maximum length: 79							
comments	Comment.	string	Maximum length: 511							
csr	Certificate Signing Request.	user	Not Specified							
enroll-protocol	Certificate enrollment protocol.	option	-	none						

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>none</i>	None (default).		
	<i>scep</i>	Simple Certificate Enrollment Protocol.		
	<i>cmpv2</i>	Certificate Management Protocol Version 2.		
	<i>acme2</i>	Automated Certificate Management Environment Version 2.		
ike-localid	Local ID the FortiGate uses for authentication as a VPN client.	string	Maximum length: 63	
ike-localid-type	IKE local ID type.	option	-	asn1dn
	Option	Description		
	<i>asn1dn</i>	ASN.1 distinguished name.		
	<i>fqdn</i>	Fully qualified domain name.		
name	Name.	string	Maximum length: 35	
name-encoding	Name encoding method for auto-regeneration.	option	-	printable
	Option	Description		
	<i>printable</i>	Printable encoding (default).		
	<i>utf8</i>	UTF-8 encoding.		
password	Password as a PEM file.	password	Not Specified	
private-key	PEM format key encrypted with a password.	user	Not Specified	
private-key-retain	Enable/disable retention of private key during SCEP renewal (default = disable).	option	-	disable
	Option	Description		
	<i>enable</i>	Keep the existing private key during SCEP renewal.		

Parameter	Description	Type	Size	Default								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>disable</i></td><td>Generate a new private key during SCEP renewal.</td></tr></table>				Option	Description	<i>disable</i>	Generate a new private key during SCEP renewal.				
	Option	Description										
<i>disable</i>	Generate a new private key during SCEP renewal.											
range	Either a global or VDOM IP address range for the certificate.	option	-	global								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>global</i></td><td>Global range.</td></tr><tr><td><i>vdom</i></td><td>VDOM IP address range.</td></tr></table>				Option	Description	<i>global</i>	Global range.	<i>vdom</i>	VDOM IP address range.		
	Option	Description										
	<i>global</i>	Global range.										
<i>vdom</i>	VDOM IP address range.											
scep-password	SCEP server challenge password for auto-regeneration.	password	Not Specified									
scep-url	SCEP server URL.	string	Maximum length: 255									
source	Certificate source type.	option	-	user								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>factory</i></td><td>Factory installed certificate.</td></tr><tr><td><i>user</i></td><td>User generated certificate.</td></tr><tr><td><i>bundle</i></td><td>Bundle file certificate.</td></tr></table>				Option	Description	<i>factory</i>	Factory installed certificate.	<i>user</i>	User generated certificate.	<i>bundle</i>	Bundle file certificate.
	Option	Description										
	<i>factory</i>	Factory installed certificate.										
	<i>user</i>	User generated certificate.										
<i>bundle</i>	Bundle file certificate.											
source-ip	Source IP address for communications to the SCEP server.	ipv4-address	Not Specified	0.0.0.0								
state	Certificate Signing Request State. Read-only.	user	Not Specified									

config certificate remote

Remote certificate as a PEM file.

```
config certificate remote
  Description: Remote certificate as a PEM file.
  edit <name>
    set range [global|vdom]
```



```

        set remote {user}
        set source [factory|user|...]
    next
end

```

config certificate remote

Parameter	Description	Type	Size	Default								
name	Name.	string	Maximum length: 35									
range	Either the global or VDOM IP address range for the remote certificate.	option	-	global								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>global</i></td><td>Global range.</td></tr><tr><td><i>vdom</i></td><td>VDOM IP address range.</td></tr></table>				Option	Description	<i>global</i>	Global range.	<i>vdom</i>	VDOM IP address range.		
Option	Description											
<i>global</i>	Global range.											
<i>vdom</i>	VDOM IP address range.											
remote	Remote certificate.	user	Not Specified									
source	Remote certificate source type.	option	-	user								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>factory</i></td><td>Factory installed certificate.</td></tr><tr><td><i>user</i></td><td>User generated certificate.</td></tr><tr><td><i>bundle</i></td><td>Bundle file certificate.</td></tr></table>				Option	Description	<i>factory</i>	Factory installed certificate.	<i>user</i>	User generated certificate.	<i>bundle</i>	Bundle file certificate.
Option	Description											
<i>factory</i>	Factory installed certificate.											
<i>user</i>	User generated certificate.											
<i>bundle</i>	Bundle file certificate.											

dlp

This section includes syntax for the following commands:

- [config dlp data-type on page 195](#)
- [config dlp dictionary on page 196](#)
- [config dlp filepattern on page 198](#)
- [config dlp fp-doc-source on page 201](#)
- [config dlp profile on page 205](#)
- [config dlp sensitivity on page 210](#)
- [config dlp sensor on page 210](#)
- [config dlp settings on page 212](#)

config dlp data-type

Configure predefined data type used by DLP blocking.

```
config dlp data-type
  Description: Configure predefined data type used by DLP blocking.
  edit <name>
    set comment {var-string}
    set look-ahead {integer}
    set look-back {integer}
    set pattern {string}
    set transform {string}
    set verify {string}
    set verify-transformed-pattern [enable|disable]
  next
end
```

config dlp data-type

Parameter	Description	Type	Size	Default
comment	Optional comments.	var-string	Maximum length: 255	
look-ahead	Number of characters to obtain in advance for verification (1 - 255, default = 1).	integer	Minimum value: 1 Maximum value: 255	1

Parameter	Description	Type	Size	Default						
look-back	Number of characters required to save for verification (1 - 255, default = 1).	integer	Minimum value: 1 Maximum value: 255	1						
name	Name of table containing the data type.	string	Maximum length: 35							
pattern	Regular expression pattern string without look around.	string	Maximum length: 255							
transform	Template to transform user input to a pattern using capture group from 'pattern'.	string	Maximum length: 255							
verify	Regular expression pattern string used to verify the data type.	string	Maximum length: 255							
verify-transformed-pattern	Enable/disable verification for transformed pattern.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable verification for transformed pattern.</td></tr><tr><td><i>disable</i></td><td>Disable verification for transformed pattern.</td></tr></table>				Option	Description	<i>enable</i>	Enable verification for transformed pattern.	<i>disable</i>	Disable verification for transformed pattern.
Option	Description									
<i>enable</i>	Enable verification for transformed pattern.									
<i>disable</i>	Disable verification for transformed pattern.									

config dlp dictionary

Configure dictionaries used by DLP blocking.

```

config dlp dictionary
  Description: Configure dictionaries used by DLP blocking.
  edit <name>
    set comment {var-string}
    config entries
      Description: DLP dictionary entries.
      edit <id>
        set comment {var-string}
        set ignore-case [enable|disable]
        set pattern {string}
        set repeat [enable|disable]
        set status [enable|disable]
        set type {string}
      next
    end
    set match-type [match-all|match-any]
    set uuid {uuid}
  next
end

```

config dlp dictionary

Parameter	Description	Type	Size	Default
comment	Optional comments.	var-string	Maximum length: 255	
match-type	Logical relation between entries (default = match-any).	option	-	match-any
	Option	Description		
	match-all	Match all entries.		
	match-any	Match any entries.		
name	Name of table containing the dictionary.	string	Maximum length: 35	
uuid	Universally Unique Identifier (UUID; automatically assigned but can be manually reset).	uuid	Not Specified	00000000-0000-0000-0000-000000000000

config entries

Parameter	Description	Type	Size	Default
comment	Optional comments.	var-string	Maximum length: 255	
id	ID.	integer	Minimum value: 0 Maximum value: 4294967295	0
ignore-case	Enable/disable ignore case.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable ignore case.		
	<i>disable</i>	Disable ignore case.		
pattern	Pattern to match.	string	Maximum length: 255	
repeat	Enable/disable repeat match.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable repeat match.		
	<i>disable</i>	Disable repeat match.		

Parameter	Description	Type	Size	Default						
status	Enable/disable this pattern.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable this pattern.</td></tr><tr><td><i>disable</i></td><td>Disable this pattern.</td></tr></table>				Option	Description	<i>enable</i>	Enable this pattern.	<i>disable</i>	Disable this pattern.
	Option	Description								
	<i>enable</i>	Enable this pattern.								
<i>disable</i>	Disable this pattern.									
type	Pattern type to match.	string	Maximum length: 35							

config dlp filepattern

Configure file patterns used by DLP blocking.

```

config dlp filepattern
  Description: Configure file patterns used by DLP blocking.
  edit <id>
    set comment {var-string}
    config entries
      Description: Configure file patterns used by DLP blocking.
      edit <pattern>
        set file-type [7z|arj|...]
        set filter-type [pattern|type]
      next
    end
    set name {string}
  next
end

```

config dlp filepattern

Parameter	Description	Type	Size	Default
comment	Optional comments.	var-string	Maximum length: 255	
id	ID.	integer	Minimum value: 0 Maximum value: 4294967295	
name	Name of table containing the file pattern list.	string	Maximum length: 63	

config entries

Parameter	Description	Type	Size	Default
file-type	Select a file type.	option	-	unknown
	Option	Description		
	7z	Match 7-zip files.		
	arj	Match arj compressed files.		
	cab	Match Windows cab files.		
	lzh	Match lzh compressed files.		
	rar	Match rar archives.		
	tar	Match tar files.		
	zip	Match zip files.		
	bzip	Match bzip files.		
	gzip	Match gzip files.		
	bzip2	Match bzip2 files.		
	xz	Match xz files.		
	bat	Match Windows batch files.		
	uue	Match uue files.		
	mime	Match mime files.		
	base64	Match base64 files.		
	binhex	Match binhex files.		
	elf	Match elf files.		
	exe	Match Windows executable files.		
	hta	Match hta files.		
	html	Match html files.		
	jad	Match jad files.		
	class	Match class files.		
	cod	Match cod files.		
	javascript	Match javascript files.		
	msoffice	Match MS-Office files. For example, doc, xls, ppt, and so on.		
	msofficex	Match MS-Office XML files. For example, docx, xlsx, pptx, and so on.		
	fsg	Match fsg files.		

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>upx</i>	Match upx files.		
	<i>petite</i>	Match petite files.		
	<i>aspack</i>	Match aspack files.		
	<i>sis</i>	Match sis files.		
	<i>hlp</i>	Match Windows help files.		
	<i>activemime</i>	Match activemime files.		
	<i>jpeg</i>	Match jpeg files.		
	<i>gif</i>	Match gif files.		
	<i>tiff</i>	Match tiff files.		
	<i>png</i>	Match png files.		
	<i>bmp</i>	Match bmp files.		
	<i>unknown</i>	Match unknown files.		
	<i>mpeg</i>	Match mpeg files.		
	<i>mov</i>	Match mov files.		
	<i>mp3</i>	Match mp3 files.		
	<i>wma</i>	Match wma files.		
	<i>wav</i>	Match wav files.		
	<i>pdf</i>	Match Acrobat PDF files.		
	<i>avi</i>	Match avi files.		
	<i>rm</i>	Match rm files.		
	<i>torrent</i>	Match torrent files.		
	<i>hibun</i>	Match special-file-23-support files.		
	<i>msi</i>	Match Windows Installer msi files.		
	<i>mach-o</i>	Match Mach object files.		
	<i>dmg</i>	Match Apple disk image files.		
	<i>.net</i>	Match .NET files.		
	<i>xar</i>	Match xar archive files.		
	<i>chm</i>	Match Windows compiled HTML help files.		
	<i>iso</i>	Match ISO archive files.		

Parameter	Description	Type	Size	Default						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>crx</i></td><td>Match Chrome extension files.</td></tr><tr><td><i>flac</i></td><td>Match flac files.</td></tr></table>	Option	Description	<i>crx</i>	Match Chrome extension files.	<i>flac</i>	Match flac files.			
	Option	Description								
	<i>crx</i>	Match Chrome extension files.								
<i>flac</i>	Match flac files.									
filter-type	Filter by file name pattern or by file type.	option	-	pattern						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>pattern</i></td><td>Filter by file name pattern.</td></tr><tr><td><i>type</i></td><td>Filter by file type.</td></tr></table>	Option	Description	<i>pattern</i>	Filter by file name pattern.	<i>type</i>	Filter by file type.			
	Option	Description								
	<i>pattern</i>	Filter by file name pattern.								
<i>type</i>	Filter by file type.									
pattern	Add a file name pattern.	string	Maximum length: 79							

config dlp fp-doc-source



This command is available for model(s): FortiGate 1000D, FortiGate 1001F, FortiGate 101F, FortiGate 1101E, FortiGate 1500DT, FortiGate 1500D, FortiGate 1801F, FortiGate 2000E, FortiGate 201E, FortiGate 201F, FortiGate 2201E, FortiGate 2500E, FortiGate 2600F, FortiGate 2601F, FortiGate 3000D, FortiGate 3001F, FortiGate 301E, FortiGate 3100D, FortiGate 3200D, FortiGate 3201F, FortiGate 3301E, FortiGate 3401E, FortiGate 3501F, FortiGate 3601E, FortiGate 3700D, FortiGate 3701F, FortiGate 401E, FortiGate 401F, FortiGate 40F 3G4G, FortiGate 4201F, FortiGate 4401F, FortiGate 5001E1, FortiGate 501E, FortiGate 601E, FortiGate 60F, FortiGate 61E, FortiGate 70F, FortiGate 71F, FortiGate 800D, FortiGate 80F Bypass, FortiGate 81E-POE, FortiGate 81E, FortiGate 81F-POE, FortiGate 81F, FortiGate 900D, FortiGate 91E, FortiGate-VM64 Aliyun, FortiGate-VM64 AWS, FortiGate-VM64 Azure, FortiGate-VM64 GCP, FortiGate-VM64 OPC, FortiGate-VM64, FortiGateRugged 60F 3G4G, FortiGateRugged 60F, FortiGateRugged 70F 3G4G, FortiGateRugged 70F, FortiWiFi 40F 3G4G, FortiWiFi 40F, FortiWiFi 60F, FortiWiFi 61E, FortiWiFi 61F, FortiWiFi 80F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G-POE, FortiWiFi 81F 2R-POE, FortiWiFi 81F 2R.

It is not available for: FortiGate 1000F, FortiGate 100EF, FortiGate 100E, FortiGate 100F, FortiGate 1100E, FortiGate 140E-POE, FortiGate 140E, FortiGate 1800F, FortiGate 200E, FortiGate 200F, FortiGate 3000F, FortiGate 300E, FortiGate 3200F, FortiGate 3300E, FortiGate 3400E, FortiGate 3600E, FortiGate 3700F, FortiGate 3960E, FortiGate 3980E, FortiGate 400E Bypass, FortiGate 400E, FortiGate 400F, FortiGate 4200F, FortiGate 4400F, FortiGate 5001E, FortiGate 500E, FortiGate 600E, FortiGate 60E-POE, FortiGate 60E, FortiGate 80E-POE, FortiGate 80E, FortiGate 80F DSL, FortiGate 80F-POE, FortiGate 80F, FortiGate 90E, FortiWiFi 60E.

Create a DLP fingerprint database by allowing the FortiGate to access a file server containing files from which to create fingerprints.


```

config dlp fp-doc-source
    Description: Create a DLP fingerprint database by allowing the FortiGate to access a file
server containing files from which to create fingerprints.
    edit <name>
        set date {integer}
        set file-path {string}
        set file-pattern {string}
        set keep-modified [enable|disable]
        set password {password}
        set period [none|daily|...]
        set remove-deleted [enable|disable]
        set scan-on-creation [enable|disable]
        set scan-subdirectories [enable|disable]
        set sensitivity {string}
        set server {string}
        set server-type {option}
        set tod-hour {integer}
        set tod-min {integer}
        set username {string}
        set vdom [mgmt|current]
        set weekday [sunday|monday|...]
    next
end

```

config dlp fp-doc-source

Parameter	Description	Type	Size	Default
date	Day of the month on which to scan the server (1 - 31).	integer	Minimum value: 1 Maximum value: 31	1
file-path	Path on the server to the fingerprint files (max 119 characters).	string	Maximum length: 119	
file-pattern	Files matching this pattern on the server are fingerprinted. Optionally use the * and ? wildcards.	string	Maximum length: 35	*
keep-modified	Enable so that when a file is changed on the server the FortiGate keeps the old fingerprint and adds a new fingerprint to the database.	option	-	enable
		Option	Description	
		<i>enable</i>	Keep the old fingerprint and add a new fingerprint when a file is changed on the server.	
		<i>disable</i>	Replace the old fingerprint with the new fingerprint when a file is changed on the server.	

Parameter	Description	Type	Size	Default										
name	Name of the DLP fingerprint database.	string	Maximum length: 35											
password	Password required to log into the file server.	password	Not Specified											
period	Frequency for which the FortiGate checks the server for new or changed files.	option	-	none										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>none</td><td>Check the server when the FortiGate starts up.</td></tr><tr><td>daily</td><td>Check the server once a day.</td></tr><tr><td>weekly</td><td>Check the server once a week.</td></tr><tr><td>monthly</td><td>Check the server once a month.</td></tr></table>				Option	Description	none	Check the server when the FortiGate starts up.	daily	Check the server once a day.	weekly	Check the server once a week.	monthly	Check the server once a month.
Option	Description													
none	Check the server when the FortiGate starts up.													
daily	Check the server once a day.													
weekly	Check the server once a week.													
monthly	Check the server once a month.													
remove-deleted	Enable to keep the fingerprint database up to date when a file is deleted from the server.	option	-	enable										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Keep the fingerprint database up to date when a file is deleted from the server.</td></tr><tr><td>disable</td><td>Do not check for deleted files on the server. Saves system resources.</td></tr></table>				Option	Description	enable	Keep the fingerprint database up to date when a file is deleted from the server.	disable	Do not check for deleted files on the server. Saves system resources.				
Option	Description													
enable	Keep the fingerprint database up to date when a file is deleted from the server.													
disable	Do not check for deleted files on the server. Saves system resources.													
scan-on-creation	Enable to keep the fingerprint database up to date when a file is added or changed on the server.	option	-	enable										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Keep the fingerprint database up to date when a file is added or changed on the server.</td></tr><tr><td>disable</td><td>Do not check for added or changed files on the server. Saves system resources.</td></tr></table>				Option	Description	enable	Keep the fingerprint database up to date when a file is added or changed on the server.	disable	Do not check for added or changed files on the server. Saves system resources.				
Option	Description													
enable	Keep the fingerprint database up to date when a file is added or changed on the server.													
disable	Do not check for added or changed files on the server. Saves system resources.													
scan-subdirectories	Enable/disable scanning subdirectories to find files to create fingerprints from.	option	-	enable										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Scan subdirectories.</td></tr><tr><td>disable</td><td>Do not scan subdirectories.</td></tr></table>				Option	Description	enable	Scan subdirectories.	disable	Do not scan subdirectories.				
Option	Description													
enable	Scan subdirectories.													
disable	Do not scan subdirectories.													
sensitivity	Select a sensitivity or threat level for matches with this fingerprint database. Add sensitivities using sensitivity.	string	Maximum length: 35											

Parameter	Description	Type	Size	Default																
server	IPv4 or IPv6 address of the server.	string	Maximum length: 35																	
server-type	Protocol used to communicate with the file server. Currently only Samba (SMB) servers are supported.	option	-	samba																
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>samba</td><td>SAMBA server.</td></tr></table>	Option	Description	samba	SAMBA server.															
Option	Description																			
samba	SAMBA server.																			
tod-hour	Hour of the day on which to scan the server (0 - 23, default = 1).	integer	Minimum value: 0 Maximum value: 23	1																
tod-min	Minute of the hour on which to scan the server (0 - 59).	integer	Minimum value: 0 Maximum value: 59	0																
username	User name required to log into the file server.	string	Maximum length: 35																	
vdom	Select the VDOM that can communicate with the file server.	option	-	mgmt																
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>mgmt</td><td>Communicate with the file server through the management VDOM.</td></tr><tr><td>current</td><td>Communicate with the file server through the VDOM containing this DLP fingerprint database configuration.</td></tr></table>	Option	Description	mgmt	Communicate with the file server through the management VDOM.	current	Communicate with the file server through the VDOM containing this DLP fingerprint database configuration.													
Option	Description																			
mgmt	Communicate with the file server through the management VDOM.																			
current	Communicate with the file server through the VDOM containing this DLP fingerprint database configuration.																			
weekday	Day of the week on which to scan the server.	option	-	sunday																
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>sunday</td><td>Sunday</td></tr><tr><td>monday</td><td>Monday</td></tr><tr><td>tuesday</td><td>Tuesday</td></tr><tr><td>wednesday</td><td>Wednesday</td></tr><tr><td>thursday</td><td>Thursday</td></tr><tr><td>friday</td><td>Friday</td></tr><tr><td>saturday</td><td>Saturday</td></tr></table>	Option	Description	sunday	Sunday	monday	Monday	tuesday	Tuesday	wednesday	Wednesday	thursday	Thursday	friday	Friday	saturday	Saturday			
Option	Description																			
sunday	Sunday																			
monday	Monday																			
tuesday	Tuesday																			
wednesday	Wednesday																			
thursday	Thursday																			
friday	Friday																			
saturday	Saturday																			

config dlp profile

Configure DLP profiles.

```
config dlp profile
  Description: Configure DLP profiles.
  edit <name>
    set comment {var-string}
    set dlp-log [enable|disable]
    set extended-log [enable|disable]
    set feature-set [flow|proxy]
    set full-archive-proto {option1}, {option2}, ...
    set nac-quar-log [enable|disable]
    set replacemsg-group {string}
  config rule
    Description: Set up DLP rules for this profile.
    edit <id>
      set action [allow|log-only|...]
      set archive [disable|enable]
      set expiry {user}
      set file-size {integer}
      set file-type {integer}
      set filter-by [sensor|mip|...]
      set label {string}
      set match-percentage {integer}
      set name {string}
      set proto {option1}, {option2}, ...
      set sensitivity <name1>, <name2>, ...
      set sensor <name1>, <name2>, ...
      set severity [info|low|...]
      set type [file|message]
    next
  end
  set summary-proto {option1}, {option2}, ...
next
end
```

config dlp profile

Parameter	Description	Type	Size	Default
comment	Comment.	var-string	Maximum length: 255	
dlp-log	Enable/disable DLP logging.	option	-	enable
		Option	Description	
		enable	Enable DLP logging.	

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>disable</i>	Disable DLP logging.		
extended-log	Enable/disable extended logging for data leak prevention.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		
feature-set	Flow/proxy feature set.	option	-	flow
	Option	Description		
	<i>flow</i>	Flow feature set.		
	<i>proxy</i>	Proxy feature set.		
full-archive-proto	Protocols to always content archive.	option	-	
	Option	Description		
	<i>smtp</i>	SMTP.		
	<i>pop3</i>	POP3.		
	<i>imap</i>	IMAP.		
	<i>http-get</i>	HTTP GET.		
	<i>http-post</i>	HTTP POST.		
	<i>ftp</i>	FTP.		
	<i>nnntp</i>	NNTP.		
	<i>mapi</i>	MAPI.		
	<i>ssh</i>	SFTP and SCP.		
	<i>cifs</i>	CIFS.		
nac-quar-log	Enable/disable NAC quarantine logging.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable NAC quarantine logging.		
	<i>disable</i>	Disable NAC quarantine logging.		

Parameter	Description	Type	Size	Default
name	Name of the DLP profile.	string	Maximum length: 35	
replacemsg-group	Replacement message group used by this DLP profile.	string	Maximum length: 35	
summary-proto	Protocols to always log summary.	option	-	
	Option	Description		
	<i>smtp</i>	SMTP.		
	<i>pop3</i>	POP3.		
	<i>imap</i>	IMAP.		
	<i>http-get</i>	HTTP GET.		
	<i>http-post</i>	HTTP POST.		
	<i>ftp</i>	FTP.		
	<i>nntp</i>	NNTP.		
	<i>mapi</i>	MAPI.		
	<i>ssh</i>	SFTP and SCP.		
	<i>cifs</i>	CIFS.		

config rule

Parameter	Description	Type	Size	Default
action	Action to take with content that this DLP profile matches.	option	-	allow
	Option	Description		
	<i>allow</i>	Allow the content to pass through the FortiGate and do not create a log message.		
	<i>log-only</i>	Allow the content to pass through the FortiGate, but write a log message.		
	<i>block</i>	Block the content and write a log message.		
	<i>quarantine-ip</i>	Quarantine all traffic from the IP address and write a log message.		
archive	Enable/disable DLP archiving.	option	-	disable

Parameter	Description	Type	Size	Default												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>disable</i></td><td>No DLP archiving.</td></tr><tr><td><i>enable</i></td><td>Enable full DLP archiving.</td></tr></table>	Option	Description	<i>disable</i>	No DLP archiving.	<i>enable</i>	Enable full DLP archiving.									
	Option	Description														
	<i>disable</i>	No DLP archiving.														
<i>enable</i>	Enable full DLP archiving.															
expiry	Quarantine duration in days, hours, minutes (format = dddhhmm).	user	Not Specified	5m												
file-size	Match files this size or larger (0 - 4294967295 kbytes).	integer	Minimum value: 0 Maximum value: 4294967295	0												
file-type	Select the number of a DLP file pattern table to match.	integer	Minimum value: 0 Maximum value: 4294967295	0												
filter-by	Select the type of content to match.	option	-	none												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>sensor</i></td><td>Use DLP sensors to match content.</td></tr><tr><td><i>mip</i></td><td>Use MIP label dictionary to match content.</td></tr><tr><td><i>fingerprint</i></td><td>Match against a fingerprint sensitivity.</td></tr><tr><td><i>encrypted</i></td><td>Look for encrypted files.</td></tr><tr><td><i>none</i></td><td>No content scan.</td></tr></table>	Option	Description	<i>sensor</i>	Use DLP sensors to match content.	<i>mip</i>	Use MIP label dictionary to match content.	<i>fingerprint</i>	Match against a fingerprint sensitivity.	<i>encrypted</i>	Look for encrypted files.	<i>none</i>	No content scan.			
	Option	Description														
	<i>sensor</i>	Use DLP sensors to match content.														
	<i>mip</i>	Use MIP label dictionary to match content.														
	<i>fingerprint</i>	Match against a fingerprint sensitivity.														
	<i>encrypted</i>	Look for encrypted files.														
<i>none</i>	No content scan.															
id	ID.	integer	Minimum value: 0 Maximum value: 4294967295	0												
label	MIP label dictionary.	string	Maximum length: 35													
match-percentage *	Percentage of fingerprints in the fingerprint databases designated with the selected sensitivity to match.	integer	Minimum value: 1 Maximum value: 100	10												
name	Filter name.	string	Maximum length: 35													
proto	Check messages or files over one or more of these protocols.	option	-													

Parameter	Description	Type	Size	Default																						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>smtp</i></td><td>SMTP.</td></tr><tr><td><i>pop3</i></td><td>POP3.</td></tr><tr><td><i>imap</i></td><td>IMAP.</td></tr><tr><td><i>http-get</i></td><td>HTTP GET.</td></tr><tr><td><i>http-post</i></td><td>HTTP POST.</td></tr><tr><td><i>ftp</i></td><td>FTP.</td></tr><tr><td><i>nnntp</i></td><td>NNTP.</td></tr><tr><td><i>mapi</i></td><td>MAPI.</td></tr><tr><td><i>ssh</i></td><td>SFTP and SCP.</td></tr><tr><td><i>cifs</i></td><td>CIFS.</td></tr></table>	Option	Description	<i>smtp</i>	SMTP.	<i>pop3</i>	POP3.	<i>imap</i>	IMAP.	<i>http-get</i>	HTTP GET.	<i>http-post</i>	HTTP POST.	<i>ftp</i>	FTP.	<i>nnntp</i>	NNTP.	<i>mapi</i>	MAPI.	<i>ssh</i>	SFTP and SCP.	<i>cifs</i>	CIFS.			
	Option	Description																								
	<i>smtp</i>	SMTP.																								
	<i>pop3</i>	POP3.																								
	<i>imap</i>	IMAP.																								
	<i>http-get</i>	HTTP GET.																								
	<i>http-post</i>	HTTP POST.																								
	<i>ftp</i>	FTP.																								
	<i>nnntp</i>	NNTP.																								
	<i>mapi</i>	MAPI.																								
<i>ssh</i>	SFTP and SCP.																									
<i>cifs</i>	CIFS.																									
sensitivity <name>	Select a DLP file pattern sensitivity to match. Select a DLP sensitivity.	string	Maximum length: 35																							
sensor <name>	Select DLP sensors. Address name.	string	Maximum length: 35																							
severity	Select the severity or threat level that matches this filter.	option	-	medium																						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>info</i></td><td>Informational.</td></tr><tr><td><i>low</i></td><td>Low.</td></tr><tr><td><i>medium</i></td><td>Medium.</td></tr><tr><td><i>high</i></td><td>High.</td></tr><tr><td><i>critical</i></td><td>Critical.</td></tr></table>	Option	Description	<i>info</i>	Informational.	<i>low</i>	Low.	<i>medium</i>	Medium.	<i>high</i>	High.	<i>critical</i>	Critical.													
	Option	Description																								
	<i>info</i>	Informational.																								
	<i>low</i>	Low.																								
	<i>medium</i>	Medium.																								
<i>high</i>	High.																									
<i>critical</i>	Critical.																									
type	Select whether to check the content of messages (an email message) or files (downloaded files or email attachments).	option	-	file																						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>file</i></td><td>Check the contents of downloaded or attached files.</td></tr><tr><td><i>message</i></td><td>Check the contents of email messages, web pages, etc.</td></tr></table>	Option	Description	<i>file</i>	Check the contents of downloaded or attached files.	<i>message</i>	Check the contents of email messages, web pages, etc.																			
	Option	Description																								
<i>file</i>	Check the contents of downloaded or attached files.																									
<i>message</i>	Check the contents of email messages, web pages, etc.																									

* This parameter may not exist in some models.

config dlp sensitivity

Create self-explanatory DLP sensitivity levels to be used when setting sensitivity under config fp-doc-source.

```
config dlp sensitivity
  Description: Create self-explanatory DLP sensitivity levels to be used when setting
  sensitivity under config fp-doc-source.
  edit <name>
    next
  end
```

config dlp sensitivity

Parameter	Description	Type	Size	Default
name	DLP Sensitivity Levels.	string	Maximum length: 35	

config dlp sensor

Configure sensors used by DLP blocking.

```
config dlp sensor
  Description: Configure sensors used by DLP blocking.
  edit <name>
    set comment {var-string}
    config entries
      Description: DLP sensor entries.
      edit <id>
        set count {integer}
        set dictionary {string}
        set status [enable|disable]
      next
    end
    set eval {string}
    set match-type [match-all|match-any|...]
  next
end
```

config dlp sensor

Parameter	Description	Type	Size	Default
comment	Optional comments.	var-string	Maximum length: 255	

Parameter	Description	Type	Size	Default								
eval	Expression to evaluate.	string	Maximum length: 255									
match-type	Logical relation between entries (default = match-any).	option	-	match-any								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>match-all</td><td>Match all entries.</td></tr><tr><td>match-any</td><td>Match any entries.</td></tr><tr><td>match-eval</td><td>Match an expression evaluation.</td></tr></table>				Option	Description	match-all	Match all entries.	match-any	Match any entries.	match-eval	Match an expression evaluation.
	Option	Description										
	match-all	Match all entries.										
	match-any	Match any entries.										
match-eval	Match an expression evaluation.											
name	Name of table containing the sensor.	string	Maximum length: 35									

config entries

Parameter	Description	Type	Size	Default						
count	Count of dictionary matches to trigger sensor entry match (Dictionary might not be able to trigger more than once based on its 'repeat' option, 1 - 255, default = 1).	integer	Minimum value: 1 Maximum value: 255	1						
dictionary	Select a DLP dictionary.	string	Maximum length: 35							
id	ID.	integer	Minimum value: 1 Maximum value: 32	0						
status	Enable/disable this entry.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable this entry.</td></tr><tr><td><i>disable</i></td><td>Disable this entry.</td></tr></table>				Option	Description	<i>enable</i>	Enable this entry.	<i>disable</i>	Disable this entry.
Option	Description									
<i>enable</i>	Enable this entry.									
<i>disable</i>	Disable this entry.									

config dlp settings



This command is available for model(s): FortiGate 1000D, FortiGate 1001F, FortiGate 101F, FortiGate 1101E, FortiGate 1500DT, FortiGate 1500D, FortiGate 1801F, FortiGate 2000E, FortiGate 201E, FortiGate 201F, FortiGate 2201E, FortiGate 2500E, FortiGate 2600F, FortiGate 2601F, FortiGate 3000D, FortiGate 3001F, FortiGate 301E, FortiGate 3100D, FortiGate 3200D, FortiGate 3201F, FortiGate 3301E, FortiGate 3401E, FortiGate 3501F, FortiGate 3601E, FortiGate 3700D, FortiGate 3701F, FortiGate 401E, FortiGate 401F, FortiGate 40F 3G4G, FortiGate 4201F, FortiGate 4401F, FortiGate 5001E1, FortiGate 501E, FortiGate 601E, FortiGate 60F, FortiGate 61E, FortiGate 70F, FortiGate 71F, FortiGate 800D, FortiGate 80F Bypass, FortiGate 81E-POE, FortiGate 81E, FortiGate 81F-POE, FortiGate 81F, FortiGate 900D, FortiGate 91E, FortiGate-VM64 Aliyun, FortiGate-VM64 AWS, FortiGate-VM64 Azure, FortiGate-VM64 GCP, FortiGate-VM64 OPC, FortiGate-VM64, FortiGateRugged 60F 3G4G, FortiGateRugged 60F, FortiGateRugged 70F 3G4G, FortiGateRugged 70F, FortiWiFi 40F 3G4G, FortiWiFi 40F, FortiWiFi 60F, FortiWiFi 61E, FortiWiFi 61F, FortiWiFi 80F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G-POE, FortiWiFi 81F 2R-POE, FortiWiFi 81F 2R.

It is not available for: FortiGate 1000F, FortiGate 100EF, FortiGate 100E, FortiGate 100F, FortiGate 1100E, FortiGate 140E-POE, FortiGate 140E, FortiGate 1800F, FortiGate 200E, FortiGate 200F, FortiGate 3000F, FortiGate 300E, FortiGate 3200F, FortiGate 3300E, FortiGate 3400E, FortiGate 3600E, FortiGate 3700F, FortiGate 3960E, FortiGate 3980E, FortiGate 400E Bypass, FortiGate 400E, FortiGate 400F, FortiGate 4200F, FortiGate 4400F, FortiGate 5001E, FortiGate 500E, FortiGate 600E, FortiGate 60E-POE, FortiGate 60E, FortiGate 80E-POE, FortiGate 80E, FortiGate 80F DSL, FortiGate 80F-POE, FortiGate 80F, FortiGate 90E, FortiWiFi 60E.

Designate logical storage for DLP fingerprint database.

```
config dlp settings
  Description: Designate logical storage for DLP fingerprint database.
  set cache-mem-percent {integer}
  set chunk-size {integer}
  set db-mode [stop-adding|remove-modified-then-oldest|...]
  set size {integer}
  set storage-device {string}
end
```

config dlp settings

Parameter	Description	Type	Size	Default
cache-mem-percent	Maximum percentage of available memory allocated to caching (1 - 15).	integer	Minimum value: 1 Maximum value: 15	2

Parameter	Description	Type	Size	Default
chunk-size	Maximum fingerprint chunk size. Caution, changing this setting will flush the entire database.	integer	Minimum value: 100 Maximum value: 100000	2800
db-mode	Behavior when the maximum size is reached.	option	-	stop-adding
	Option	Description		
	stop-adding	Stop adding entries.		
	remove-modified-then-oldest	Remove modified chunks first, then oldest file entries.		
	remove-oldest	Remove the oldest files first.		
size	Maximum total size of files within the storage (MB).	integer	Minimum value: 16 Maximum value: 4294967295	16
storage-device	Storage device name.	string	Maximum length: 35	

dnsfilter

This section includes syntax for the following commands:

- [config dnsfilter domain-filter on page 214](#)
- [config dnsfilter profile on page 215](#)

config dnsfilter domain-filter

Configure DNS domain filters.

```
config dnsfilter domain-filter
  Description: Configure DNS domain filters.
  edit <id>
    set comment {var-string}
    config entries
      Description: DNS domain filter entries.
      edit <id>
        set action [block|allow|...]
        set domain {string}
        set status [enable|disable]
        set type [simple|regex|...]
      next
    end
  set name {string}
next
end
```

config dnsfilter domain-filter

Parameter	Description	Type	Size	Default
comment	Optional comments.	var-string	Maximum length: 255	
id	ID.	integer	Minimum value: 0 Maximum value: 4294967295	
name	Name of table.	string	Maximum length: 63	

config entries

Parameter	Description	Type	Size	Default
action	Action to take for domain filter matches.	option	-	block
	Option	Description		
	<i>block</i>	Block DNS requests matching the domain filter.		
	<i>allow</i>	Allow DNS requests matching the domain filter without logging.		
	<i>monitor</i>	Allow DNS requests matching the domain filter with logging.		
domain	Domain entries to be filtered.	string	Maximum length: 511	
id	Id.	integer	Minimum value: 0 0 Maximum value: 4294967295	
status	Enable/disable this domain filter.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable this domain filter.		
	<i>disable</i>	Disable this domain filter.		
type	DNS domain filter type.	option	-	simple
	Option	Description		
	<i>simple</i>	Simple domain string.		
	<i>regex</i>	Regular expression domain string.		
	<i>wildcard</i>	Wildcard domain string.		

config dnsfilter profile

Configure DNS domain filter profile.

```
config dnsfilter profile
  Description: Configure DNS domain filter profile.
  edit <name>
    set block-action [block|redirect|...]
    set block-botnet [disable|enable]
    set comment {var-string}
    config dns-translation
      Description: DNS translation settings.
      edit <id>
```

```

        set addr-type [ipv4|ipv6]
        set dst {ipv4-address}
        set dst6 {ipv6-address}
        set netmask {ipv4-netmask}
        set prefix {integer}
        set src {ipv4-address}
        set src6 {ipv6-address}
        set status [enable|disable]
    next
end
config domain-filter
    Description: Domain filter settings.
    set domain-filter-table {integer}
end
set external-ip-blocklist <name1>, <name2>, ...
config ftgd-dns
    Description: FortiGuard DNS Filter settings.
    config filters
        Description: FortiGuard DNS domain filters.
        edit <id>
            set action [block|monitor]
            set category {integer}
            set log [enable|disable]
        next
    end
    set options {option1}, {option2}, ...
end
set log-all-domain [enable|disable]
set redirect-portal {ipv4-address}
set redirect-portal6 {ipv6-address}
set safe-search [disable|enable]
set sdns-domain-log [enable|disable]
set sdns-ftgd-err-log [enable|disable]
set youtube-restrict [strict|moderate]
next
end

```

config dnsfilter profile

Parameter	Description	Type	Size	Default
block-action	Action to take for blocked domains.	option	-	redirect
	Option	Description		
	<i>block</i>	Return NXDOMAIN for blocked domains.		
	<i>redirect</i>	Redirect blocked domains to SDNS portal.		
	<i>block-sevrfail</i>	Return SERVFAIL for blocked domains.		

Parameter	Description	Type	Size	Default						
block-botnet	Enable/disable blocking botnet C&C DNS lookups.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Disable blocking botnet C&C DNS lookups.</td></tr><tr><td>enable</td><td>Enable blocking botnet C&C DNS lookups.</td></tr></table>	Option	Description	disable	Disable blocking botnet C&C DNS lookups.	enable	Enable blocking botnet C&C DNS lookups.			
Option	Description									
disable	Disable blocking botnet C&C DNS lookups.									
enable	Enable blocking botnet C&C DNS lookups.									
comment	Comment.	var-string	Maximum length: 255							
external-ip-blocklist <name>	One or more external IP block lists. External domain block list name.	string	Maximum length: 79							
log-all-domain	Enable/disable logging of all domains visited (detailed DNS logging).	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable logging of all domains visited.</td></tr><tr><td>disable</td><td>Disable logging of all domains visited.</td></tr></table>	Option	Description	enable	Enable logging of all domains visited.	disable	Disable logging of all domains visited.			
Option	Description									
enable	Enable logging of all domains visited.									
disable	Disable logging of all domains visited.									
name	Profile name.	string	Maximum length: 35							
redirect-portal	IPv4 address of the SDNS redirect portal.	ipv4-address	Not Specified	0.0.0.0						
redirect-portal6	IPv6 address of the SDNS redirect portal.	ipv6-address	Not Specified	::						
safe-search	Enable/disable Google, Bing, YouTube, Qwant, DuckDuckGo safe search.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Disable Google, Bing, YouTube, Qwant, DuckDuckGo safe search.</td></tr><tr><td>enable</td><td>Enable Google, Bing, YouTube, Qwant, DuckDuckGo safe search.</td></tr></table>	Option	Description	disable	Disable Google, Bing, YouTube, Qwant, DuckDuckGo safe search.	enable	Enable Google, Bing, YouTube, Qwant, DuckDuckGo safe search.			
Option	Description									
disable	Disable Google, Bing, YouTube, Qwant, DuckDuckGo safe search.									
enable	Enable Google, Bing, YouTube, Qwant, DuckDuckGo safe search.									
sdns-domain-log	Enable/disable domain filtering and botnet domain logging.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable domain filtering and botnet domain logging.</td></tr><tr><td>disable</td><td>Disable domain filtering and botnet domain logging.</td></tr></table>	Option	Description	enable	Enable domain filtering and botnet domain logging.	disable	Disable domain filtering and botnet domain logging.			
Option	Description									
enable	Enable domain filtering and botnet domain logging.									
disable	Disable domain filtering and botnet domain logging.									
sdns-ftgd-err-log	Enable/disable FortiGuard SDNS rating error logging.	option	-	enable						

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>enable</i>	Enable FortiGuard SDNS rating error logging.		
	<i>disable</i>	Disable FortiGuard SDNS rating error logging.		
youtube-restrict	Set safe search for YouTube restriction level.	option	-	strict
	Option	Description		
	<i>strict</i>	Enable strict safe search for YouTube.		
	<i>moderate</i>	Enable moderate safe search for YouTube.		

config dns-translation

Parameter	Description	Type	Size	Default						
addr-type	DNS translation type (IPv4 or IPv6).	option	-	ipv4						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>ipv4</td><td>IPv4 address type.</td></tr><tr><td>ipv6</td><td>IPv6 address type.</td></tr></table>				Option	Description	ipv4	IPv4 address type.	ipv6	IPv6 address type.
Option	Description									
ipv4	IPv4 address type.									
ipv6	IPv6 address type.									
dst	IPv4 address or subnet on the external network to substitute for the resolved address in DNS query replies. Can be single IP address or subnet on the external network, but number of addresses must equal number of mapped IP addresses in src.	ipv4-address	Not Specified	0.0.0.0						
dst6	IPv6 address or subnet on the external network to substitute for the resolved address in DNS query replies. Can be single IP address or subnet on the external network, but number of addresses must equal number of mapped IP addresses in src6.	ipv6-address	Not Specified	::						
id	ID.	integer	Minimum value: 0 Maximum value: 4294967295							

Parameter	Description	Type	Size	Default						
netmask	If src and dst are subnets rather than single IP addresses, enter the netmask for both src and dst.	ipv4-netmask	Not Specified	255.255.255.255						
prefix	If src6 and dst6 are subnets rather than single IP addresses, enter the prefix for both src6 and dst6 (1 - 128, default = 128).	integer	Minimum value: 1 Maximum value: 128	128						
src	IPv4 address or subnet on the internal network to compare with the resolved address in DNS query replies. If the resolved address matches, the resolved address is substituted with dst.	ipv4-address	Not Specified	0.0.0.0						
src6	IPv6 address or subnet on the internal network to compare with the resolved address in DNS query replies. If the resolved address matches, the resolved address is substituted with dst6.	ipv6-address	Not Specified	::						
status	Enable/disable this DNS translation entry.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable this DNS translation.</td></tr><tr><td>disable</td><td>Disable this DNS translation.</td></tr></table>				Option	Description	enable	Enable this DNS translation.	disable	Disable this DNS translation.
Option	Description									
enable	Enable this DNS translation.									
disable	Disable this DNS translation.									

config domain-filter

Parameter	Description	Type	Size	Default
domain-filter-table	DNS domain filter table ID.	integer	Minimum value: 0 Maximum value: 4294967295	0

config ftgd-dns

Parameter	Description	Type	Size	Default
options	FortiGuard DNS filter options.	option	-	

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>error-allow</i>	Allow all domains when FortiGuard DNS servers fail.		
	<i>ftgd-disable</i>	Disable FortiGuard DNS domain rating.		

config filters

Parameter	Description	Type	Size	Default
action	Action to take for DNS requests matching the category.	option	-	monitor
	Option	Description		
	<i>block</i>	Block DNS requests matching the category.		
	<i>monitor</i>	Allow DNS requests matching the category and log the result.		
category	Category number.	integer	Minimum value: 0 Maximum value: 255	0
id	ID number.	integer	Minimum value: 0 Maximum value: 255	0
log	Enable/disable DNS filter logging for this DNS profile.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable DNS filter logging.		
	<i>disable</i>	Disable DNS filter logging.		

dpdk

This section includes syntax for the following commands:

- [config dpdk cpus on page 221](#)
- [config dpdk global on page 222](#)

config dpdk cpus



This command is available for model(s): FortiGate-VM64 AWS, FortiGate-VM64 Azure, FortiGate-VM64 GCP, FortiGate-VM64 OPC, FortiGate-VM64.

It is not available for: FortiGate 1000D, FortiGate 1000F, FortiGate 1001F, FortiGate 100EF, FortiGate 100E, FortiGate 100F, FortiGate 101F, FortiGate 1100E, FortiGate 1101E, FortiGate 140E-POE, FortiGate 140E, FortiGate 1500DT, FortiGate 1500D, FortiGate 1800F, FortiGate 1801F, FortiGate 2000E, FortiGate 200E, FortiGate 200F, FortiGate 201E, FortiGate 201F, FortiGate 2201E, FortiGate 2500E, FortiGate 2600F, FortiGate 2601F, FortiGate 3000D, FortiGate 3000F, FortiGate 3001F, FortiGate 300E, FortiGate 301E, FortiGate 3100D, FortiGate 3200D, FortiGate 3200F, FortiGate 3201F, FortiGate 3300E, FortiGate 3301E, FortiGate 3400E, FortiGate 3401E, FortiGate 3501F, FortiGate 3600E, FortiGate 3601E, FortiGate 3700D, FortiGate 3700F, FortiGate 3701F, FortiGate 3960E, FortiGate 3980E, FortiGate 400E Bypass, FortiGate 400E, FortiGate 400F, FortiGate 401E, FortiGate 401F, FortiGate 40F 3G4G, FortiGate 4200F, FortiGate 4201F, FortiGate 4400F, FortiGate 4401F, FortiGate 5001E1, FortiGate 5001E, FortiGate 500E, FortiGate 501E, FortiGate 600E, FortiGate 601E, FortiGate 60E-POE, FortiGate 60E, FortiGate 60F, FortiGate 61E, FortiGate 70F, FortiGate 71F, FortiGate 800D, FortiGate 80E-POE, FortiGate 80E, FortiGate 80F Bypass, FortiGate 80F DSL, FortiGate 80F-POE, FortiGate 80F, FortiGate 81E-POE, FortiGate 81E, FortiGate 81F-POE, FortiGate 81F, FortiGate 900D, FortiGate 90E, FortiGate 91E, FortiGate-VM64 Aliyun, FortiGateRugged 60F 3G4G, FortiGateRugged 60F, FortiGateRugged 70F 3G4G, FortiGateRugged 70F, FortiWiFi 40F 3G4G, FortiWiFi 40F, FortiWiFi 60E, FortiWiFi 60F, FortiWiFi 61E, FortiWiFi 61F, FortiWiFi 80F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G-POE, FortiWiFi 81F 2R-POE, FortiWiFi 81F 2R.

Configure CPUs enabled to run engines in each DPDK stage.

```
config dpdk cpus
  Description: Configure CPUs enabled to run engines in each DPDK stage.
  set ips-cpus {string}
  set isolated-cpus {string}
  set rx-cpus {string}
  set tx-cpus {string}
  set vnp-cpus {string}
end
```

config dpdk cpus

Parameter	Description	Type	Size	Default
ips-cpus	CPUs enabled to run DPDK IPS engines.	string	Maximum length: 1022	all
isolated-cpus	CPUs isolated to run only the DPDK engines with the exception of processes that have affinity explicitly set by either a user configuration or by their implementation.	string	Maximum length: 1022	none
rx-cpus	CPUs enabled to run DPDK RX engines.	string	Maximum length: 1022	all
tx-cpus	CPUs enabled to run DPDK TX engines.	string	Maximum length: 1022	all
vnp-cpus	CPUs enabled to run DPDK VNP engines.	string	Maximum length: 1022	all

config dpdk global



This command is available for model(s): FortiGate-VM64 AWS, FortiGate-VM64 Azure, FortiGate-VM64 GCP, FortiGate-VM64 OPC, FortiGate-VM64.

It is not available for: FortiGate 1000D, FortiGate 1000F, FortiGate 1001F, FortiGate 100EF, FortiGate 100E, FortiGate 100F, FortiGate 101F, FortiGate 1100E, FortiGate 1101E, FortiGate 140E-POE, FortiGate 140E, FortiGate 1500DT, FortiGate 1500D, FortiGate 1800F, FortiGate 1801F, FortiGate 2000E, FortiGate 200E, FortiGate 200F, FortiGate 201E, FortiGate 201F, FortiGate 2201E, FortiGate 2500E, FortiGate 2600F, FortiGate 2601F, FortiGate 3000D, FortiGate 3000F, FortiGate 3001F, FortiGate 300E, FortiGate 301E, FortiGate 3100D, FortiGate 3200D, FortiGate 3200F, FortiGate 3201F, FortiGate 3300E, FortiGate 3301E, FortiGate 3400E, FortiGate 3401E, FortiGate 3501F, FortiGate 3600E, FortiGate 3601E, FortiGate 3700D, FortiGate 3700F, FortiGate 3701F, FortiGate 3960E, FortiGate 3980E, FortiGate 400E Bypass, FortiGate 400E, FortiGate 400F, FortiGate 401E, FortiGate 401F, FortiGate 40F 3G4G, FortiGate 4200F, FortiGate 4201F, FortiGate 4400F, FortiGate 4401F, FortiGate 5001E1, FortiGate 5001E, FortiGate 500E, FortiGate 501E, FortiGate 600E, FortiGate 601E, FortiGate 60E-POE, FortiGate 60E, FortiGate 60F, FortiGate 61E, FortiGate 70F, FortiGate 71F, FortiGate 800D, FortiGate 80E-POE, FortiGate 80E, FortiGate 80F Bypass, FortiGate 80F DSL, FortiGate 80F-POE, FortiGate 80F, FortiGate 81E-POE, FortiGate 81E, FortiGate 81F-POE, FortiGate 81F, FortiGate 900D, FortiGate 90E, FortiGate 91E, FortiGate-VM64 Aliyun, FortiGateRugged 60F 3G4G, FortiGateRugged 60F, FortiGateRugged 70F 3G4G, FortiGateRugged 70F, FortiWiFi 40F 3G4G, FortiWiFi 40F, FortiWiFi 60E, FortiWiFi 60F, FortiWiFi 61E, FortiWiFi 61F, FortiWiFi 80F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G-POE, FortiWiFi 81F 2R-POE, FortiWiFi 81F 2R.

Configure global DPDK options.

```
config dpdk global
  Description: Configure global DPDK options.
  set elasticbuffer [disable|enable]
  set hugepage-percentage {integer}
  set interface <interface-name1>, <interface-name2>, ...
  set ipsec-offload [disable|enable]
  set mbufpool-percentage {integer}
  set multiqueue [disable|enable]
  set per-session-accounting [disable|traffic-log-only|...]
  set sleep-on-idle [disable|enable]
  set status [disable|enable]
end
```

config dpdk global

Parameter	Description	Type	Size	Default
elasticbuffer	Enable/disable elasticbuffer support for all DPDK ports.	option	-	disable
	Option	Description		
	disable	Disable elasticbuffer support for DPDK ports.		
	enable	Enable elasticbuffer support for DPDK ports.		
hugepage-percentage	Percentage of main memory allocated to hugepages, which are available for DPDK operation.	integer	Minimum value: 15 Maximum value: 50	30
interface <interface-name>	Physical interfaces that enable DPDK. (Only AWS Elastic Network Adapter (ENA) is supported.) Physical interface name. (Only AWS Elastic Network Adapter (ENA) is supported.)	string	Maximum length: 31	
ipsec-offload	Enable/disable DPDK IPsec phase 2 offloading.	option	-	disable
	Option	Description		
	disable	Disable DPDK IPsec phase 2 offloading.		
	enable	Enable DPDK IPsec phase 2 offloading.		
mbufpool-percentage	Percentage of main memory allocated to DPDK packet buffer.	integer	Minimum value: 10 Maximum value: 45	25

Parameter	Description	Type	Size	Default								
multiqueue	Enable/disable multi-queue RX/TX support for all DPDK ports.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>disable</i></td><td>Disable multi-queue RX/TX support for DPDK ports.</td></tr><tr><td><i>enable</i></td><td>Enable multi-queue RX/TX support for DPDK ports.</td></tr></table>	Option	Description	<i>disable</i>	Disable multi-queue RX/TX support for DPDK ports.	<i>enable</i>	Enable multi-queue RX/TX support for DPDK ports.					
Option	Description											
<i>disable</i>	Disable multi-queue RX/TX support for DPDK ports.											
<i>enable</i>	Enable multi-queue RX/TX support for DPDK ports.											
per-session-accounting	Enable/disable per-session accounting.	option	-	traffic-log-only								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>disable</i></td><td>Disable per-session accounting.</td></tr><tr><td><i>traffic-log-only</i></td><td>Enable per-session accounting only for VNP sessions with traffic logging turned on in firewall policy.</td></tr><tr><td><i>enable</i></td><td>Enable per-session accounting for all VNP sessions. *Affect performance.</td></tr></table>	Option	Description	<i>disable</i>	Disable per-session accounting.	<i>traffic-log-only</i>	Enable per-session accounting only for VNP sessions with traffic logging turned on in firewall policy.	<i>enable</i>	Enable per-session accounting for all VNP sessions. *Affect performance.			
Option	Description											
<i>disable</i>	Disable per-session accounting.											
<i>traffic-log-only</i>	Enable per-session accounting only for VNP sessions with traffic logging turned on in firewall policy.											
<i>enable</i>	Enable per-session accounting for all VNP sessions. *Affect performance.											
sleep-on-idle	Enable/disable sleep-on-idle support for all FDH engines.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>disable</i></td><td>Disable sleep-on-idle support for FDH engines.</td></tr><tr><td><i>enable</i></td><td>Enable sleep-on-idle support for FDH engines.</td></tr></table>	Option	Description	<i>disable</i>	Disable sleep-on-idle support for FDH engines.	<i>enable</i>	Enable sleep-on-idle support for FDH engines.					
Option	Description											
<i>disable</i>	Disable sleep-on-idle support for FDH engines.											
<i>enable</i>	Enable sleep-on-idle support for FDH engines.											
status	Enable/disable DPDK operation for the entire system.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>disable</i></td><td>Disable DPDK operation.</td></tr><tr><td><i>enable</i></td><td>Enable DPDK operation. *The minimum system requirements for DPDK is 2 vCPUs and 4GB memory.</td></tr></table>	Option	Description	<i>disable</i>	Disable DPDK operation.	<i>enable</i>	Enable DPDK operation. *The minimum system requirements for DPDK is 2 vCPUs and 4GB memory.					
Option	Description											
<i>disable</i>	Disable DPDK operation.											
<i>enable</i>	Enable DPDK operation. *The minimum system requirements for DPDK is 2 vCPUs and 4GB memory.											

emailfilter

This section includes syntax for the following commands:

- [config emailfilter block-allow-list](#) on page 225
- [config emailfilter bword](#) on page 227
- [config emailfilter dnsbl](#) on page 229
- [config emailfilter fortishield](#) on page 230
- [config emailfilter iptrust](#) on page 231
- [config emailfilter mheader](#) on page 232
- [config emailfilter options](#) on page 234
- [config emailfilter profile](#) on page 234

config emailfilter block-allow-list

Configure anti-spam block/allow list.

```
config emailfilter block-allow-list
  Description: Configure anti-spam block/allow list.
  edit <id>
    set comment {var-string}
    config entries
      Description: Anti-spam block/allow entries.
      edit <id>
        set action [reject|spam|...]
        set addr-type [ipv4|ipv6]
        set ip4-subnet {ipv4-classnet}
        set ip6-subnet {ipv6-network}
        set pattern {string}
        set pattern-type [wildcard|regexp]
        set status [enable|disable]
        set type [ip|email-to|...]
      next
    end
    set name {string}
  next
end
```


config emailfilter block-allow-list

Parameter	Description	Type	Size	Default
comment	Optional comments.	var-string	Maximum length: 255	
id	ID.	integer	Minimum value: 0 Maximum value: 4294967295	
name	Name of table.	string	Maximum length: 63	

config entries

Parameter	Description	Type	Size	Default								
action	Reject, mark as spam or good email.	option	-	spam								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>reject</i></td><td>Reject the connection.</td></tr><tr><td><i>spam</i></td><td>Mark as spam email.</td></tr><tr><td><i>clear</i></td><td>Mark as good email.</td></tr></table>	Option	Description	<i>reject</i>	Reject the connection.	<i>spam</i>	Mark as spam email.	<i>clear</i>	Mark as good email.			
	Option	Description										
	<i>reject</i>	Reject the connection.										
	<i>spam</i>	Mark as spam email.										
<i>clear</i>	Mark as good email.											
addr-type	IP address type.	option	-	ipv4								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>ipv4</i></td><td>IPv4 Address type.</td></tr><tr><td><i>ipv6</i></td><td>IPv6 Address type.</td></tr></table>	Option	Description	<i>ipv4</i>	IPv4 Address type.	<i>ipv6</i>	IPv6 Address type.					
	Option	Description										
	<i>ipv4</i>	IPv4 Address type.										
<i>ipv6</i>	IPv6 Address type.											
id	Entry ID.	integer	Minimum value: 0 Maximum value: 4294967295	0								
ip4-subnet	IPv4 network address/subnet mask bits.	ipv4-classnet	Not Specified	0.0.0.0 0.0.0.0								
ip6-subnet	IPv6 network address/subnet mask bits.	ipv6-network	Not Specified	::/128								
pattern	Pattern to match.	string	Maximum length: 127									
pattern-type	Wildcard pattern or regular expression.	option	-	wildcard								

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>wildcard</i>	Wildcard pattern.		
	<i>regexp</i>	Perl regular expression.		
status	Enable/disable status.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable status.		
	<i>disable</i>	Disable status.		
type	Entry type.	option	-	ip
	Option	Description		
	<i>ip</i>	By IP address.		
	<i>email-to</i>	By email recipient.		
	<i>email-from</i>	By email sender.		
	<i>subject</i>	By email subject.		

config emailfilter bword

Configure AntiSpam banned word list.

```

config emailfilter bword
  Description: Configure AntiSpam banned word list.
  edit <id>
    set comment {var-string}
    config entries
      Description: Spam filter banned word.
      edit <id>
        set action [spam|clear]
        set language [western|simch|...]
        set pattern {string}
        set pattern-type [wildcard|regexp]
        set score {integer}
        set status [enable|disable]
        set where [subject|body|...]
      next
    end
    set name {string}
  next
end

```

config emailfilter bword

Parameter	Description	Type	Size	Default
comment	Optional comments.	var-string	Maximum length: 255	
id	ID.	integer	Minimum value: 0 Maximum value: 4294967295	
name	Name of table.	string	Maximum length: 63	

config entries

Parameter	Description	Type	Size	Default																		
action	Mark spam or good.	option	-	spam																		
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>spam</td><td>Mark as spam email.</td></tr><tr><td>clear</td><td>Mark as good email.</td></tr></table>	Option	Description	spam	Mark as spam email.	clear	Mark as good email.															
	Option	Description																				
	spam	Mark as spam email.																				
clear	Mark as good email.																					
id	Banned word entry ID.	integer	Minimum value: 0 0 Maximum value: 4294967295																			
language	Language for the banned word.	option	-	western																		
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>western</td><td>Western.</td></tr><tr><td>simch</td><td>Simplified Chinese.</td></tr><tr><td>trach</td><td>Traditional Chinese.</td></tr><tr><td>japanese</td><td>Japanese.</td></tr><tr><td>korean</td><td>Korean.</td></tr><tr><td>french</td><td>French.</td></tr><tr><td>thai</td><td>Thai.</td></tr><tr><td>spanish</td><td>Spanish.</td></tr></table>	Option	Description	western	Western.	simch	Simplified Chinese.	trach	Traditional Chinese.	japanese	Japanese.	korean	Korean.	french	French.	thai	Thai.	spanish	Spanish.			
	Option	Description																				
	western	Western.																				
	simch	Simplified Chinese.																				
	trach	Traditional Chinese.																				
	japanese	Japanese.																				
	korean	Korean.																				
	french	French.																				
	thai	Thai.																				
spanish	Spanish.																					
pattern	Pattern for the banned word.	string	Maximum length: 127																			

Parameter	Description	Type	Size	Default								
pattern-type	Wildcard pattern or regular expression.	option	-	wildcard								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>wildcard</td><td>Wildcard pattern.</td></tr><tr><td>regex</td><td>Perl regular expression.</td></tr></table>	Option	Description	wildcard	Wildcard pattern.	regex	Perl regular expression.					
Option	Description											
wildcard	Wildcard pattern.											
regex	Perl regular expression.											
score	Score value.	integer	Minimum value: 10 1 Maximum value: 99999									
status	Enable/disable status.	option	-	enable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable status.</td></tr><tr><td>disable</td><td>Disable status.</td></tr></table>	Option	Description	enable	Enable status.	disable	Disable status.					
Option	Description											
enable	Enable status.											
disable	Disable status.											
where	Component of the email to be scanned.	option	-	all								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>subject</td><td>Banned word in email subject.</td></tr><tr><td>body</td><td>Banned word in email body.</td></tr><tr><td>all</td><td>Banned word in both subject and body.</td></tr></table>	Option	Description	subject	Banned word in email subject.	body	Banned word in email body.	all	Banned word in both subject and body.			
Option	Description											
subject	Banned word in email subject.											
body	Banned word in email body.											
all	Banned word in both subject and body.											

config emailfilter dnsbl

Configure AntiSpam DNSBL/ORBL.

```

config emailfilter dnsbl
  Description: Configure AntiSpam DNSBL/ORBL.
  edit <id>
    set comment {var-string}
    config entries
      Description: Spam filter DNSBL and ORBL server.
      edit <id>
        set action [reject|spam]
        set server {string}
        set status [enable|disable]
      next
    end
    set name {string}
  next
end

```

config emailfilter dnsbl

Parameter	Description	Type	Size	Default
comment	Optional comments.	var-string	Maximum length: 255	
id	ID.	integer	Minimum value: 0 Maximum value: 4294967295	
name	Name of table.	string	Maximum length: 63	

config entries

Parameter	Description	Type	Size	Default						
action	Reject connection or mark as spam email.	option	-	spam						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>reject</i></td><td>Reject the connection.</td></tr><tr><td><i>spam</i></td><td>Mark as spam email.</td></tr></table>	Option	Description	<i>reject</i>	Reject the connection.	<i>spam</i>	Mark as spam email.			
Option	Description									
<i>reject</i>	Reject the connection.									
<i>spam</i>	Mark as spam email.									
id	DNSBL/ORBL entry ID.	integer	Minimum value: 0 Maximum value: 4294967295							
server	DNSBL or ORBL server name.	string	Maximum length: 127							
status	Enable/disable status.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable status.</td></tr><tr><td><i>disable</i></td><td>Disable status.</td></tr></table>	Option	Description	<i>enable</i>	Enable status.	<i>disable</i>	Disable status.			
Option	Description									
<i>enable</i>	Enable status.									
<i>disable</i>	Disable status.									

config emailfilter fortishield

Configure FortiGuard - AntiSpam.

```
config emailfilter fortishield
  Description: Configure FortiGuard - AntiSpam.
  set spam-submit-force [enable|disable]
  set spam-submit-srv {string}
```

```

    set spam-submit-txt2htm [enable|disable]
end

```

config emailfilter fortishield

Parameter	Description	Type	Size	Default
spam-submit-force	Enable/disable force insertion of a new mime entity for the submission text.	option	-	enable
	Option	Description		
	enable	Enable setting.		
	disable	Disable setting.		
spam-submit-srv	Hostname of the spam submission server.	string	Maximum length: 63	www.nospammer.net
spam-submit-txt2htm	Enable/disable conversion of text email to HTML email.	option	-	enable
	Option	Description		
	enable	Enable setting.		
	disable	Disable setting.		

config emailfilter iptrust

Configure AntiSpam IP trust.

```

config emailfilter iptrust
    Description: Configure AntiSpam IP trust.
    edit <id>
        set comment {var-string}
        config entries
            Description: Spam filter trusted IP addresses.
            edit <id>
                set addr-type [ipv4|ipv6]
                set ip4-subnet {ipv4-classnet}
                set ip6-subnet {ipv6-network}
                set status [enable|disable]
            next
        end
        set name {string}
    next
end

```

config emailfilter iptrust

Parameter	Description	Type	Size	Default
comment	Optional comments.	var-string	Maximum length: 255	
id	ID.	integer	Minimum value: 0 Maximum value: 4294967295	0
name	Name of table.	string	Maximum length: 63	

config entries

Parameter	Description	Type	Size	Default
addr-type	Type of address.	option	-	ipv4
	Option	Description		
	ipv4	IPv4 Address type.		
	ipv6	IPv6 Address type.		
id	Trusted IP entry ID.	integer	Minimum value: 0 0 Maximum value: 4294967295	
ip4-subnet	IPv4 network address or network address/subnet mask bits.	ipv4-classnet	Not Specified	0.0.0.0 0.0.0.0
ip6-subnet	IPv6 network address/subnet mask bits.	ipv6-network	Not Specified	::/128
status	Enable/disable status.	option	-	enable
	Option	Description		
	enable	Enable status.		
	disable	Disable status.		

config emailfilter mheader

Configure AntiSpam MIME header.

```

config emailfilter mheader
  Description: Configure AntiSpam MIME header.
  edit <id>
    set comment {var-string}
    config entries
      Description: Spam filter mime header content.
      edit <id>
        set action [spam|clear]
        set fieldbody {string}
        set fieldname {string}
        set pattern-type [wildcard|regexp]
        set status [enable|disable]
      next
    end
    set name {string}
  next
end

```

config emailfilter mheader

Parameter	Description	Type	Size	Default
comment	Optional comments.	var-string	Maximum length: 255	
id	ID.	integer	Minimum value: 0 Maximum value: 4294967295	
name	Name of table.	string	Maximum length: 63	

config entries

Parameter	Description	Type	Size	Default
action	Mark spam or good.	option	-	spam
	Option	Description		
	<i>spam</i>	Mark as spam email.		
	<i>clear</i>	Mark as good email.		
fieldbody	Pattern for the header field body.	string	Maximum length: 127	
fieldname	Pattern for header field name.	string	Maximum length: 63	

Parameter	Description	Type	Size	Default						
id	Mime header entry ID.	integer	Minimum value: 0 0 Maximum value: 4294967295	0						
pattern-type	Wildcard pattern or regular expression.	option	-	wildcard						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>wildcard</td><td>Wildcard pattern.</td></tr><tr><td>regex</td><td>Perl regular expression.</td></tr></table>				Option	Description	wildcard	Wildcard pattern.	regex	Perl regular expression.
	Option	Description								
	wildcard	Wildcard pattern.								
regex	Perl regular expression.									
status	Enable/disable status.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable status.</td></tr><tr><td>disable</td><td>Disable status.</td></tr></table>				Option	Description	enable	Enable status.	disable	Disable status.
	Option	Description								
	enable	Enable status.								
disable	Disable status.									

config emailfilter options

Configure AntiSpam options.

```
config emailfilter options
    Description: Configure AntiSpam options.
    set dns-timeout {integer}
end
```

config emailfilter options

Parameter	Description	Type	Size	Default
dns-timeout	DNS query time out (1 - 30 sec).	integer	Minimum value: 1 Maximum value: 30	7

config emailfilter profile

Configure Email Filter profiles.

```
config emailfilter profile
    Description: Configure Email Filter profiles.
```

```

edit <name>
    set comment {var-string}
    set external [enable|disable]
    set feature-set [flow|proxy]
    config gmail
        Description: Gmail.
        set log-all [disable|enable]
    end
    config imap
        Description: IMAP.
        set action [pass|tag]
        set log-all [disable|enable]
        set tag-msg {string}
        set tag-type {option1}, {option2}, ...
    end
    config mapi
        Description: MAPI.
        set action [pass|discard]
        set log-all [disable|enable]
    end
    config msn-hotmail
        Description: MSN Hotmail.
        set log-all [disable|enable]
    end
    set options {option1}, {option2}, ...
    config other-webmails
        Description: Other supported webmails.
        set log-all [disable|enable]
    end
    config pop3
        Description: POP3.
        set action [pass|tag]
        set log-all [disable|enable]
        set tag-msg {string}
        set tag-type {option1}, {option2}, ...
    end
    set replacemsg-group {string}
    config smtp
        Description: SMTP.
        set action [pass|tag|...]
        set hdrop [disable|enable]
        set local-override [disable|enable]
        set log-all [disable|enable]
        set tag-msg {string}
        set tag-type {option1}, {option2}, ...
    end
    set spam-bal-table {integer}
    set spam-bword-table {integer}
    set spam-bword-threshold {integer}
    set spam-filtering [enable|disable]
    set spam-iptrust-table {integer}
    set spam-log [disable|enable]

```

```

set spam-log-fortiguard-response [disable|enable]
set spam-mheader-table {integer}
set spam-rbl-table {integer}
config yahoo-mail
    Description: Yahoo! Mail.
    set log-all [disable|enable]
end
next
end

```

config emailfilter profile

Parameter	Description	Type	Size	Default																
comment	Comment.	var-string	Maximum length: 255																	
external	Enable/disable external Email inspection.	option	-	disable																
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable setting.</td></tr><tr><td><i>disable</i></td><td>Disable setting.</td></tr></table>	Option	Description	<i>enable</i>	Enable setting.	<i>disable</i>	Disable setting.													
Option	Description																			
<i>enable</i>	Enable setting.																			
<i>disable</i>	Disable setting.																			
feature-set	Flow/proxy feature set.	option	-	flow																
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>flow</i></td><td>Flow feature set.</td></tr><tr><td><i>proxy</i></td><td>Proxy feature set.</td></tr></table>	Option	Description	<i>flow</i>	Flow feature set.	<i>proxy</i>	Proxy feature set.													
Option	Description																			
<i>flow</i>	Flow feature set.																			
<i>proxy</i>	Proxy feature set.																			
name	Profile name.	string	Maximum length: 35																	
options	Options.	option	-																	
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>bannedword</i></td><td>Content block.</td></tr><tr><td><i>spambal</i></td><td>Block/allow list.</td></tr><tr><td><i>spamfsip</i></td><td>Email IP address FortiGuard AntiSpam block list check.</td></tr><tr><td><i>spamfssubmit</i></td><td>Add FortiGuard AntiSpam spam submission text.</td></tr><tr><td><i>spamfschksum</i></td><td>Email checksum FortiGuard AntiSpam check.</td></tr><tr><td><i>spamfsurl</i></td><td>Email content URL FortiGuard AntiSpam check.</td></tr><tr><td><i>spamhelodns</i></td><td>Email helo/ehlo domain DNS check.</td></tr></table>	Option	Description	<i>bannedword</i>	Content block.	<i>spambal</i>	Block/allow list.	<i>spamfsip</i>	Email IP address FortiGuard AntiSpam block list check.	<i>spamfssubmit</i>	Add FortiGuard AntiSpam spam submission text.	<i>spamfschksum</i>	Email checksum FortiGuard AntiSpam check.	<i>spamfsurl</i>	Email content URL FortiGuard AntiSpam check.	<i>spamhelodns</i>	Email helo/ehlo domain DNS check.			
Option	Description																			
<i>bannedword</i>	Content block.																			
<i>spambal</i>	Block/allow list.																			
<i>spamfsip</i>	Email IP address FortiGuard AntiSpam block list check.																			
<i>spamfssubmit</i>	Add FortiGuard AntiSpam spam submission text.																			
<i>spamfschksum</i>	Email checksum FortiGuard AntiSpam check.																			
<i>spamfsurl</i>	Email content URL FortiGuard AntiSpam check.																			
<i>spamhelodns</i>	Email helo/ehlo domain DNS check.																			

Parameter	Description	Type	Size	Default											
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>spamraddrdns</td><td>Email return address DNS check.</td></tr><tr><td>spamrbl</td><td>Email DNSBL & ORBL check.</td></tr><tr><td>spamhdrcheck</td><td>Email mime header check.</td></tr><tr><td>spamfsphish</td><td>Email content phishing URL FortiGuard AntiSpam check.</td></tr></table>		Option	Description	spamraddrdns	Email return address DNS check.	spamrbl	Email DNSBL & ORBL check.	spamhdrcheck	Email mime header check.	spamfsphish	Email content phishing URL FortiGuard AntiSpam check.			
	Option	Description													
	spamraddrdns	Email return address DNS check.													
	spamrbl	Email DNSBL & ORBL check.													
	spamhdrcheck	Email mime header check.													
spamfsphish	Email content phishing URL FortiGuard AntiSpam check.														
replacemsg-group	Replacement message group.	string	Maximum length: 35												
spam-bal-table	Anti-spam block/allow list table ID.	integer	Minimum value: 0 0 Maximum value: 4294967295												
spam-bword-table	Anti-spam banned word table ID.	integer	Minimum value: 0 0 Maximum value: 4294967295												
spam-bword-threshold	Spam banned word threshold.	integer	Minimum value: 10 0 Maximum value: 2147483647												
spam-filtering	Enable/disable spam filtering.	option	-	disable											
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable setting.</td></tr><tr><td>disable</td><td>Disable setting.</td></tr></table>		Option	Description	enable	Enable setting.	disable	Disable setting.							
	Option	Description													
	enable	Enable setting.													
disable	Disable setting.														
spam-iptrust-table	Anti-spam IP trust table ID.	integer	Minimum value: 0 0 Maximum value: 4294967295												
spam-log	Enable/disable spam logging for email filtering.	option	-	enable											
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Disable spam logging for email filtering.</td></tr><tr><td>enable</td><td>Enable spam logging for email filtering.</td></tr></table>		Option	Description	disable	Disable spam logging for email filtering.	enable	Enable spam logging for email filtering.							
	Option	Description													
	disable	Disable spam logging for email filtering.													
enable	Enable spam logging for email filtering.														
spam-log-fortiguard-response	Enable/disable logging FortiGuard spam response.	option	-	disable											

Parameter	Description	Type	Size	Default
	Option Description			
	<i>disable</i>	Disable logging FortiGuard spam response.		
	<i>enable</i>	Enable logging FortiGuard spam response.		
spam-mheader-table	Anti-spam MIME header table ID.	integer	Minimum value: 0 0 Maximum value: 4294967295	
spam-rbl-table	Anti-spam DNSBL table ID.	integer	Minimum value: 0 0 Maximum value: 4294967295	

config gmail

Parameter	Description	Type	Size	Default
log-all	Enable/disable logging of all email traffic.	option	-	disable
	Option Description			
	<i>disable</i>	Disable logging of all email traffic.		
	<i>enable</i>	Enable logging of all email traffic.		

config imap

Parameter	Description	Type	Size	Default
action	Action for spam email.	option	-	tag
	Option Description			
	<i>pass</i>	Allow spam email to pass through.		
	<i>tag</i>	Tag spam email with configured text in subject or header.		
log-all	Enable/disable logging of all email traffic.	option	-	disable
	Option Description			
	<i>disable</i>	Disable logging of all email traffic.		
	<i>enable</i>	Enable logging of all email traffic.		
tag-msg	Subject text or header added to spam email.	string	Maximum length: 63	Spam

Parameter	Description	Type	Size	Default
tag-type	Tag subject or header for spam email.	option	-	subject spaminfo
	Option	Description		
	<i>subject</i>	Prepend text to spam email subject.		
	<i>header</i>	Append a user defined mime header to spam email.		
	<i>spaminfo</i>	Append spam info to spam email header.		

config mapi

Parameter	Description	Type	Size	Default
action	Action for spam email.	option	-	pass
	Option	Description		
	<i>pass</i>	Allow spam email to pass through.		
	<i>discard</i>	Discard (block) spam email.		
log-all	Enable/disable logging of all email traffic.	option	-	disable
	Option	Description		
	<i>disable</i>	Disable logging of all email traffic.		
	<i>enable</i>	Enable logging of all email traffic.		

config msn-hotmail

Parameter	Description	Type	Size	Default
log-all	Enable/disable logging of all email traffic.	option	-	disable
	Option	Description		
	<i>disable</i>	Disable logging of all email traffic.		
	<i>enable</i>	Enable logging of all email traffic.		

config other-webmails

Parameter	Description	Type	Size	Default
log-all	Enable/disable logging of all email traffic.	option	-	disable

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>disable</i>	Disable logging of all email traffic.		
	<i>enable</i>	Enable logging of all email traffic.		

config pop3

Parameter	Description	Type	Size	Default
action	Action for spam email.	option	-	tag
	Option	Description		
	<i>pass</i>	Allow spam email to pass through.		
	<i>tag</i>	Tag spam email with configured text in subject or header.		
log-all	Enable/disable logging of all email traffic.	option	-	disable
	Option	Description		
	<i>disable</i>	Disable logging of all email traffic.		
	<i>enable</i>	Enable logging of all email traffic.		
tag-msg	Subject text or header added to spam email.	string	Maximum length: 63	Spam
tag-type	Tag subject or header for spam email.	option	-	subject spaminfo
	Option	Description		
	<i>subject</i>	Prepend text to spam email subject.		
	<i>header</i>	Append a user defined mime header to spam email.		
	<i>spaminfo</i>	Append spam info to spam email header.		

config smtp

Parameter	Description	Type	Size	Default
action	Action for spam email.	option	-	discard
	Option	Description		
	<i>pass</i>	Allow spam email to pass through.		

Parameter	Description	Type	Size	Default								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>tag</td><td>Tag spam email with configured text in subject or header.</td></tr><tr><td>discard</td><td>Discard (block) spam email.</td></tr></table>	Option	Description	tag	Tag spam email with configured text in subject or header.	discard	Discard (block) spam email.					
Option	Description											
tag	Tag spam email with configured text in subject or header.											
discard	Discard (block) spam email.											
hdrip	Enable/disable SMTP email header IP checks for spamfsip, spamrbl, and spambal filters.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Disable SMTP email header IP checks for spamfsip, spamrbl, and spambal filters.</td></tr><tr><td>enable</td><td>Enable SMTP email header IP checks for spamfsip, spamrbl, and spambal filters.</td></tr></table>	Option	Description	disable	Disable SMTP email header IP checks for spamfsip, spamrbl, and spambal filters.	enable	Enable SMTP email header IP checks for spamfsip, spamrbl, and spambal filters.					
Option	Description											
disable	Disable SMTP email header IP checks for spamfsip, spamrbl, and spambal filters.											
enable	Enable SMTP email header IP checks for spamfsip, spamrbl, and spambal filters.											
local-override	Enable/disable local filter to override SMTP remote check result.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Disable local filter to override SMTP remote check result.</td></tr><tr><td>enable</td><td>Enable local filter to override SMTP remote check result.</td></tr></table>	Option	Description	disable	Disable local filter to override SMTP remote check result.	enable	Enable local filter to override SMTP remote check result.					
Option	Description											
disable	Disable local filter to override SMTP remote check result.											
enable	Enable local filter to override SMTP remote check result.											
log-all	Enable/disable logging of all email traffic.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Disable logging of all email traffic.</td></tr><tr><td>enable</td><td>Enable logging of all email traffic.</td></tr></table>	Option	Description	disable	Disable logging of all email traffic.	enable	Enable logging of all email traffic.					
Option	Description											
disable	Disable logging of all email traffic.											
enable	Enable logging of all email traffic.											
tag-msg	Subject text or header added to spam email.	string	Maximum length: 63	Spam								
tag-type	Tag subject or header for spam email.	option	-	subject spaminfo								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>subject</td><td>Prepend text to spam email subject.</td></tr><tr><td>header</td><td>Append a user defined mime header to spam email.</td></tr><tr><td>spaminfo</td><td>Append spam info to spam email header.</td></tr></table>	Option	Description	subject	Prepend text to spam email subject.	header	Append a user defined mime header to spam email.	spaminfo	Append spam info to spam email header.			
Option	Description											
subject	Prepend text to spam email subject.											
header	Append a user defined mime header to spam email.											
spaminfo	Append spam info to spam email header.											

config yahoo-mail

Parameter	Description	Type	Size	Default
log-all	Enable/disable logging of all email traffic.	option	-	disable
	Option	Description		
	<i>disable</i>	Disable logging of all email traffic.		
	<i>enable</i>	Enable logging of all email traffic.		

endpoint-control

This section includes syntax for the following commands:

- [config endpoint-control fctems](#) on page 243

config endpoint-control fctems

Configure FortiClient Enterprise Management Server (EMS) entries.

```
config endpoint-control fctems
  Description: Configure FortiClient Enterprise Management Server (EMS) entries.
  edit <ems-id>
    set call-timeout {integer}
    set capabilities {option1}, {option2}, ...
    set cloud-server-type [production|alpha|...]
    set dirty-reason [none|mismatched-ems-sn]
    set fortinetone-cloud-authentication [enable|disable]
    set https-port {integer}
    set interface {string}
    set interface-select-method [auto|sdwan|...]
    set name {string}
    set out-of-sync-threshold {integer}
    set preserve-ssl-session [enable|disable]
    set pull-avatars [enable|disable]
    set pull-malware-hash [enable|disable]
    set pull-sysinfo [enable|disable]
    set pull-tags [enable|disable]
    set pull-vulnerabilities [enable|disable]
    set serial-number {string}
    set server {string}
    set source-ip {ipv4-address-any}
    set status [enable|disable]
    set tenant-id {string}
    set trust-ca-cn [enable|disable]
    set websocket-override [disable|enable]
  next
end
```

config endpoint-control fctems

Parameter	Description	Type	Size	Default																
call-timeout	FortiClient EMS call timeout in seconds (1 - 180 seconds, default = 30).	integer	Minimum value: 1 Maximum value: 180	30																
capabilities	List of EMS capabilities.	option	-																	
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>fabric-auth</i></td><td>Allow this FortiGate unit to load the authentication page provided by EMS to authenticate itself with EMS.</td></tr><tr><td><i>silent-approval</i></td><td>Allow silent approval of non-root or FortiGate HA clusters on EMS in the Security Fabric.</td></tr><tr><td><i>websocket</i></td><td>Enable/disable websockets for this FortiGate unit. Override behavior using websocket-override.</td></tr><tr><td><i>websocket-malware</i></td><td>Allow this FortiGate unit to request malware hash notifications over websocket.</td></tr><tr><td><i>push-ca-certs</i></td><td>Enable/disable syncing deep inspection certificates with EMS.</td></tr><tr><td><i>common-tags-api</i></td><td>Can receive tag information from New Common Tags API from EMS.</td></tr><tr><td><i>tenant-id</i></td><td>Allow this FortiGate to retrieve Tenant-ID from EMS.</td></tr></table>	Option	Description	<i>fabric-auth</i>	Allow this FortiGate unit to load the authentication page provided by EMS to authenticate itself with EMS.	<i>silent-approval</i>	Allow silent approval of non-root or FortiGate HA clusters on EMS in the Security Fabric.	<i>websocket</i>	Enable/disable websockets for this FortiGate unit. Override behavior using websocket-override.	<i>websocket-malware</i>	Allow this FortiGate unit to request malware hash notifications over websocket.	<i>push-ca-certs</i>	Enable/disable syncing deep inspection certificates with EMS.	<i>common-tags-api</i>	Can receive tag information from New Common Tags API from EMS.	<i>tenant-id</i>	Allow this FortiGate to retrieve Tenant-ID from EMS.			
Option	Description																			
<i>fabric-auth</i>	Allow this FortiGate unit to load the authentication page provided by EMS to authenticate itself with EMS.																			
<i>silent-approval</i>	Allow silent approval of non-root or FortiGate HA clusters on EMS in the Security Fabric.																			
<i>websocket</i>	Enable/disable websockets for this FortiGate unit. Override behavior using websocket-override.																			
<i>websocket-malware</i>	Allow this FortiGate unit to request malware hash notifications over websocket.																			
<i>push-ca-certs</i>	Enable/disable syncing deep inspection certificates with EMS.																			
<i>common-tags-api</i>	Can receive tag information from New Common Tags API from EMS.																			
<i>tenant-id</i>	Allow this FortiGate to retrieve Tenant-ID from EMS.																			
cloud-server-type	Cloud server type.	option	-	production																
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>production</i></td><td>Production FortiClient EMS Cloud Controller.</td></tr><tr><td><i>alpha</i></td><td>Alpha FortiClient EMS Cloud Controller. For testing only.</td></tr><tr><td><i>beta</i></td><td>Beta FortiClient EMS Cloud Controller. For testing only.</td></tr></table>	Option	Description	<i>production</i>	Production FortiClient EMS Cloud Controller.	<i>alpha</i>	Alpha FortiClient EMS Cloud Controller. For testing only.	<i>beta</i>	Beta FortiClient EMS Cloud Controller. For testing only.											
Option	Description																			
<i>production</i>	Production FortiClient EMS Cloud Controller.																			
<i>alpha</i>	Alpha FortiClient EMS Cloud Controller. For testing only.																			
<i>beta</i>	Beta FortiClient EMS Cloud Controller. For testing only.																			
dirty-reason	Dirty Reason for FortiClient EMS.	option	-	none																
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>none</i></td><td>FortiClient EMS entry not dirty.</td></tr><tr><td><i>mismatched-ems-sn</i></td><td>FortiClient EMS entry dirty because EMS SN is mismatched with configured SN.</td></tr></table>	Option	Description	<i>none</i>	FortiClient EMS entry not dirty.	<i>mismatched-ems-sn</i>	FortiClient EMS entry dirty because EMS SN is mismatched with configured SN.													
Option	Description																			
<i>none</i>	FortiClient EMS entry not dirty.																			
<i>mismatched-ems-sn</i>	FortiClient EMS entry dirty because EMS SN is mismatched with configured SN.																			

Parameter	Description	Type	Size	Default								
ems-id	EMS ID in order (1 - 7).	integer	Minimum value: 1 Maximum value: 7	0								
fortinetone-cloud-authentication	Enable/disable authentication of FortiClient EMS Cloud through FortiCloud account.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable authentication of FortiClient EMS Cloud through the use of FortiCloud account.</td></tr><tr><td><i>disable</i></td><td>Disable authentication of FortiClient EMS Cloud through the use of FortiCloud account.</td></tr></table>				Option	Description	<i>enable</i>	Enable authentication of FortiClient EMS Cloud through the use of FortiCloud account.	<i>disable</i>	Disable authentication of FortiClient EMS Cloud through the use of FortiCloud account.		
Option	Description											
<i>enable</i>	Enable authentication of FortiClient EMS Cloud through the use of FortiCloud account.											
<i>disable</i>	Disable authentication of FortiClient EMS Cloud through the use of FortiCloud account.											
https-port	FortiClient EMS HTTPS access port number. (1 - 65535, default: 443).	integer	Minimum value: 1 Maximum value: 65535	443								
interface	Specify outgoing interface to reach server.	string	Maximum length: 15									
interface-select-method	Specify how to select outgoing interface to reach server.	option	-	auto								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>auto</i></td><td>Set outgoing interface automatically.</td></tr><tr><td><i>sdwan</i></td><td>Set outgoing interface by SD-WAN or policy routing rules.</td></tr><tr><td><i>specify</i></td><td>Set outgoing interface manually.</td></tr></table>				Option	Description	<i>auto</i>	Set outgoing interface automatically.	<i>sdwan</i>	Set outgoing interface by SD-WAN or policy routing rules.	<i>specify</i>	Set outgoing interface manually.
Option	Description											
<i>auto</i>	Set outgoing interface automatically.											
<i>sdwan</i>	Set outgoing interface by SD-WAN or policy routing rules.											
<i>specify</i>	Set outgoing interface manually.											
name	FortiClient Enterprise Management Server (EMS) name.	string	Maximum length: 35									
out-of-sync-threshold	Outdated resource threshold in seconds (10 - 3600, default = 180).	integer	Minimum value: 10 Maximum value: 3600	180								
preserve-ssl-session	Enable/disable preservation of EMS SSL session connection. Warning, most users should not touch this setting.	option	-	disable								

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>enable</i>	Allow preservation of EMS SSL session connection.		
	<i>disable</i>	Don't allow preservation of EMS SSL session connection.		
pull-avatars	Enable/disable pulling avatars from EMS.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable pulling FortiClient user avatars from EMS.		
	<i>disable</i>	Disable pulling FortiClient user avatars from EMS.		
pull-malware-hash	Enable/disable pulling FortiClient malware hash from EMS.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable pulling FortiClient malware hash from EMS.		
	<i>disable</i>	Disable pulling FortiClient malware hash from EMS.		
pull-sysinfo	Enable/disable pulling SysInfo from EMS.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable pulling FortiClient user SysInfo from EMS.		
	<i>disable</i>	Disable pulling FortiClient user SysInfo from EMS.		
pull-tags	Enable/disable pulling FortiClient user tags from EMS.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable pulling FortiClient user tags from EMS.		
	<i>disable</i>	Disable pulling FortiClient user tags from EMS.		
pull-vulnerabilities	Enable/disable pulling vulnerabilities from EMS.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable pulling client vulnerabilities from EMS.		
	<i>disable</i>	Disable pulling client vulnerabilities from EMS.		
serial-number	EMS Serial Number.	string	Maximum length: 16	

Parameter	Description	Type	Size	Default						
server	FortiClient EMS FQDN or IPv4 address.	string	Maximum length: 255							
source-ip	REST API call source IP.	ipv4-address-any	Not Specified	0.0.0.0						
status	Enable or disable this EMS configuration.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable EMS configuration and operation.</td></tr><tr><td>disable</td><td>Disable EMS configuration and operation.</td></tr></table>				Option	Description	enable	Enable EMS configuration and operation.	disable	Disable EMS configuration and operation.
	Option	Description								
	enable	Enable EMS configuration and operation.								
disable	Disable EMS configuration and operation.									
tenant-id	EMS Tenant ID.	string	Maximum length: 32							
trust-ca-cn	Enable/disable trust of the EMS certificate issuer(CA) and common name(CN) for certificate auto-renewal.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Trust EMS certificate CA & CN to automatically renew certificate.</td></tr><tr><td>disable</td><td>Do not trust EMS certificate CA & CN to automatically renew certificate.</td></tr></table>				Option	Description	enable	Trust EMS certificate CA & CN to automatically renew certificate.	disable	Do not trust EMS certificate CA & CN to automatically renew certificate.
	Option	Description								
	enable	Trust EMS certificate CA & CN to automatically renew certificate.								
disable	Do not trust EMS certificate CA & CN to automatically renew certificate.									
websocket-override	Enable/disable override behavior for how this FortiGate unit connects to EMS using a WebSocket connection.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Do not override the WebSocket connection. Connect to WebSocket of this EMS server if it is capable (default).</td></tr><tr><td>enable</td><td>Override the WebSocket connection. Do not connect to WebSocket even if EMS is capable of a WebSocket connection.</td></tr></table>				Option	Description	disable	Do not override the WebSocket connection. Connect to WebSocket of this EMS server if it is capable (default).	enable	Override the WebSocket connection. Do not connect to WebSocket even if EMS is capable of a WebSocket connection.
	Option	Description								
	disable	Do not override the WebSocket connection. Connect to WebSocket of this EMS server if it is capable (default).								
enable	Override the WebSocket connection. Do not connect to WebSocket even if EMS is capable of a WebSocket connection.									

extension-controller

This section includes syntax for the following commands:

- [config extension-controller dataplan on page 248](#)
- [config extension-controller extender-profile on page 254](#)
- [config extension-controller extender on page 251](#)
- [config extension-controller fortigate-profile on page 268](#)
- [config extension-controller fortigate on page 267](#)

config extension-controller dataplan

FortiExtender dataplan configuration.

```
config extension-controller dataplan
  Description: FortiExtender dataplan configuration.
  edit <name>
    set apn {string}
    set auth-type [none|pap|...]
    set billing-date {integer}
    set capacity {integer}
    set carrier {string}
    set iccid {string}
    set modem-id [modem1|modem2|...]
    set monthly-fee {integer}
    set overage [disable|enable]
    set password {password}
    set pdn [ipv4-only|ipv6-only|...]
    set preferred-subnet {integer}
    set private-network [disable|enable]
    set signal-period {integer}
    set signal-threshold {integer}
    set slot [sim1|sim2]
    set type [carrier|slot|...]
    set username {string}
  next
end
```

config extension-controller dataplan

Parameter	Description	Type	Size	Default
apn	APN configuration.	string	Maximum length: 63	
auth-type	Authentication type.	option	-	none
	Option Description			
	<i>none</i>	No authentication.		
	<i>pap</i>	PAP.		
	<i>chap</i>	CHAP.		
billing-date	Billing day of the month (1 - 31).	integer	Minimum value: 1 Maximum value: 31	1
capacity	Capacity in MB (0 - 102400000).	integer	Minimum value: 0 Maximum value: 102400000	0
carrier	Carrier configuration.	string	Maximum length: 31	
iccid	ICCID configuration.	string	Maximum length: 31	
modem-id	Dataplan's modem specifics, if any.	option	-	all
	Option Description			
	<i>modem1</i>	Modem one.		
	<i>modem2</i>	Modem two.		
	<i>all</i>	All modems.		
monthly-fee	Monthly fee of dataplan (0 - 100000, in local currency).	integer	Minimum value: 0 Maximum value: 100000	0
name	FortiExtender data plan name.	string	Maximum length: 31	
overage	Enable/disable dataplan overage detection.	option	-	disable

Parameter	Description	Type	Size	Default
	Option Description			
	<i>disable</i>	Disable dataplan overage detection.		
	<i>enable</i>	Enable dataplan overage detection.		
password	Password.	password	Not Specified	
pdn	PDN type.	option	-	ipv4-only
	Option Description			
	<i>ipv4-only</i>	IPv4 only PDN activation.		
	<i>ipv6-only</i>	IPv6 only PDN activation.		
	<i>ipv4-ipv6</i>	Both IPv4 and IPv6 PDN activations.		
preferred-subnet	Preferred subnet mask (0 - 32).	integer	Minimum value: 0 Maximum value: 32	0
private-network	Enable/disable dataplan private network support.	option	-	disable
	Option Description			
	<i>disable</i>	Disable dataplan private network support.		
	<i>enable</i>	Enable dataplan private network support.		
signal-period	Signal period (600 to 18000 seconds).	integer	Minimum value: 600 Maximum value: 18000	3600
signal-threshold	Signal threshold. Specify the range between 50 - 100, where 50/100 means -50/-100 dBm.	integer	Minimum value: 50 Maximum value: 100	100
slot	SIM slot configuration.	option	-	
	Option Description			
	<i>sim1</i>	Sim slot one.		
	<i>sim2</i>	Sim slot two.		
type	Type preferences configuration.	option	-	generic

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>carrier</i>	Assign by SIM carrier.		
	<i>slot</i>	Assign to SIM slot 1 or 2.		
	<i>iccid</i>	Assign to a specific SIM by ICCID.		
	<i>generic</i>	Compatible with any SIM. Assigned if no other dataplan matches the chosen SIM.		
username	Username.	string	Maximum length: 127	

config extension-controller extender

Extender controller configuration.

```

config extension-controller extender
  Description: Extender controller configuration.
  edit <name>
    set allowaccess {option1}, {option2}, ...
    set authorized [discovered|disable|...]
    set bandwidth-limit {integer}
    set description {string}
    set device-id {integer}
    set enforce-bandwidth [enable|disable]
    set ext-name {string}
    set extension-type [wan-extension|lan-extension]
    set firmware-provision-latest [disable|once]
    set id {string}
    set login-password {password}
    set login-password-change [yes|default|...]
    set override-allowaccess [enable|disable]
    set override-enforce-bandwidth [enable|disable]
    set override-login-password-change [enable|disable]
    set profile {string}
    set vdom {integer}
    config wan-extension
      Description: FortiExtender wan extension configuration.
      set modem1-extension {string}
      set modem2-extension {string}
    end
  end
next
end

```

config extension-controller extender

Parameter	Description	Type	Size	Default														
allowaccess	Control management access to the managed extender. Separate entries with a space.	option	-															
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>ping</i></td><td>PING access.</td></tr><tr><td><i>telnet</i></td><td>TELNET access.</td></tr><tr><td><i>http</i></td><td>HTTP access.</td></tr><tr><td><i>https</i></td><td>HTTPS access.</td></tr><tr><td><i>ssh</i></td><td>SSH access.</td></tr><tr><td><i>snmp</i></td><td>SNMP access.</td></tr></table>	Option	Description	<i>ping</i>	PING access.	<i>telnet</i>	TELNET access.	<i>http</i>	HTTP access.	<i>https</i>	HTTPS access.	<i>ssh</i>	SSH access.	<i>snmp</i>	SNMP access.			
Option	Description																	
<i>ping</i>	PING access.																	
<i>telnet</i>	TELNET access.																	
<i>http</i>	HTTP access.																	
<i>https</i>	HTTPS access.																	
<i>ssh</i>	SSH access.																	
<i>snmp</i>	SNMP access.																	
authorized	FortiExtender Administration (enable or disable).	option	-	discovered														
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>discovered</i></td><td>Controller discovered this FortiExtender.</td></tr><tr><td><i>disable</i></td><td>Controller is configured to not provide service to this FortiExtender.</td></tr><tr><td><i>enable</i></td><td>Controller is configured to provide service to this FortiExtender.</td></tr></table>	Option	Description	<i>discovered</i>	Controller discovered this FortiExtender.	<i>disable</i>	Controller is configured to not provide service to this FortiExtender.	<i>enable</i>	Controller is configured to provide service to this FortiExtender.									
Option	Description																	
<i>discovered</i>	Controller discovered this FortiExtender.																	
<i>disable</i>	Controller is configured to not provide service to this FortiExtender.																	
<i>enable</i>	Controller is configured to provide service to this FortiExtender.																	
bandwidth-limit	FortiExtender LAN extension bandwidth limit (Mbps).	integer	Minimum value: 1024 Maximum value: 16776000															
description	Description.	string	Maximum length: 255															
device-id	Device ID.	integer	Minimum value: 128 Maximum value: 4294967295															
enforce-bandwidth	Enable/disable enforcement of bandwidth on LAN extension interface.	option	-	disable														
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable to enforce bandwidth limit on LAN extension interface.</td></tr><tr><td><i>disable</i></td><td>Disable to enforce bandwidth limit on LAN extension interface.</td></tr></table>	Option	Description	<i>enable</i>	Enable to enforce bandwidth limit on LAN extension interface.	<i>disable</i>	Disable to enforce bandwidth limit on LAN extension interface.											
Option	Description																	
<i>enable</i>	Enable to enforce bandwidth limit on LAN extension interface.																	
<i>disable</i>	Disable to enforce bandwidth limit on LAN extension interface.																	

Parameter	Description	Type	Size	Default								
ext-name	FortiExtender name.	string	Maximum length: 31									
extension-type	Extension type for this FortiExtender.	option	-									
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>wan-extension</td><td>FortiExtender wan-extension.</td></tr><tr><td>lan-extension</td><td>FortiExtender lan-extension.</td></tr></table>	Option	Description	wan-extension	FortiExtender wan-extension.	lan-extension	FortiExtender lan-extension.					
Option	Description											
wan-extension	FortiExtender wan-extension.											
lan-extension	FortiExtender lan-extension.											
firmware-provision-latest	Enable/disable one-time automatic provisioning of the latest firmware version.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Do not automatically provision the latest available firmware.</td></tr><tr><td>once</td><td>Automatically attempt a one-time upgrade to the latest available firmware version.</td></tr></table>	Option	Description	disable	Do not automatically provision the latest available firmware.	once	Automatically attempt a one-time upgrade to the latest available firmware version.					
Option	Description											
disable	Do not automatically provision the latest available firmware.											
once	Automatically attempt a one-time upgrade to the latest available firmware version.											
id	FortiExtender serial number.	string	Maximum length: 19									
login-password	Set the managed extender's administrator password.	password	Not Specified									
login-password-change	Change or reset the administrator password of a managed extender (yes, default, or no, default = no).	option	-	no								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>yes</td><td>Change the managed extender's administrator password. Use the login-password option to set the password.</td></tr><tr><td>default</td><td>Keep the managed extender's administrator password set to the factory default.</td></tr><tr><td>no</td><td>Do not change the managed extender's administrator password.</td></tr></table>	Option	Description	yes	Change the managed extender's administrator password. Use the login-password option to set the password.	default	Keep the managed extender's administrator password set to the factory default.	no	Do not change the managed extender's administrator password.			
Option	Description											
yes	Change the managed extender's administrator password. Use the login-password option to set the password.											
default	Keep the managed extender's administrator password set to the factory default.											
no	Do not change the managed extender's administrator password.											
name	FortiExtender entry name.	string	Maximum length: 19									
override-allowaccess	Enable to override the extender profile management access configuration.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Override the extender profile management access configuration.</td></tr></table>	Option	Description	enable	Override the extender profile management access configuration.							
Option	Description											
enable	Override the extender profile management access configuration.											

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>disable</i>	Use the extender profile management access configuration.		
override-enforce-bandwidth	Enable to override the extender profile enforce-bandwidth setting.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable override of FortiExtender profile bandwidth setting.		
	<i>disable</i>	Disable override of FortiExtender profile bandwidth setting.		
override-login-password-change	Enable to override the extender profile login-password (administrator password) setting.	option	-	disable
	Option	Description		
	<i>enable</i>	Override the WTP profile login-password (administrator password) setting.		
	<i>disable</i>	Use the the WTP profile login-password (administrator password) setting.		
profile	FortiExtender profile configuration.	string	Maximum length: 31	
vdom	VDOM. Read-only.	integer	Minimum value: 1 0 Maximum value: 4294967295	

config wan-extension

Parameter	Description	Type	Size	Default
modem1-extension	FortiExtender interface name.	string	Maximum length: 31	
modem2-extension	FortiExtender interface name.	string	Maximum length: 31	

config extension-controller extender-profile

FortiExtender extender profile configuration.

```

config extension-controller extender-profile
    Description: FortiExtender extender profile configuration.
    edit <name>
        set allowaccess {option1}, {option2}, ...
        set bandwidth-limit {integer}
    config cellular
        Description: FortiExtender cellular configuration.
        config controller-report
            Description: FortiExtender controller report configuration.
            set interval {integer}
            set signal-threshold {integer}
            set status [disable|enable]
        end
        set dataplan <name1>, <name2>, ...
    config modem1
        Description: Configuration options for modem 1.
        config auto-switch
            Description: FortiExtender auto switch configuration.
            set dataplan [disable|enable]
            set disconnect [disable|enable]
            set disconnect-period {integer}
            set disconnect-threshold {integer}
            set signal [disable|enable]
            set switch-back {option1}, {option2}, ...
            set switch-back-time {string}
            set switch-back-timer {integer}
        end
        set conn-status {integer}
        set default-sim [sim1|sim2|...]
        set gps [disable|enable]
        set preferred-carrier {string}
        set redundant-intf {string}
        set redundant-mode [disable|enable]
        set sim1-pin [disable|enable]
        set sim1-pin-code {password}
        set sim2-pin [disable|enable]
        set sim2-pin-code {password}
    end
    config modem2
        Description: Configuration options for modem 2.
        config auto-switch
            Description: FortiExtender auto switch configuration.
            set dataplan [disable|enable]
            set disconnect [disable|enable]
            set disconnect-period {integer}
            set disconnect-threshold {integer}
            set signal [disable|enable]
            set switch-back {option1}, {option2}, ...
            set switch-back-time {string}
            set switch-back-timer {integer}
        end
        set conn-status {integer}

```

```

    set default-sim [sim1|sim2|...]
    set gps [disable|enable]
    set preferred-carrier {string}
    set redundant-intf {string}
    set redundant-mode [disable|enable]
    set sim1-pin [disable|enable]
    set sim1-pin-code {password}
    set sim2-pin [disable|enable]
    set sim2-pin-code {password}
end
config sms-notification
    Description: FortiExtender cellular SMS notification configuration.
    config alert
        Description: SMS alert list.
        set data-exhausted {string}
        set fgt-backup-mode-switch {string}
        set low-signal-strength {string}
        set mode-switch {string}
        set os-image-fallback {string}
        set session-disconnect {string}
        set system-reboot {string}
    end
    config receiver
        Description: SMS notification receiver list.
        edit <name>
            set alert {option1}, {option2}, ...
            set phone-number {string}
            set status [disable|enable]
        next
    end
    set status [disable|enable]
end
set enforce-bandwidth [enable|disable]
set extension [wan-extension|lan-extension]
set id {integer}
config lan-extension
    Description: FortiExtender lan extension configuration.
    config backhaul
        Description: LAN extension backhaul tunnel configuration.
        edit <name>
            set port [wan|lte1|...]
            set role [primary|secondary]
            set weight {integer}
        next
    end
    set backhaul-interface {string}
    set backhaul-ip {string}
    set ipsec-tunnel {string}
    set link-loadbalance [activebackup|loadbalance]
end
set login-password {password}

```

```

        set login-password-change [yes|default|...]
        set model [FX201E|FX211E|...]
    next
end

```

config extension-controller extender-profile

Parameter	Description	Type	Size	Default														
allowaccess	Control management access to the managed extender. Separate entries with a space.	option	-															
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>ping</i></td><td>PING access.</td></tr><tr><td><i>telnet</i></td><td>TELNET access.</td></tr><tr><td><i>http</i></td><td>HTTP access.</td></tr><tr><td><i>https</i></td><td>HTTPS access.</td></tr><tr><td><i>ssh</i></td><td>SSH access.</td></tr><tr><td><i>snmp</i></td><td>SNMP access.</td></tr></table>	Option	Description	<i>ping</i>	PING access.	<i>telnet</i>	TELNET access.	<i>http</i>	HTTP access.	<i>https</i>	HTTPS access.	<i>ssh</i>	SSH access.	<i>snmp</i>	SNMP access.			
Option	Description																	
<i>ping</i>	PING access.																	
<i>telnet</i>	TELNET access.																	
<i>http</i>	HTTP access.																	
<i>https</i>	HTTPS access.																	
<i>ssh</i>	SSH access.																	
<i>snmp</i>	SNMP access.																	
bandwidth-limit	FortiExtender LAN extension bandwidth limit (Mbps).	integer	Minimum value: 1 Maximum value: 16776000	1024														
enforce-bandwidth	Enable/disable enforcement of bandwidth on LAN extension interface.	option	-	disable														
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable to enforce bandwidth limit on LAN extension interface.</td></tr><tr><td><i>disable</i></td><td>Disable to enforce bandwidth limit on LAN extension interface.</td></tr></table>	Option	Description	<i>enable</i>	Enable to enforce bandwidth limit on LAN extension interface.	<i>disable</i>	Disable to enforce bandwidth limit on LAN extension interface.											
Option	Description																	
<i>enable</i>	Enable to enforce bandwidth limit on LAN extension interface.																	
<i>disable</i>	Disable to enforce bandwidth limit on LAN extension interface.																	
extension	Extension option.	option	-	wan-extension **														
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>wan-extension</i></td><td>WAN extension.</td></tr><tr><td><i>lan-extension</i></td><td>LAN extension.</td></tr></table>	Option	Description	<i>wan-extension</i>	WAN extension.	<i>lan-extension</i>	LAN extension.											
Option	Description																	
<i>wan-extension</i>	WAN extension.																	
<i>lan-extension</i>	LAN extension.																	

Parameter	Description	Type	Size	Default																														
id	ID.	integer	Minimum value: 0 Maximum value: 102400000	32																														
login-password	Set the managed extender's administrator password.	password	Not Specified																															
login-password-change	Change or reset the administrator password of a managed extender (yes, default, or no, default = no).	option	-	no																														
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>yes</td><td>Change the managed extender's administrator password. Use the login-password option to set the password.</td></tr><tr><td>default</td><td>Keep the managed extender's administrator password set to the factory default.</td></tr><tr><td>no</td><td>Do not change the managed extender's administrator password.</td></tr></table>				Option	Description	yes	Change the managed extender's administrator password. Use the login-password option to set the password.	default	Keep the managed extender's administrator password set to the factory default.	no	Do not change the managed extender's administrator password.																						
	Option	Description																																
	yes	Change the managed extender's administrator password. Use the login-password option to set the password.																																
	default	Keep the managed extender's administrator password set to the factory default.																																
no	Do not change the managed extender's administrator password.																																	
model	Model.	option	-	FX201E																														
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>FX201E</td><td>FEX-201E model.</td></tr><tr><td>FX211E</td><td>FEX-211E model.</td></tr><tr><td>FX200F</td><td>FEX-200F model.</td></tr><tr><td>FXA11F</td><td>FEX-101F-AM model.</td></tr><tr><td>FXE11F</td><td>FEX-101F-EA model.</td></tr><tr><td>FXA21F</td><td>FEX-201F-AM model.</td></tr><tr><td>FXE21F</td><td>FEX-201F-EA model.</td></tr><tr><td>FXA22F</td><td>FEX-202F-AM model.</td></tr><tr><td>FXE22F</td><td>FEX-202F-EA model.</td></tr><tr><td>FX212F</td><td>FEX-212F model.</td></tr><tr><td>FX311F</td><td>FEX-311F model.</td></tr><tr><td>FX312F</td><td>FEX-312F model.</td></tr><tr><td>FX511F</td><td>FEX-511F model.</td></tr><tr><td>FVG21F</td><td>FEV-211F model.</td></tr></table>				Option	Description	FX201E	FEX-201E model.	FX211E	FEX-211E model.	FX200F	FEX-200F model.	FXA11F	FEX-101F-AM model.	FXE11F	FEX-101F-EA model.	FXA21F	FEX-201F-AM model.	FXE21F	FEX-201F-EA model.	FXA22F	FEX-202F-AM model.	FXE22F	FEX-202F-EA model.	FX212F	FEX-212F model.	FX311F	FEX-311F model.	FX312F	FEX-312F model.	FX511F	FEX-511F model.	FVG21F	FEV-211F model.
	Option	Description																																
	FX201E	FEX-201E model.																																
	FX211E	FEX-211E model.																																
	FX200F	FEX-200F model.																																
	FXA11F	FEX-101F-AM model.																																
	FXE11F	FEX-101F-EA model.																																
	FXA21F	FEX-201F-AM model.																																
	FXE21F	FEX-201F-EA model.																																
	FXA22F	FEX-202F-AM model.																																
	FXE22F	FEX-202F-EA model.																																
	FX212F	FEX-212F model.																																
	FX311F	FEX-311F model.																																
	FX312F	FEX-312F model.																																
	FX511F	FEX-511F model.																																
FVG21F	FEV-211F model.																																	

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>FVA21F</i>	FEV-211F-AM model.		
	<i>FVG22F</i>	FEV-212F model.		
	<i>FVA22F</i>	FEV-212F-AM model.		
	<i>FX04DA</i>	FX40D-AMEU model.		
name	FortiExtender profile name.	string	Maximum length: 31	

** Values may differ between models.

config cellular

Parameter	Description	Type	Size	Default
dataplan <name>	Dataplan names. Dataplan name.	string	Maximum length: 79	

config controller-report

Parameter	Description	Type	Size	Default
interval	Controller report interval.	integer	Minimum value: 0 Maximum value: 4294967295	300
signal-threshold	Controller report signal threshold.	integer	Minimum value: 10 Maximum value: 50	10
status	FortiExtender controller report status.	option	-	disable
	Option	Description		
	<i>disable</i>	Controller is configured to not provide service to this FortiExtender.		
	<i>enable</i>	Controller is configured to provide service to this FortiExtender.		

config modem1

Parameter	Description	Type	Size	Default
conn-status	Connection status. Read-only.	integer	Minimum value: 0 Maximum value: 4294967295	0
default-sim	Default SIM selection.	option	-	sim1
	Option	Description		
	sim1	Use SIM #1 by default.		
	sim2	Use SIM #2 by default.		
	carrier	Assign default SIM based on carrier.		
	cost	Assign default SIM based on cost.		
gps	FortiExtender GPS enable/disable.	option	-	enable
	Option	Description		
	disable	Disable GPS.		
	enable	Enable GPS.		
preferred-carrier	Preferred carrier.	string	Maximum length: 31	
redundant-intf	Redundant interface.	string	Maximum length: 15	
redundant-mode	FortiExtender mode.	option	-	disable
	Option	Description		
	disable	Disable interface redundancy.		
	enable	Enable interface redundancy.		
sim1-pin	SIM #1 PIN status.	option	-	disable
	Option	Description		
	disable	Disable SIM #1 PIN.		
	enable	Enable SIM #1 PIN.		
sim1-pin-code	SIM #1 PIN password.	password	Not Specified	
sim2-pin	SIM #2 PIN status.	option	-	disable

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>disable</i>	Disable SIM #2 PIN.		
	<i>enable</i>	Enable SIM #2 PIN.		
sim2-pin-code	SIM #2 PIN password.	password	Not Specified	

config auto-switch

Parameter	Description	Type	Size	Default
dataplan	Automatically switch based on data usage.	option	-	disable
	Option	Description		
	<i>disable</i>	Disable switching of SIM card based on cellular data usage.		
	<i>enable</i>	Enable switching of SIM card based on cellular data usage.		
disconnect	Auto switch by disconnect.	option	-	disable
	Option	Description		
	<i>disable</i>	Disable switching of SIM card based on cellular disconnections.		
	<i>enable</i>	Enable switching of SIM card based on cellular disconnections.		
disconnect-period	Automatically switch based on disconnect period.	integer	Minimum value: 600 Maximum value: 18000	600
disconnect-threshold	Automatically switch based on disconnect threshold.	integer	Minimum value: 1 Maximum value: 100	3
signal	Automatically switch based on signal strength.	option	-	disable
	Option	Description		
	<i>disable</i>	Disable switching of SIM card based on cellular signal quality.		
	<i>enable</i>	Enable switching of SIM card based on cellular signal quality.		
switch-back	Auto switch with switch back multi-options.	option	-	
	Option	Description		
	<i>time</i>	Switch back based on specific time in UTC (HH:MM).		

Parameter	Description	Type	Size	Default				
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>timer</i></td><td>Switch back based on an interval.</td></tr></table>	Option	Description	<i>timer</i>	Switch back based on an interval.			
Option	Description							
<i>timer</i>	Switch back based on an interval.							
switch-back-time	Automatically switch over to preferred SIM/carrier at a specified time in UTC (HH:MM).	string	Maximum length: 31	00:01				
switch-back-timer	Automatically switch over to preferred SIM/carrier after the given time (3600 - 2147483647 sec).	integer	Minimum value: 3600 Maximum value: 2147483647	86400				

config modem2

Parameter	Description	Type	Size	Default
conn-status	Connection status. Read-only.	integer	Minimum value: 0 Maximum value: 4294967295	0
default-sim	Default SIM selection.	option	-	sim1
	Option Description			
	sim1	Use SIM #1 by default.		
	sim2	Use SIM #2 by default.		
	carrier	Assign default SIM based on carrier.		
	cost	Assign default SIM based on cost.		
gps	FortiExtender GPS enable/disable.	option	-	enable
	Option Description			
	disable	Disable GPS.		
	enable	Enable GPS.		
preferred-carrier	Preferred carrier.	string	Maximum length: 31	
redundant-intf	Redundant interface.	string	Maximum length: 15	
redundant-mode	FortiExtender mode.	option	-	disable

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>disable</i>	Disable interface redundancy.		
	<i>enable</i>	Enable interface redundancy.		
sim1-pin	SIM #1 PIN status.	option	-	disable
	Option	Description		
	<i>disable</i>	Disable SIM #1 PIN.		
	<i>enable</i>	Enable SIM #1 PIN.		
sim1-pin-code	SIM #1 PIN password.	password	Not Specified	
sim2-pin	SIM #2 PIN status.	option	-	disable
	Option	Description		
	<i>disable</i>	Disable SIM #2 PIN.		
	<i>enable</i>	Enable SIM #2 PIN.		
sim2-pin-code	SIM #2 PIN password.	password	Not Specified	

config auto-switch

Parameter	Description	Type	Size	Default
dataplan	Automatically switch based on data usage.	option	-	disable
	Option	Description		
	<i>disable</i>	Disable switching of SIM card based on cellular data usage.		
	<i>enable</i>	Enable switching of SIM card based on cellular data usage.		
disconnect	Auto switch by disconnect.	option	-	disable
	Option	Description		
	<i>disable</i>	Disable switching of SIM card based on cellular disconnections.		
	<i>enable</i>	Enable switching of SIM card based on cellular disconnections.		
disconnect-period	Automatically switch based on disconnect period.	integer	Minimum value: 600 Maximum value: 18000	600

Parameter	Description	Type	Size	Default						
disconnect-threshold	Automatically switch based on disconnect threshold.	integer	Minimum value: 1 Maximum value: 100	3						
signal	Automatically switch based on signal strength.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Disable switching of SIM card based on cellular signal quality.</td></tr><tr><td>enable</td><td>Enable switching of SIM card based on cellular signal quality.</td></tr></table>	Option	Description	disable	Disable switching of SIM card based on cellular signal quality.	enable	Enable switching of SIM card based on cellular signal quality.			
	Option	Description								
	disable	Disable switching of SIM card based on cellular signal quality.								
enable	Enable switching of SIM card based on cellular signal quality.									
switch-back	Auto switch with switch back multi-options.	option	-							
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>time</td><td>Switch back based on specific time in UTC (HH:MM).</td></tr><tr><td>timer</td><td>Switch back based on an interval.</td></tr></table>	Option	Description	time	Switch back based on specific time in UTC (HH:MM).	timer	Switch back based on an interval.			
	Option	Description								
	time	Switch back based on specific time in UTC (HH:MM).								
timer	Switch back based on an interval.									
switch-back-time	Automatically switch over to preferred SIM/carrier at a specified time in UTC (HH:MM).	string	Maximum length: 31	00:01						
switch-back-timer	Automatically switch over to preferred SIM/carrier after the given time (3600 - 2147483647 sec).	integer	Minimum value: 3600 Maximum value: 2147483647	86400						

config sms-notification

Parameter	Description	Type	Size	Default
status	FortiExtender SMS notification status.	option	-	disable
	Option	Description		
	disable	SMS notification is configured to not provide service to this FortiExtender.		
	enable	SMS notification is configured to provide service to this FortiExtender.		

config alert

Parameter	Description	Type	Size	Default
data-exhausted	Display string when data exhausted.	string	Maximum length: 63	data plan is exhausted

Parameter	Description	Type	Size	Default
fgt-backup-mode-switch	Display string when FortiGate backup mode switched.	string	Maximum length: 63	FortiGate backup work mode switched
low-signal-strength	Display string when signal strength is low.	string	Maximum length: 63	LTE signal strength is too low
mode-switch	Display string when mode is switched.	string	Maximum length: 63	system networking mode switched
os-image-fallback	Display string when falling back to a previous OS image.	string	Maximum length: 63	system start to fallback OS image
session-disconnect	Display string when session disconnected.	string	Maximum length: 63	LTE data session is disconnected
system-reboot	Display string when system rebooted.	string	Maximum length: 63	system will reboot

config receiver

Parameter	Description	Type	Size	Default																
alert	Alert multi-options.	option	-																	
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>system-reboot</i></td><td>System will reboot.</td></tr><tr><td><i>data-exhausted</i></td><td>Data plan is exhausted.</td></tr><tr><td><i>session-disconnect</i></td><td>LTE data session is disconnected.</td></tr><tr><td><i>low-signal-strength</i></td><td>LTE signal strength is too low.</td></tr><tr><td><i>mode-switch</i></td><td>System is starting to use fallback OS image.</td></tr><tr><td><i>os-image-fallback</i></td><td>System networking mode switched.</td></tr><tr><td><i>fgt-backup-mode-switch</i></td><td>FortiGate backup work mode switched.</td></tr></table>	Option	Description	<i>system-reboot</i>	System will reboot.	<i>data-exhausted</i>	Data plan is exhausted.	<i>session-disconnect</i>	LTE data session is disconnected.	<i>low-signal-strength</i>	LTE signal strength is too low.	<i>mode-switch</i>	System is starting to use fallback OS image.	<i>os-image-fallback</i>	System networking mode switched.	<i>fgt-backup-mode-switch</i>	FortiGate backup work mode switched.			
Option	Description																			
<i>system-reboot</i>	System will reboot.																			
<i>data-exhausted</i>	Data plan is exhausted.																			
<i>session-disconnect</i>	LTE data session is disconnected.																			
<i>low-signal-strength</i>	LTE signal strength is too low.																			
<i>mode-switch</i>	System is starting to use fallback OS image.																			
<i>os-image-fallback</i>	System networking mode switched.																			
<i>fgt-backup-mode-switch</i>	FortiGate backup work mode switched.																			
name	FortiExtender SMS notification receiver name.	string	Maximum length: 31																	

Parameter	Description	Type	Size	Default
phone-number	Receiver phone number. Format: [+][country code][area code][local phone number]. For example, +16501234567.	string	Maximum length: 31	
status	SMS notification receiver status.	option	-	disable
	Option	Description		
	<i>disable</i>	Disable SMS notification receiver.		
	<i>enable</i>	Enable SMS notification receiver.		

config lan-extension

Parameter	Description	Type	Size	Default
backhaul-interface	IPsec phase1 interface.	string	Maximum length: 15	
backhaul-ip	IPsec phase1 IPv4/FQDN. Used to specify the external IP/FQDN when the FortiGate unit is behind a NAT device.	string	Maximum length: 63	
ipsec-tunnel	IPsec tunnel name.	string	Maximum length: 15	
link-loadbalance	LAN extension link load balance strategy.	option	-	activebackup
	Option	Description		
	activebackup	FortiExtender LAN extension active-backup.		
	loadbalance	FortiExtender LAN extension load-balance.		

config backhaul

Parameter	Description	Type	Size	Default
name	FortiExtender LAN extension backhaul name.	string	Maximum length: 31	
port	FortiExtender uplink port.	option	-	wan
	Option	Description		
	wan	FortiExtender WAN port.		
	lte1	FortiExtender LTE1 port.		
	lte2	FortiExtender LTE2 port.		

Parameter	Description	Type	Size	Default														
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>port1</td><td>FortiExtender port1 port.</td></tr><tr><td>port2</td><td>FortiExtender port2 port.</td></tr><tr><td>port3</td><td>FortiExtender port3 port.</td></tr><tr><td>port4</td><td>FortiExtender port4 port.</td></tr><tr><td>port5</td><td>FortiExtender port5 port.</td></tr><tr><td>sfp</td><td>FortiExtender SFP port.</td></tr></table>	Option	Description	port1	FortiExtender port1 port.	port2	FortiExtender port2 port.	port3	FortiExtender port3 port.	port4	FortiExtender port4 port.	port5	FortiExtender port5 port.	sfp	FortiExtender SFP port.			
	Option	Description																
	port1	FortiExtender port1 port.																
	port2	FortiExtender port2 port.																
	port3	FortiExtender port3 port.																
	port4	FortiExtender port4 port.																
	port5	FortiExtender port5 port.																
sfp	FortiExtender SFP port.																	
role	FortiExtender uplink port.	option	-	primary														
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>primary</td><td>FortiExtender LAN extension primary role.</td></tr><tr><td>secondary</td><td>FortiExtender LAN extension secondary role.</td></tr></table>	Option	Description	primary	FortiExtender LAN extension primary role.	secondary	FortiExtender LAN extension secondary role.											
	Option	Description																
	primary	FortiExtender LAN extension primary role.																
secondary	FortiExtender LAN extension secondary role.																	
weight	WRR weight parameter.	integer	Minimum value: 1 Maximum value: 256	1														

config extension-controller fortigate

FortiGate controller configuration.

```

config extension-controller fortigate
  Description: FortiGate controller configuration.
  edit <name>
    set authorized [discovered|disable|...]
    set description {string}
    set device-id {integer}
    set hostname {string}
    set id {string}
    set profile {string}
    set vdom {integer}
  next
end

```

config extension-controller fortigate

Parameter	Description	Type	Size	Default
authorized	Enable/disable FortiGate administration.	option	-	discovered
	Option	Description		
	<i>discovered</i>	Controller discovered this FortiGate.		
	<i>disable</i>	Controller is configured to not provide service to this FortiGate.		
	<i>enable</i>	Controller is configured to provide service to this FortiGate.		
description	Description.	string	Maximum length: 255	
device-id	Device ID.	integer	Minimum value: 128 0 Maximum value: 4294967295	
hostname	FortiGate hostname.	string	Maximum length: 31	
id	FortiGate serial number.	string	Maximum length: 19	
name	FortiGate entry name.	string	Maximum length: 19	
profile	FortiGate profile configuration.	string	Maximum length: 31	
vdom	VDOM. Read-only.	integer	Minimum value: 0 0 Maximum value: 4294967295	

config extension-controller fortigate-profile

FortiGate connector profile configuration.

```
config extension-controller fortigate-profile
  Description: FortiGate connector profile configuration.
  edit <name>
    set extension {option}
    set id {integer}
    config lan-extension
      Description: FortiGate connector LAN extension configuration.
      set backhaul-interface {string}
      set backhaul-ip {string}
```

```

        set ipsec-tunnel {string}
    end
next
end

```

config extension-controller fortigate-profile

Parameter	Description	Type	Size	Default
extension	Extension option. Read-only.	option	-	lan-extension
	Option	Description		
	lan-extension	LAN extension.		
id	ID.	integer	Minimum value: 0 Maximum value: 102400000	32
name	FortiGate connector profile name.	string	Maximum length: 31	

config lan-extension

Parameter	Description	Type	Size	Default
backhaul-interface	IPsec phase1 interface.	string	Maximum length: 15	
backhaul-ip	IPsec phase1 IPv4/FQDN. Used to specify the external IP/FQDN when the FortiGate unit is behind a NAT device.	string	Maximum length: 63	
ipsec-tunnel	IPsec tunnel name.	string	Maximum length: 15	

file-filter

This section includes syntax for the following commands:

- [config file-filter profile on page 270](#)

config file-filter profile

Configure file-filter profiles.

```
config file-filter profile
  Description: Configure file-filter profiles.
  edit <name>
    set comment {var-string}
    set extended-log [disable|enable]
    set feature-set [flow|proxy]
    set log [disable|enable]
    set replacemsg-group {string}
    config rules
      Description: File filter rules.
      edit <name>
        set action [log-only|block]
        set comment {var-string}
        set direction [incoming|outgoing|...]
        set file-type <name1>, <name2>, ...
        set password-protected [yes|any]
        set protocol {option1}, {option2}, ...
      next
    end
    set scan-archive-contents [disable|enable]
  next
end
```

config file-filter profile

Parameter	Description	Type	Size	Default
comment	Comment.	var-string	Maximum length: 255	
extended-log	Enable/disable file-filter extended logging.	option	-	disable

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>disable</i>	Disable extended logging.		
	<i>enable</i>	Enable extended logging.		
feature-set	Flow/proxy feature set.	option	-	flow
	Option	Description		
	<i>flow</i>	Flow feature set.		
	<i>proxy</i>	Proxy feature set.		
log	Enable/disable file-filter logging.	option	-	enable
	Option	Description		
	<i>disable</i>	Disable logging.		
	<i>enable</i>	Enable logging.		
name	Profile name.	string	Maximum length: 35	
replacemsg-group	Replacement message group.	string	Maximum length: 35	
scan-archive-contents	Enable/disable archive contents scan.	option	-	enable
	Option	Description		
	<i>disable</i>	Disable scanning archive contents.		
	<i>enable</i>	Enable scanning archive contents.		

config rules

Parameter	Description	Type	Size	Default
action	Action taken for matched file.	option	-	log-only
	Option	Description		
	<i>log-only</i>	Allow the content and write a log message.		
	<i>block</i>	Block the content and write a log message.		
comment	Comment.	var-string	Maximum length: 255	
direction	Traffic direction (HTTP, FTP, SSH, CIFS only).	option	-	any

Parameter	Description	Type	Size	Default																		
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>incoming</i></td><td>Match files transmitted in the session's reply direction.</td></tr><tr><td><i>outgoing</i></td><td>Match files transmitted in the session's originating direction.</td></tr><tr><td><i>any</i></td><td>Match files transmitted in the session's originating and reply directions.</td></tr></table>	Option	Description	<i>incoming</i>	Match files transmitted in the session's reply direction.	<i>outgoing</i>	Match files transmitted in the session's originating direction.	<i>any</i>	Match files transmitted in the session's originating and reply directions.													
	Option	Description																				
	<i>incoming</i>	Match files transmitted in the session's reply direction.																				
	<i>outgoing</i>	Match files transmitted in the session's originating direction.																				
<i>any</i>	Match files transmitted in the session's originating and reply directions.																					
file-type <name>	Select file type. File type name.	string	Maximum length: 39																			
name	File-filter rule name.	string	Maximum length: 35																			
password-protected	Match password-protected files.	option	-	any																		
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>yes</i></td><td>Match only password-protected files.</td></tr><tr><td><i>any</i></td><td>Match any file.</td></tr></table>	Option	Description	<i>yes</i>	Match only password-protected files.	<i>any</i>	Match any file.															
	Option	Description																				
	<i>yes</i>	Match only password-protected files.																				
<i>any</i>	Match any file.																					
protocol	Protocols to apply rule to.	option	-	http ftp smtp imap pop3 mapi cifs ssh																		
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>http</i></td><td>Filter on HTTP.</td></tr><tr><td><i>ftp</i></td><td>Filter on FTP.</td></tr><tr><td><i>smtp</i></td><td>Filter on SMTP.</td></tr><tr><td><i>imap</i></td><td>Filter on IMAP.</td></tr><tr><td><i>pop3</i></td><td>Filter on POP3.</td></tr><tr><td><i>mapi</i></td><td>Filter on MAPI. (Proxy mode only.)</td></tr><tr><td><i>cifs</i></td><td>Filter on CIFS.</td></tr><tr><td><i>ssh</i></td><td>Filter on SFTP and SCP. (Proxy mode only.)</td></tr></table>	Option	Description	<i>http</i>	Filter on HTTP.	<i>ftp</i>	Filter on FTP.	<i>smtp</i>	Filter on SMTP.	<i>imap</i>	Filter on IMAP.	<i>pop3</i>	Filter on POP3.	<i>mapi</i>	Filter on MAPI. (Proxy mode only.)	<i>cifs</i>	Filter on CIFS.	<i>ssh</i>	Filter on SFTP and SCP. (Proxy mode only.)			
	Option	Description																				
	<i>http</i>	Filter on HTTP.																				
	<i>ftp</i>	Filter on FTP.																				
	<i>smtp</i>	Filter on SMTP.																				
	<i>imap</i>	Filter on IMAP.																				
	<i>pop3</i>	Filter on POP3.																				
	<i>mapi</i>	Filter on MAPI. (Proxy mode only.)																				
<i>cifs</i>	Filter on CIFS.																					
<i>ssh</i>	Filter on SFTP and SCP. (Proxy mode only.)																					

firewall

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- [config firewall central-snat-map on page 365](#)
- [config firewall city on page 368](#)
- [config firewall country on page 368](#)
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- [config firewall internet-service-group on page 391](#)
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config firewall DoS-policy

Configure IPv4 DoS policies.

```
config firewall DoS-policy
  Description: Configure IPv4 DoS policies.
  edit <policyid>
    config anomaly
      Description: Anomaly name.
      edit <name>
        set action [pass|block]
        set log [enable|disable]
        set quarantine [none|attacker]
        set quarantine-expiry {user}
        set quarantine-log [disable|enable]
        set status [disable|enable]
        set threshold {integer}
        set threshold(default) {integer}
      next
    end
    set comments {var-string}
    set dstaddr <name1>, <name2>, ...
    set interface {string}
    set name {string}
    set service <name1>, <name2>, ...
    set srcaddr <name1>, <name2>, ...
    set status [enable|disable]
  next
end
```

config firewall DoS-policy

Parameter	Description	Type	Size	Default						
comments	Comment.	var-string	Maximum length: 1023							
dstaddr <name>	Destination address name from available addresses. Address name.	string	Maximum length: 79							
interface	Incoming interface name from available interfaces.	string	Maximum length: 35							
name	Policy name.	string	Maximum length: 35							
policyid	Policy ID.	integer	Minimum value: 0 Maximum value: 9999 **	0						
service <name>	Service object from available options. Service name.	string	Maximum length: 79							
srcaddr <name>	Source address name from available addresses. Address name.	string	Maximum length: 79							
status	Enable/disable this policy.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable this policy.</td></tr><tr><td>disable</td><td>Disable this policy.</td></tr></table>				Option	Description	enable	Enable this policy.	disable	Disable this policy.
Option	Description									
enable	Enable this policy.									
disable	Disable this policy.									

** Values may differ between models.

config anomaly

Parameter	Description	Type	Size	Default						
action	Action taken when the threshold is reached.	option	-	pass						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>pass</td><td>Allow traffic but record a log message if logging is enabled.</td></tr><tr><td>block</td><td>Block traffic if this anomaly is found.</td></tr></table>	Option	Description	pass	Allow traffic but record a log message if logging is enabled.	block	Block traffic if this anomaly is found.			
	Option	Description								
	pass	Allow traffic but record a log message if logging is enabled.								
block	Block traffic if this anomaly is found.									
log	Enable/disable anomaly logging.	option	-	disable						

Parameter	Description	Type	Size	Default						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable anomaly logging.</td></tr><tr><td><i>disable</i></td><td>Disable anomaly logging.</td></tr></table>	Option	Description	<i>enable</i>	Enable anomaly logging.	<i>disable</i>	Disable anomaly logging.			
	Option	Description								
	<i>enable</i>	Enable anomaly logging.								
<i>disable</i>	Disable anomaly logging.									
name	Anomaly name.	string	Maximum length: 63							
quarantine	Quarantine method.	option	-	none						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>none</i></td><td>Quarantine is disabled.</td></tr><tr><td><i>attacker</i></td><td>Block all traffic sent from attacker's IP address. The attacker's IP address is also added to the banned user list. The target's address is not affected.</td></tr></table>	Option	Description	<i>none</i>	Quarantine is disabled.	<i>attacker</i>	Block all traffic sent from attacker's IP address. The attacker's IP address is also added to the banned user list. The target's address is not affected.			
	Option	Description								
	<i>none</i>	Quarantine is disabled.								
<i>attacker</i>	Block all traffic sent from attacker's IP address. The attacker's IP address is also added to the banned user list. The target's address is not affected.									
quarantine-expiry	Duration of quarantine. (Format ####d###h###m, minimum 1m, maximum 364d23h59m, default = 5m). Requires quarantine set to attacker.	user	Not Specified	5m						
quarantine-log	Enable/disable quarantine logging.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>disable</i></td><td>Disable quarantine logging.</td></tr><tr><td><i>enable</i></td><td>Enable quarantine logging.</td></tr></table>	Option	Description	<i>disable</i>	Disable quarantine logging.	<i>enable</i>	Enable quarantine logging.			
	Option	Description								
	<i>disable</i>	Disable quarantine logging.								
<i>enable</i>	Enable quarantine logging.									
status	Enable/disable this anomaly.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>disable</i></td><td>Disable this status.</td></tr><tr><td><i>enable</i></td><td>Enable this status.</td></tr></table>	Option	Description	<i>disable</i>	Disable this status.	<i>enable</i>	Enable this status.			
	Option	Description								
	<i>disable</i>	Disable this status.								
<i>enable</i>	Enable this status.									
threshold	Anomaly threshold. Number of detected instances (packets per second or concurrent session number) that triggers the anomaly action.	integer	Minimum value: 0 1 Maximum value: 2147483647							
threshold (default)	Number of detected instances (packets per second or concurrent session number) which triggers action (1 - 2147483647, default = 1000). Note that each anomaly has a different threshold value assigned to it. Read-only.	integer	Minimum value: 0 0 Maximum value: 4294967295							

config firewall DoS-policy6

Configure IPv6 DoS policies.

```
config firewall DoS-policy6
  Description: Configure IPv6 DoS policies.
  edit <policyid>
    config anomaly
      Description: Anomaly name.
      edit <name>
        set action [pass|block]
        set log [enable|disable]
        set quarantine [none|attacker]
        set quarantine-expiry {user}
        set quarantine-log [disable|enable]
        set status [disable|enable]
        set threshold {integer}
        set threshold(default) {integer}
      next
    end
    set comments {var-string}
    set dstaddr <name1>, <name2>, ...
    set interface {string}
    set name {string}
    set service <name1>, <name2>, ...
    set srcaddr <name1>, <name2>, ...
    set status [enable|disable]
  next
end
```

config firewall DoS-policy6

Parameter	Description	Type	Size	Default
comments	Comment.	var-string	Maximum length: 1023	
dstaddr <name>	Destination address name from available addresses. Address name.	string	Maximum length: 79	
interface	Incoming interface name from available interfaces.	string	Maximum length: 35	
name	Policy name.	string	Maximum length: 35	

Parameter	Description	Type	Size	Default						
policyid	Policy ID.	integer	Minimum value: 0 Maximum value: 9999 **	0						
service <name>	Service object from available options. Service name.	string	Maximum length: 79							
srcaddr <name>	Source address name from available addresses. Address name.	string	Maximum length: 79							
status	Enable/disable this policy.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable this policy.</td></tr><tr><td>disable</td><td>Disable this policy.</td></tr></table>				Option	Description	enable	Enable this policy.	disable	Disable this policy.
Option	Description									
enable	Enable this policy.									
disable	Disable this policy.									

** Values may differ between models.

config anomaly

Parameter	Description	Type	Size	Default						
action	Action taken when the threshold is reached.	option	-	pass						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>pass</td><td>Allow traffic but record a log message if logging is enabled.</td></tr><tr><td>block</td><td>Block traffic if this anomaly is found.</td></tr></table>	Option	Description	pass	Allow traffic but record a log message if logging is enabled.	block	Block traffic if this anomaly is found.			
Option	Description									
pass	Allow traffic but record a log message if logging is enabled.									
block	Block traffic if this anomaly is found.									
log	Enable/disable anomaly logging.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable anomaly logging.</td></tr><tr><td>disable</td><td>Disable anomaly logging.</td></tr></table>	Option	Description	enable	Enable anomaly logging.	disable	Disable anomaly logging.			
Option	Description									
enable	Enable anomaly logging.									
disable	Disable anomaly logging.									
name	Anomaly name.	string	Maximum length: 63							
quarantine	Quarantine method.	option	-	none						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>none</td><td>Quarantine is disabled.</td></tr></table>	Option	Description	none	Quarantine is disabled.					
Option	Description									
none	Quarantine is disabled.									

Parameter	Description	Type	Size	Default						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>attacker</i></td><td>Block all traffic sent from attacker's IP address. The attacker's IP address is also added to the banned user list. The target's address is not affected.</td></tr></table>	Option	Description	<i>attacker</i>	Block all traffic sent from attacker's IP address. The attacker's IP address is also added to the banned user list. The target's address is not affected.					
	Option	Description								
<i>attacker</i>	Block all traffic sent from attacker's IP address. The attacker's IP address is also added to the banned user list. The target's address is not affected.									
quarantine-expiry	Duration of quarantine. (Format ####d###h###m, minimum 1m, maximum 364d23h59m, default = 5m). Requires quarantine set to attacker.	user	Not Specified	5m						
quarantine-log	Enable/disable quarantine logging.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>disable</i></td><td>Disable quarantine logging.</td></tr><tr><td><i>enable</i></td><td>Enable quarantine logging.</td></tr></table>	Option	Description	<i>disable</i>	Disable quarantine logging.	<i>enable</i>	Enable quarantine logging.			
	Option	Description								
	<i>disable</i>	Disable quarantine logging.								
<i>enable</i>	Enable quarantine logging.									
status	Enable/disable this anomaly.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>disable</i></td><td>Disable this status.</td></tr><tr><td><i>enable</i></td><td>Enable this status.</td></tr></table>	Option	Description	<i>disable</i>	Disable this status.	<i>enable</i>	Enable this status.			
	Option	Description								
	<i>disable</i>	Disable this status.								
<i>enable</i>	Enable this status.									
threshold	Anomaly threshold. Number of detected instances (packets per second or concurrent session number) that triggers the anomaly action.	integer	Minimum value: 0 1 Maximum value: 2147483647							
threshold (default)	Number of detected instances (packets per second or concurrent session number) which triggers action (1 - 2147483647, default = 1000). Note that each anomaly has a different threshold value assigned to it. Read-only.	integer	Minimum value: 0 0 Maximum value: 4294967295							

config firewall access-proxy

Configure IPv4 access proxy.

```
config firewall access-proxy
  Description: Configure IPv4 access proxy.
  edit <name>
    set add-vhost-domain-to-dnsdb [enable|disable]
  config api-gateway
    Description: Set IPv4 API Gateway.
    edit <id>
      set application <name1>, <name2>, ...
```

```

set http-cookie-age {integer}
set http-cookie-domain {string}
set http-cookie-domain-from-host [disable|enable]
set http-cookie-generation {integer}
set http-cookie-path {string}
set http-cookie-share [disable|same-ip]
set https-cookie-secure [disable|enable]
set ldb-method [static|round-robin|...]
set persistence [none|http-cookie]
config realservers
    Description: Select the real servers that this Access Proxy will distribute
traffic to.
    edit <id>
        set addr-type [ip|fqdn]
        set address {string}
        set domain {string}
        set health-check [disable|enable]
        set health-check-proto [ping|http|...]
        set holddown-interval [enable|disable]
        set http-host {string}
        set ip {ipv4-address-any}
        set mappedport {user}
        set port {integer}
        set ssh-client-cert {string}
        set ssh-host-key <name1>, <name2>, ...
        set ssh-host-key-validation [disable|enable]
        set status [active|standby|...]
        set translate-host [enable|disable]
        set type [tcp-forwarding|ssh]
        set weight {integer}
    next
end
set saml-redirect [disable|enable]
set saml-server {string}
set service [http|https|...]
set ssl-algorithm [high|medium|...]
config ssl-cipher-suites
    Description: SSL/TLS cipher suites to offer to a server, ordered by priority.
    edit <priority>
        set cipher [TLS-AES-128-GCM-SHA256|TLS-AES-256-GCM-SHA384|...]
        set versions {option1}, {option2}, ...
    next
end
set ssl-dh-bits [768|1024|...]
set ssl-max-version [tls-1.0|tls-1.1|...]
set ssl-min-version [tls-1.0|tls-1.1|...]
set ssl-renegotiation [enable|disable]
set ssl-vpn-web-portal {string}
set url-map {string}
set url-map-type [sub-string|wildcard|...]
set virtual-host {string}
next

```



```

end
config api-gateway6
    Description: Set IPv6 API Gateway.
    edit <id>
        set application <name1>, <name2>, ...
        set http-cookie-age {integer}
        set http-cookie-domain {string}
        set http-cookie-domain-from-host [disable|enable]
        set http-cookie-generation {integer}
        set http-cookie-path {string}
        set http-cookie-share [disable|same-ip]
        set https-cookie-secure [disable|enable]
        set ldb-method [static|round-robin|...]
        set persistence [none|http-cookie]
    config realservers
        Description: Select the real servers that this Access Proxy will distribute
traffic to.
        edit <id>
            set addr-type [ip|fqdn]
            set address {string}
            set domain {string}
            set health-check [disable|enable]
            set health-check-proto [ping|http|...]
            set holddown-interval [enable|disable]
            set http-host {string}
            set ip {ipv6-address}
            set mappedport {user}
            set port {integer}
            set ssh-client-cert {string}
            set ssh-host-key <name1>, <name2>, ...
            set ssh-host-key-validation [disable|enable]
            set status [active|standby|...]
            set translate-host [enable|disable]
            set type [tcp-forwarding|ssh]
            set weight {integer}
        next
    end
    set saml-redirect [disable|enable]
    set saml-server {string}
    set service [http|https|...]
    set ssl-algorithm [high|medium|...]
    config ssl-cipher-suites
        Description: SSL/TLS cipher suites to offer to a server, ordered by priority.
        edit <priority>
            set cipher [TLS-AES-128-GCM-SHA256|TLS-AES-256-GCM-SHA384|...]
            set versions {option1}, {option2}, ...
        next
    end
    set ssl-dh-bits [768|1024|...]
    set ssl-max-version [tls-1.0|tls-1.1|...]
    set ssl-min-version [tls-1.0|tls-1.1|...]
    set ssl-renegotiation [enable|disable]

```

```

        set ssl-vpn-web-portal {string}
        set url-map {string}
        set url-map-type [sub-string|wildcard|...]
        set virtual-host {string}
    next
end
set auth-portal [disable|enable]
set auth-virtual-host {string}
set client-cert [disable|enable]
set decrypted-traffic-mirror {string}
set empty-cert-action [accept|block|...]
set http-supported-max-version [http1|http2]
set log-blocked-traffic [enable|disable]
set svr-pool-multiplex [enable|disable]
set svr-pool-server-max-request {integer}
set svr-pool-ttl {integer}
set user-agent-detect [disable|enable]
set vip {string}
next
end

```

config firewall access-proxy

Parameter	Description	Type	Size	Default						
add-vhost-domain-to-dnsdb	Enable/disable adding vhost/domain to dnsdb for ztna dox tunnel.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>add dns entry for all vhosts used by access proxy.</td></tr><tr><td><i>disable</i></td><td>Do not add dns entry for all vhosts used by access proxy.</td></tr></table>	Option	Description	<i>enable</i>	add dns entry for all vhosts used by access proxy.	<i>disable</i>	Do not add dns entry for all vhosts used by access proxy.			
Option	Description									
<i>enable</i>	add dns entry for all vhosts used by access proxy.									
<i>disable</i>	Do not add dns entry for all vhosts used by access proxy.									
auth-portal	Enable/disable authentication portal.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>disable</i></td><td>Disable authentication portal.</td></tr><tr><td><i>enable</i></td><td>Enable authentication portal.</td></tr></table>	Option	Description	<i>disable</i>	Disable authentication portal.	<i>enable</i>	Enable authentication portal.			
Option	Description									
<i>disable</i>	Disable authentication portal.									
<i>enable</i>	Enable authentication portal.									
auth-virtual-host	Virtual host for authentication portal.	string	Maximum length: 79							
client-cert	Enable/disable to request client certificate.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>disable</i></td><td>Disable client certificate request.</td></tr><tr><td><i>enable</i></td><td>Enable client certificate request.</td></tr></table>	Option	Description	<i>disable</i>	Disable client certificate request.	<i>enable</i>	Enable client certificate request.			
Option	Description									
<i>disable</i>	Disable client certificate request.									
<i>enable</i>	Enable client certificate request.									

Parameter	Description	Type	Size	Default								
decrypted-traffic-mirror	Decrypted traffic mirror.	string	Maximum length: 35									
empty-cert-action	Action of an empty client certificate.	option	-	block								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>accept</td><td>Accept the SSL handshake if the client certificate is empty.</td></tr><tr><td>block</td><td>Block the SSL handshake if the client certificate is empty.</td></tr><tr><td>accept-unmanageable</td><td>Accept the SSL handshake only if the end-point is unmanageable.</td></tr></table>				Option	Description	accept	Accept the SSL handshake if the client certificate is empty.	block	Block the SSL handshake if the client certificate is empty.	accept-unmanageable	Accept the SSL handshake only if the end-point is unmanageable.
	Option	Description										
	accept	Accept the SSL handshake if the client certificate is empty.										
	block	Block the SSL handshake if the client certificate is empty.										
	accept-unmanageable	Accept the SSL handshake only if the end-point is unmanageable.										
http-supported-max-version	Maximum supported HTTP versions. default = HTTP2	option	-	http2								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>http1</td><td>Support HTTP 1.1 and HTTP1.</td></tr><tr><td>http2</td><td>Support HTTP2, HTTP 1.1, and HTTP1.</td></tr></table>				Option	Description	http1	Support HTTP 1.1 and HTTP1.	http2	Support HTTP2, HTTP 1.1, and HTTP1.		
	Option	Description										
	http1	Support HTTP 1.1 and HTTP1.										
	http2	Support HTTP2, HTTP 1.1, and HTTP1.										
log-blocked-traffic	Enable/disable logging of blocked traffic.	option	-	enable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Log all traffic denied by this access proxy.</td></tr><tr><td>disable</td><td>Do not log all traffic denied by this access proxy.</td></tr></table>				Option	Description	enable	Log all traffic denied by this access proxy.	disable	Do not log all traffic denied by this access proxy.		
	Option	Description										
	enable	Log all traffic denied by this access proxy.										
	disable	Do not log all traffic denied by this access proxy.										
name	Access Proxy name.	string	Maximum length: 79									
svr-pool-multiplex	Enable/disable server pool multiplexing. Share connected server in HTTP, HTTPS, and web-portal api-gateway.	option	-	enable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable server pool multiplexing. Share connected server.</td></tr><tr><td>disable</td><td>Disable server pool multiplexing. Do not share connected server.</td></tr></table>				Option	Description	enable	Enable server pool multiplexing. Share connected server.	disable	Disable server pool multiplexing. Do not share connected server.		
	Option	Description										
	enable	Enable server pool multiplexing. Share connected server.										
disable	Disable server pool multiplexing. Do not share connected server.											
svr-pool-server-max-request	Maximum number of requests that servers in server pool handle before disconnecting (default = unlimited).	integer	Minimum value: 0 Maximum value: 2147483647	0								

Parameter	Description	Type	Size	Default						
svr-pool-ttl	Time-to-live in the server pool for idle connections to servers.	integer	Minimum value: 0 Maximum value: 2147483647	15						
user-agent-detect	Enable/disable to detect device type by HTTP user-agent if no client certificate provided.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>disable</i></td><td>Disable to detect unknown device by HTTP user-agent if no client certificate provided.</td></tr><tr><td><i>enable</i></td><td>Enable to detect unknown device by HTTP user-agent if no client certificate provided.</td></tr></table>				Option	Description	<i>disable</i>	Disable to detect unknown device by HTTP user-agent if no client certificate provided.	<i>enable</i>	Enable to detect unknown device by HTTP user-agent if no client certificate provided.
Option	Description									
<i>disable</i>	Disable to detect unknown device by HTTP user-agent if no client certificate provided.									
<i>enable</i>	Enable to detect unknown device by HTTP user-agent if no client certificate provided.									
vip	Virtual IP name.	string	Maximum length: 79							

config api-gateway

Parameter	Description	Type	Size	Default						
application <name>	SaaS application controlled by this Access Proxy. SaaS application name.	string	Maximum length: 79							
http-cookie-age	Time in minutes that client web browsers should keep a cookie. Default is 60 minutes. 0 = no time limit.	integer	Minimum value: 0 Maximum value: 525600	60						
http-cookie-domain	Domain that HTTP cookie persistence should apply to.	string	Maximum length: 35							
http-cookie-domain-from-host	Enable/disable use of HTTP cookie domain from host field in HTTP.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>disable</i></td><td>Disable use of HTTP cookie domain from host field in HTTP (use http-cooke-domain setting).</td></tr><tr><td><i>enable</i></td><td>Enable use of HTTP cookie domain from host field in HTTP.</td></tr></table>				Option	Description	<i>disable</i>	Disable use of HTTP cookie domain from host field in HTTP (use http-cooke-domain setting).	<i>enable</i>	Enable use of HTTP cookie domain from host field in HTTP.
Option	Description									
<i>disable</i>	Disable use of HTTP cookie domain from host field in HTTP (use http-cooke-domain setting).									
<i>enable</i>	Enable use of HTTP cookie domain from host field in HTTP.									
http-cookie-generation	Generation of HTTP cookie to be accepted. Changing invalidates all existing cookies.	integer	Minimum value: 0 Maximum value: 4294967295	0						

Parameter	Description	Type	Size	Default												
http-cookie-path	Limit HTTP cookie persistence to the specified path.	string	Maximum length: 35													
http-cookie-share	Control sharing of cookies across API Gateway. Use of same-ip means a cookie from one virtual server can be used by another. Disable stops cookie sharing.	option	-	same-ip												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Only allow HTTP cookie to match this API Gateway.</td></tr><tr><td>same-ip</td><td>Allow HTTP cookie to match any API Gateway with same IP.</td></tr></table>	Option	Description	disable	Only allow HTTP cookie to match this API Gateway.	same-ip	Allow HTTP cookie to match any API Gateway with same IP.									
Option	Description															
disable	Only allow HTTP cookie to match this API Gateway.															
same-ip	Allow HTTP cookie to match any API Gateway with same IP.															
https-cookie-secure	Enable/disable verification that inserted HTTPS cookies are secure.	option	-	disable												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Do not mark cookie as secure, allow sharing between an HTTP and HTTPS connection.</td></tr><tr><td>enable</td><td>Mark inserted cookie as secure, cookie can only be used for HTTPS a connection.</td></tr></table>	Option	Description	disable	Do not mark cookie as secure, allow sharing between an HTTP and HTTPS connection.	enable	Mark inserted cookie as secure, cookie can only be used for HTTPS a connection.									
Option	Description															
disable	Do not mark cookie as secure, allow sharing between an HTTP and HTTPS connection.															
enable	Mark inserted cookie as secure, cookie can only be used for HTTPS a connection.															
id	API Gateway ID.	integer	Minimum value: 0 Maximum value: 4294967295													
ldb-method	Method used to distribute sessions to real servers.	option	-	static												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>static</td><td>Distribute to server based on source IP.</td></tr><tr><td>round-robin</td><td>Distribute to server based round robin order.</td></tr><tr><td>weighted</td><td>Distribute to server based on weight.</td></tr><tr><td>first-alive</td><td>Distribute to the first server that is alive.</td></tr><tr><td>http-host</td><td>Distribute to server based on host field in HTTP header.</td></tr></table>	Option	Description	static	Distribute to server based on source IP.	round-robin	Distribute to server based round robin order.	weighted	Distribute to server based on weight.	first-alive	Distribute to the first server that is alive.	http-host	Distribute to server based on host field in HTTP header.			
Option	Description															
static	Distribute to server based on source IP.															
round-robin	Distribute to server based round robin order.															
weighted	Distribute to server based on weight.															
first-alive	Distribute to the first server that is alive.															
http-host	Distribute to server based on host field in HTTP header.															
persistence	Configure how to make sure that clients connect to the same server every time they make a request that is part of the same session.	option	-	none												

Parameter	Description	Type	Size	Default
	Option Description			
	<i>none</i>	None.		
	<i>http-cookie</i>	HTTP cookie.		
saml-redirect	Enable/disable SAML redirection after successful authentication.	option	-	disable
	Option Description			
	<i>disable</i>	Do not support redirection after successful SAML authentication.		
	<i>enable</i>	Support redirection after successful SAML authentication.		
saml-server	SAML service provider configuration for VIP authentication.	string	Maximum length: 35	
service	Service.	option	-	https
	Option Description			
	<i>http</i>	HTTP.		
	<i>https</i>	HTTPS.		
	<i>tcp-forwarding</i>	TCP-FORWARDING.		
	<i>samlsp</i>	SAML-SP.		
	<i>web-portal</i>	VPN-SSL-WEB-PORTAL.		
	<i>saas</i>	SAAS.		
ssl-algorithm	Permitted encryption algorithms for the server side of SSL full mode sessions according to encryption strength.	option	-	high
	Option Description			
	<i>high</i>	High encryption. Allow only AES and ChaCha.		
	<i>medium</i>	Medium encryption. Allow AES, ChaCha, 3DES, and RC4.		
	<i>low</i>	Low encryption. Allow AES, ChaCha, 3DES, RC4, and DES.		
ssl-dh-bits	Number of bits to use in the Diffie-Hellman exchange for RSA encryption of SSL sessions.	option	-	2048
	Option Description			
	<i>768</i>	768-bit Diffie-Hellman prime.		

Parameter	Description	Type	Size	Default												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>1024</td><td>1024-bit Diffie-Hellman prime.</td></tr><tr><td>1536</td><td>1536-bit Diffie-Hellman prime.</td></tr><tr><td>2048</td><td>2048-bit Diffie-Hellman prime.</td></tr><tr><td>3072</td><td>3072-bit Diffie-Hellman prime.</td></tr><tr><td>4096</td><td>4096-bit Diffie-Hellman prime.</td></tr></table>	Option	Description	1024	1024-bit Diffie-Hellman prime.	1536	1536-bit Diffie-Hellman prime.	2048	2048-bit Diffie-Hellman prime.	3072	3072-bit Diffie-Hellman prime.	4096	4096-bit Diffie-Hellman prime.			
	Option	Description														
	1024	1024-bit Diffie-Hellman prime.														
	1536	1536-bit Diffie-Hellman prime.														
	2048	2048-bit Diffie-Hellman prime.														
	3072	3072-bit Diffie-Hellman prime.														
	4096	4096-bit Diffie-Hellman prime.														
ssl-max-version	Highest SSL/TLS version acceptable from a server.	option	-	tls-1.3												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>tls-1.0</td><td>TLS 1.0.</td></tr><tr><td>tls-1.1</td><td>TLS 1.1.</td></tr><tr><td>tls-1.2</td><td>TLS 1.2.</td></tr><tr><td>tls-1.3</td><td>TLS 1.3.</td></tr></table>	Option	Description	tls-1.0	TLS 1.0.	tls-1.1	TLS 1.1.	tls-1.2	TLS 1.2.	tls-1.3	TLS 1.3.					
	Option	Description														
	tls-1.0	TLS 1.0.														
	tls-1.1	TLS 1.1.														
	tls-1.2	TLS 1.2.														
	tls-1.3	TLS 1.3.														
ssl-min-version	Lowest SSL/TLS version acceptable from a server.	option	-	tls-1.1												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>tls-1.0</td><td>TLS 1.0.</td></tr><tr><td>tls-1.1</td><td>TLS 1.1.</td></tr><tr><td>tls-1.2</td><td>TLS 1.2.</td></tr><tr><td>tls-1.3</td><td>TLS 1.3.</td></tr></table>	Option	Description	tls-1.0	TLS 1.0.	tls-1.1	TLS 1.1.	tls-1.2	TLS 1.2.	tls-1.3	TLS 1.3.					
	Option	Description														
	tls-1.0	TLS 1.0.														
	tls-1.1	TLS 1.1.														
	tls-1.2	TLS 1.2.														
	tls-1.3	TLS 1.3.														
ssl-renegotiation	Enable/disable secure renegotiation to comply with RFC 5746.	option	-	enable												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable secure renegotiation.</td></tr><tr><td>disable</td><td>Disable secure renegotiation.</td></tr></table>	Option	Description	enable	Enable secure renegotiation.	disable	Disable secure renegotiation.									
	Option	Description														
	enable	Enable secure renegotiation.														
disable	Disable secure renegotiation.															
ssl-vpn-web-portal	SSL-VPN web portal.	string	Maximum length: 35													
url-map	URL pattern to match.	string	Maximum length: 511	/												
url-map-type	Type of url-map.	option	-	sub-string												

Parameter	Description	Type	Size	Default								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>sub-string</i></td><td>Match the pattern if a string contains the sub-string.</td></tr><tr><td><i>wildcard</i></td><td>Match the pattern with wildcards.</td></tr><tr><td><i>regex</i></td><td>Match the pattern with a regular expression.</td></tr></table>				Option	Description	<i>sub-string</i>	Match the pattern if a string contains the sub-string.	<i>wildcard</i>	Match the pattern with wildcards.	<i>regex</i>	Match the pattern with a regular expression.
	Option	Description										
	<i>sub-string</i>	Match the pattern if a string contains the sub-string.										
	<i>wildcard</i>	Match the pattern with wildcards.										
<i>regex</i>	Match the pattern with a regular expression.											
virtual-host	Virtual host.	string	Maximum length: 79									

config realservers

Parameter	Description	Type	Size	Default								
addr-type	Type of address.	option	-	ip								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>ip</i></td><td>Standard IPv4 address.</td></tr><tr><td><i>fqdn</i></td><td>Non-wildcard FQDN address object.</td></tr></table>				Option	Description	<i>ip</i>	Standard IPv4 address.	<i>fqdn</i>	Non-wildcard FQDN address object.		
Option	Description											
<i>ip</i>	Standard IPv4 address.											
<i>fqdn</i>	Non-wildcard FQDN address object.											
address	Address or address group of the real server.	string	Maximum length: 79									
domain	Wildcard domain name of the real server.	string	Maximum length: 255									
health-check	Enable to check the responsiveness of the real server before forwarding traffic.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>disable</i></td><td>Disable per server health check.</td></tr><tr><td><i>enable</i></td><td>Enable per server health check.</td></tr></table>				Option	Description	<i>disable</i>	Disable per server health check.	<i>enable</i>	Enable per server health check.		
Option	Description											
<i>disable</i>	Disable per server health check.											
<i>enable</i>	Enable per server health check.											
health-check-proto	Protocol of the health check monitor to use when polling to determine server's connectivity status.	option	-	ping								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>ping</i></td><td>Use PING to test the link with the server.</td></tr><tr><td><i>http</i></td><td>Use HTTP-GET to test the link with the server.</td></tr><tr><td><i>tcp-connect</i></td><td>Use a full TCP connection to test the link with the server.</td></tr></table>				Option	Description	<i>ping</i>	Use PING to test the link with the server.	<i>http</i>	Use HTTP-GET to test the link with the server.	<i>tcp-connect</i>	Use a full TCP connection to test the link with the server.
Option	Description											
<i>ping</i>	Use PING to test the link with the server.											
<i>http</i>	Use HTTP-GET to test the link with the server.											
<i>tcp-connect</i>	Use a full TCP connection to test the link with the server.											
holddown-interval	Enable/disable holddown timer. Server will be considered active and reachable once the holddown period has expired (30 seconds).	option	-	enable								

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>enable</i>	Enable per server holddown.		
	<i>disable</i>	Disable per server holddown.		
http-host	HTTP server domain name in HTTP header.	string	Maximum length: 63	
id	Real server ID.	integer	Minimum value: 0 0 Maximum value: 4294967295	
ip	IP address of the real server.	ipv4-address-any	Not Specified	0.0.0.0
mappedport	Port for communicating with the real server.	user	Not Specified	
port	Port for communicating with the real server.	integer	Minimum value: 1 Maximum value: 65535	443
ssh-client-cert	Set access-proxy SSH client certificate profile.	string	Maximum length: 79	
ssh-host-key <name>	One or more server host key. Server host key name.	string	Maximum length: 79	
ssh-host-key-validation	Enable/disable SSH real server host key validation.	option	-	disable
	Option	Description		
	<i>disable</i>	Disable SSH real server host key validation.		
	<i>enable</i>	Enable SSH real server host key validation.		
status	Set the status of the real server to active so that it can accept traffic, or on standby or disabled so no traffic is sent.	option	-	active
	Option	Description		
	<i>active</i>	Server status active.		
	<i>standby</i>	Server status standby.		
	<i>disable</i>	Server status disable.		
translate-host	Enable/disable translation of hostname/IP from virtual server to real server.	option	-	enable

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>enable</i>	Enable virtual hostname/IP translation.		
	<i>disable</i>	Disable virtual hostname/IP translation.		
type	TCP forwarding server type.	option	-	tcp-forwarding
	Option	Description		
	<i>tcp-forwarding</i>	TCP forwarding.		
	<i>ssh</i>	SSH.		
weight	Weight of the real server. If weighted load balancing is enabled, the server with the highest weight gets more connections.	integer	Minimum value: 1 Maximum value: 255	

config ssl-cipher-suites

Parameter	Description	Type	Size	Default												
cipher	Cipher suite name.	option	-													
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>TLS-AES-128-GCM-SHA256</i></td><td>Cipher suite TLS-AES-128-GCM-SHA256.</td></tr><tr><td><i>TLS-AES-256-GCM-SHA384</i></td><td>Cipher suite TLS-AES-256-GCM-SHA384.</td></tr><tr><td><i>TLS-CHACHA20-POLY1305-SHA256</i></td><td>Cipher suite TLS-CHACHA20-POLY1305-SHA256.</td></tr><tr><td><i>TLS-ECDHE-RSA-WITH-CHACHA20-POLY1305-SHA256</i></td><td>Cipher suite TLS-ECDHE-RSA-WITH-CHACHA20-POLY1305-SHA256.</td></tr><tr><td><i>TLS-ECDHE-ECDSA-WITH-CHACHA20-POLY1305-SHA256</i></td><td>Cipher suite TLS-ECDHE-ECDSA-WITH-CHACHA20-POLY1305-SHA256.</td></tr></table>				Option	Description	<i>TLS-AES-128-GCM-SHA256</i>	Cipher suite TLS-AES-128-GCM-SHA256.	<i>TLS-AES-256-GCM-SHA384</i>	Cipher suite TLS-AES-256-GCM-SHA384.	<i>TLS-CHACHA20-POLY1305-SHA256</i>	Cipher suite TLS-CHACHA20-POLY1305-SHA256.	<i>TLS-ECDHE-RSA-WITH-CHACHA20-POLY1305-SHA256</i>	Cipher suite TLS-ECDHE-RSA-WITH-CHACHA20-POLY1305-SHA256.	<i>TLS-ECDHE-ECDSA-WITH-CHACHA20-POLY1305-SHA256</i>	Cipher suite TLS-ECDHE-ECDSA-WITH-CHACHA20-POLY1305-SHA256.
Option	Description															
<i>TLS-AES-128-GCM-SHA256</i>	Cipher suite TLS-AES-128-GCM-SHA256.															
<i>TLS-AES-256-GCM-SHA384</i>	Cipher suite TLS-AES-256-GCM-SHA384.															
<i>TLS-CHACHA20-POLY1305-SHA256</i>	Cipher suite TLS-CHACHA20-POLY1305-SHA256.															
<i>TLS-ECDHE-RSA-WITH-CHACHA20-POLY1305-SHA256</i>	Cipher suite TLS-ECDHE-RSA-WITH-CHACHA20-POLY1305-SHA256.															
<i>TLS-ECDHE-ECDSA-WITH-CHACHA20-POLY1305-SHA256</i>	Cipher suite TLS-ECDHE-ECDSA-WITH-CHACHA20-POLY1305-SHA256.															

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>TLS-DHE-RSA-WITH-CHACHA20-POLY1305-SHA256</i>	Cipher suite TLS-DHE-RSA-WITH-CHACHA20-POLY1305-SHA256.		
	<i>TLS-DHE-RSA-WITH-AES-128-CBC-SHA</i>	Cipher suite TLS-DHE-RSA-WITH-AES-128-CBC-SHA.		
	<i>TLS-DHE-RSA-WITH-AES-256-CBC-SHA</i>	Cipher suite TLS-DHE-RSA-WITH-AES-256-CBC-SHA.		
	<i>TLS-DHE-RSA-WITH-AES-128-CBC-SHA256</i>	Cipher suite TLS-DHE-RSA-WITH-AES-128-CBC-SHA256.		
	<i>TLS-DHE-RSA-WITH-AES-128-GCM-SHA256</i>	Cipher suite TLS-DHE-RSA-WITH-AES-128-GCM-SHA256.		
	<i>TLS-DHE-RSA-WITH-AES-256-CBC-SHA256</i>	Cipher suite TLS-DHE-RSA-WITH-AES-256-CBC-SHA256.		
	<i>TLS-DHE-RSA-WITH-AES-256-GCM-SHA384</i>	Cipher suite TLS-DHE-RSA-WITH-AES-256-GCM-SHA384.		
	<i>TLS-DHE-DSS-WITH-AES-128-CBC-SHA</i>	Cipher suite TLS-DHE-DSS-WITH-AES-128-CBC-SHA.		
	<i>TLS-DHE-DSS-WITH-AES-256-CBC-SHA</i>	Cipher suite TLS-DHE-DSS-WITH-AES-256-CBC-SHA.		
	<i>TLS-DHE-DSS-WITH-AES-128-CBC-SHA256</i>	Cipher suite TLS-DHE-DSS-WITH-AES-128-CBC-SHA256.		
	<i>TLS-DHE-DSS-WITH-AES-128-GCM-SHA256</i>	Cipher suite TLS-DHE-DSS-WITH-AES-128-GCM-SHA256.		

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>TLS-DHE-DSS-WITH-AES-256-CBC-SHA256</i>	Cipher suite TLS-DHE-DSS-WITH-AES-256-CBC-SHA256.		
	<i>TLS-DHE-DSS-WITH-AES-256-GCM-SHA384</i>	Cipher suite TLS-DHE-DSS-WITH-AES-256-GCM-SHA384.		
	<i>TLS-ECDHE-RSA-WITH-AES-128-CBC-SHA</i>	Cipher suite TLS-ECDHE-RSA-WITH-AES-128-CBC-SHA.		
	<i>TLS-ECDHE-RSA-WITH-AES-128-CBC-SHA256</i>	Cipher suite TLS-ECDHE-RSA-WITH-AES-128-CBC-SHA256.		
	<i>TLS-ECDHE-RSA-WITH-AES-128-GCM-SHA256</i>	Cipher suite TLS-ECDHE-RSA-WITH-AES-128-GCM-SHA256.		
	<i>TLS-ECDHE-RSA-WITH-AES-256-CBC-SHA</i>	Cipher suite TLS-ECDHE-RSA-WITH-AES-256-CBC-SHA.		
	<i>TLS-ECDHE-RSA-WITH-AES-256-CBC-SHA384</i>	Cipher suite TLS-ECDHE-RSA-WITH-AES-256-CBC-SHA384.		
	<i>TLS-ECDHE-RSA-WITH-AES-256-GCM-SHA384</i>	Cipher suite TLS-ECDHE-RSA-WITH-AES-256-GCM-SHA384.		
	<i>TLS-ECDHE-ECDSA-WITH-AES-128-CBC-SHA</i>	Cipher suite TLS-ECDHE-ECDSA-WITH-AES-128-CBC-SHA.		

Parameter	Description	Type	Size	Default
	Option	Description		
	TLS-ECDHE-ECDSA-WITH-AES-128-CBC-SHA256	Cipher suite TLS-ECDHE-ECDSA-WITH-AES-128-CBC-SHA256.		
	TLS-ECDHE-ECDSA-WITH-AES-128-GCM-SHA256	Cipher suite TLS-ECDHE-ECDSA-WITH-AES-128-GCM-SHA256.		
	TLS-ECDHE-ECDSA-WITH-AES-256-CBC-SHA	Cipher suite TLS-ECDHE-ECDSA-WITH-AES-256-CBC-SHA.		
	TLS-ECDHE-ECDSA-WITH-AES-256-CBC-SHA384	Cipher suite TLS-ECDHE-ECDSA-WITH-AES-256-CBC-SHA384.		
	TLS-ECDHE-ECDSA-WITH-AES-256-GCM-SHA384	Cipher suite TLS-ECDHE-ECDSA-WITH-AES-256-GCM-SHA384.		
	TLS-RSA-WITH-AES-128-CBC-SHA	Cipher suite TLS-RSA-WITH-AES-128-CBC-SHA.		
	TLS-RSA-WITH-AES-256-CBC-SHA	Cipher suite TLS-RSA-WITH-AES-256-CBC-SHA.		
	TLS-RSA-WITH-AES-128-CBC-SHA256	Cipher suite TLS-RSA-WITH-AES-128-CBC-SHA256.		
	TLS-RSA-WITH-AES-128-GCM-SHA256	Cipher suite TLS-RSA-WITH-AES-128-GCM-SHA256.		
TLS-RSA-WITH-AES-256-CBC-SHA256	Cipher suite TLS-RSA-WITH-AES-256-CBC-SHA256.			

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>TLS-RSA-WITH-AES-256-GCM-SHA384</i>	Cipher suite TLS-RSA-WITH-AES-256-GCM-SHA384.		
	<i>TLS-RSA-WITH-CAMELLIA-128-CBC-SHA</i>	Cipher suite TLS-RSA-WITH-CAMELLIA-128-CBC-SHA.		
	<i>TLS-RSA-WITH-CAMELLIA-256-CBC-SHA</i>	Cipher suite TLS-RSA-WITH-CAMELLIA-256-CBC-SHA.		
	<i>TLS-RSA-WITH-CAMELLIA-128-CBC-SHA256</i>	Cipher suite TLS-RSA-WITH-CAMELLIA-128-CBC-SHA256.		
	<i>TLS-RSA-WITH-CAMELLIA-256-CBC-SHA256</i>	Cipher suite TLS-RSA-WITH-CAMELLIA-256-CBC-SHA256.		
	<i>TLS-DHE-RSA-WITH-3DES-EDE-CBC-SHA</i>	Cipher suite TLS-DHE-RSA-WITH-3DES-EDE-CBC-SHA.		
	<i>TLS-DHE-RSA-WITH-CAMELLIA-128-CBC-SHA</i>	Cipher suite TLS-DHE-RSA-WITH-CAMELLIA-128-CBC-SHA.		
	<i>TLS-DHE-DSS-WITH-CAMELLIA-128-CBC-SHA</i>	Cipher suite TLS-DSS-RSA-WITH-CAMELLIA-128-CBC-SHA.		
	<i>TLS-DHE-RSA-WITH-CAMELLIA-256-CBC-SHA</i>	Cipher suite TLS-DHE-RSA-WITH-CAMELLIA-256-CBC-SHA.		

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>TLS-DHE-DSS-WITH-CAMELLIA-256-CBC-SHA</i>	Cipher suite TLS-DHE-DSS-WITH-CAMELLIA-256-CBC-SHA.		
	<i>TLS-DHE-RSA-WITH-CAMELLIA-128-CBC-SHA256</i>	Cipher suite TLS-DHE-RSA-WITH-CAMELLIA-128-CBC-SHA256.		
	<i>TLS-DHE-DSS-WITH-CAMELLIA-128-CBC-SHA256</i>	Cipher suite TLS-DHE-DSS-WITH-CAMELLIA-128-CBC-SHA256.		
	<i>TLS-DHE-RSA-WITH-CAMELLIA-256-CBC-SHA256</i>	Cipher suite TLS-DHE-RSA-WITH-CAMELLIA-256-CBC-SHA256.		
	<i>TLS-DHE-DSS-WITH-CAMELLIA-256-CBC-SHA256</i>	Cipher suite TLS-DHE-DSS-WITH-CAMELLIA-256-CBC-SHA256.		
	<i>TLS-DHE-RSA-WITH-SEED-CBC-SHA</i>	Cipher suite TLS-DHE-RSA-WITH-SEED-CBC-SHA.		
	<i>TLS-DHE-DSS-WITH-SEED-CBC-SHA</i>	Cipher suite TLS-DHE-DSS-WITH-SEED-CBC-SHA.		
	<i>TLS-DHE-RSA-WITH-ARIA-128-CBC-SHA256</i>	Cipher suite TLS-DHE-RSA-WITH-ARIA-128-CBC-SHA256.		
	<i>TLS-DHE-RSA-WITH-ARIA-256-CBC-SHA384</i>	Cipher suite TLS-DHE-RSA-WITH-ARIA-256-CBC-SHA384.		

Parameter	Description	Type	Size	Default																						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>TLS-DHE-DSS-WITH-ARIA-128-CBC-SHA256</i></td><td>Cipher suite TLS-DHE-DSS-WITH-ARIA-128-CBC-SHA256.</td></tr><tr><td><i>TLS-DHE-DSS-WITH-ARIA-256-CBC-SHA384</i></td><td>Cipher suite TLS-DHE-DSS-WITH-ARIA-256-CBC-SHA384.</td></tr><tr><td><i>TLS-RSA-WITH-SEED-CBC-SHA</i></td><td>Cipher suite TLS-RSA-WITH-SEED-CBC-SHA.</td></tr><tr><td><i>TLS-RSA-WITH-ARIA-128-CBC-SHA256</i></td><td>Cipher suite TLS-RSA-WITH-ARIA-128-CBC-SHA256.</td></tr><tr><td><i>TLS-RSA-WITH-ARIA-256-CBC-SHA384</i></td><td>Cipher suite TLS-RSA-WITH-ARIA-256-CBC-SHA384.</td></tr><tr><td><i>TLS-ECDHE-RSA-WITH-ARIA-128-CBC-SHA256</i></td><td>Cipher suite TLS-ECDHE-RSA-WITH-ARIA-128-CBC-SHA256.</td></tr><tr><td><i>TLS-ECDHE-RSA-WITH-ARIA-256-CBC-SHA384</i></td><td>Cipher suite TLS-ECDHE-RSA-WITH-ARIA-256-CBC-SHA384.</td></tr><tr><td><i>TLS-ECDHE-ECDSA-WITH-ARIA-128-CBC-SHA256</i></td><td>Cipher suite TLS-ECDHE-ECDSA-WITH-ARIA-128-CBC_SHA256.</td></tr><tr><td><i>TLS-ECDHE-ECDSA-WITH-ARIA-256-CBC-SHA384</i></td><td>Cipher suite TLS-ECDHE-ECDSA-WITH-ARIA-256-CBC_SHA384.</td></tr><tr><td><i>TLS-ECDHE-RSA-WITH-RC4-128-SHA</i></td><td>Cipher suite TLS-ECDHE-RSA-WITH-RC4-128-SHA.</td></tr></table>	Option	Description	<i>TLS-DHE-DSS-WITH-ARIA-128-CBC-SHA256</i>	Cipher suite TLS-DHE-DSS-WITH-ARIA-128-CBC-SHA256.	<i>TLS-DHE-DSS-WITH-ARIA-256-CBC-SHA384</i>	Cipher suite TLS-DHE-DSS-WITH-ARIA-256-CBC-SHA384.	<i>TLS-RSA-WITH-SEED-CBC-SHA</i>	Cipher suite TLS-RSA-WITH-SEED-CBC-SHA.	<i>TLS-RSA-WITH-ARIA-128-CBC-SHA256</i>	Cipher suite TLS-RSA-WITH-ARIA-128-CBC-SHA256.	<i>TLS-RSA-WITH-ARIA-256-CBC-SHA384</i>	Cipher suite TLS-RSA-WITH-ARIA-256-CBC-SHA384.	<i>TLS-ECDHE-RSA-WITH-ARIA-128-CBC-SHA256</i>	Cipher suite TLS-ECDHE-RSA-WITH-ARIA-128-CBC-SHA256.	<i>TLS-ECDHE-RSA-WITH-ARIA-256-CBC-SHA384</i>	Cipher suite TLS-ECDHE-RSA-WITH-ARIA-256-CBC-SHA384.	<i>TLS-ECDHE-ECDSA-WITH-ARIA-128-CBC-SHA256</i>	Cipher suite TLS-ECDHE-ECDSA-WITH-ARIA-128-CBC_SHA256.	<i>TLS-ECDHE-ECDSA-WITH-ARIA-256-CBC-SHA384</i>	Cipher suite TLS-ECDHE-ECDSA-WITH-ARIA-256-CBC_SHA384.	<i>TLS-ECDHE-RSA-WITH-RC4-128-SHA</i>	Cipher suite TLS-ECDHE-RSA-WITH-RC4-128-SHA.			
Option	Description																									
<i>TLS-DHE-DSS-WITH-ARIA-128-CBC-SHA256</i>	Cipher suite TLS-DHE-DSS-WITH-ARIA-128-CBC-SHA256.																									
<i>TLS-DHE-DSS-WITH-ARIA-256-CBC-SHA384</i>	Cipher suite TLS-DHE-DSS-WITH-ARIA-256-CBC-SHA384.																									
<i>TLS-RSA-WITH-SEED-CBC-SHA</i>	Cipher suite TLS-RSA-WITH-SEED-CBC-SHA.																									
<i>TLS-RSA-WITH-ARIA-128-CBC-SHA256</i>	Cipher suite TLS-RSA-WITH-ARIA-128-CBC-SHA256.																									
<i>TLS-RSA-WITH-ARIA-256-CBC-SHA384</i>	Cipher suite TLS-RSA-WITH-ARIA-256-CBC-SHA384.																									
<i>TLS-ECDHE-RSA-WITH-ARIA-128-CBC-SHA256</i>	Cipher suite TLS-ECDHE-RSA-WITH-ARIA-128-CBC-SHA256.																									
<i>TLS-ECDHE-RSA-WITH-ARIA-256-CBC-SHA384</i>	Cipher suite TLS-ECDHE-RSA-WITH-ARIA-256-CBC-SHA384.																									
<i>TLS-ECDHE-ECDSA-WITH-ARIA-128-CBC-SHA256</i>	Cipher suite TLS-ECDHE-ECDSA-WITH-ARIA-128-CBC_SHA256.																									
<i>TLS-ECDHE-ECDSA-WITH-ARIA-256-CBC-SHA384</i>	Cipher suite TLS-ECDHE-ECDSA-WITH-ARIA-256-CBC_SHA384.																									
<i>TLS-ECDHE-RSA-WITH-RC4-128-SHA</i>	Cipher suite TLS-ECDHE-RSA-WITH-RC4-128-SHA.																									

Parameter	Description	Type	Size	Default																		
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>TLS-ECDHE-RSA-WITH-3DES-EDE-CBC-SHA</i></td><td>Cipher suite TLS-ECDHE-RSA-WITH-3DES-EDE-CBC-SHA.</td></tr><tr><td><i>TLS-DHE-DSS-WITH-3DES-EDE-CBC-SHA</i></td><td>Cipher suite TLS-DHE-DSS-WITH-3DES-EDE-CBC-SHA.</td></tr><tr><td><i>TLS-RSA-WITH-3DES-EDE-CBC-SHA</i></td><td>Cipher suite TLS-RSA-WITH-3DES-EDE-CBC-SHA.</td></tr><tr><td><i>TLS-RSA-WITH-RC4-128-MD5</i></td><td>Cipher suite TLS-RSA-WITH-RC4-128-MD5.</td></tr><tr><td><i>TLS-RSA-WITH-RC4-128-SHA</i></td><td>Cipher suite TLS-RSA-WITH-RC4-128-SHA.</td></tr><tr><td><i>TLS-DHE-RSA-WITH-DES-CBC-SHA</i></td><td>Cipher suite TLS-DHE-RSA-WITH-DES-CBC-SHA.</td></tr><tr><td><i>TLS-DHE-DSS-WITH-DES-CBC-SHA</i></td><td>Cipher suite TLS-DHE-DSS-WITH-DES-CBC-SHA.</td></tr><tr><td><i>TLS-RSA-WITH-DES-CBC-SHA</i></td><td>Cipher suite TLS-RSA-WITH-DES-CBC-SHA.</td></tr></table>	Option	Description	<i>TLS-ECDHE-RSA-WITH-3DES-EDE-CBC-SHA</i>	Cipher suite TLS-ECDHE-RSA-WITH-3DES-EDE-CBC-SHA.	<i>TLS-DHE-DSS-WITH-3DES-EDE-CBC-SHA</i>	Cipher suite TLS-DHE-DSS-WITH-3DES-EDE-CBC-SHA.	<i>TLS-RSA-WITH-3DES-EDE-CBC-SHA</i>	Cipher suite TLS-RSA-WITH-3DES-EDE-CBC-SHA.	<i>TLS-RSA-WITH-RC4-128-MD5</i>	Cipher suite TLS-RSA-WITH-RC4-128-MD5.	<i>TLS-RSA-WITH-RC4-128-SHA</i>	Cipher suite TLS-RSA-WITH-RC4-128-SHA.	<i>TLS-DHE-RSA-WITH-DES-CBC-SHA</i>	Cipher suite TLS-DHE-RSA-WITH-DES-CBC-SHA.	<i>TLS-DHE-DSS-WITH-DES-CBC-SHA</i>	Cipher suite TLS-DHE-DSS-WITH-DES-CBC-SHA.	<i>TLS-RSA-WITH-DES-CBC-SHA</i>	Cipher suite TLS-RSA-WITH-DES-CBC-SHA.			
	Option	Description																				
	<i>TLS-ECDHE-RSA-WITH-3DES-EDE-CBC-SHA</i>	Cipher suite TLS-ECDHE-RSA-WITH-3DES-EDE-CBC-SHA.																				
	<i>TLS-DHE-DSS-WITH-3DES-EDE-CBC-SHA</i>	Cipher suite TLS-DHE-DSS-WITH-3DES-EDE-CBC-SHA.																				
	<i>TLS-RSA-WITH-3DES-EDE-CBC-SHA</i>	Cipher suite TLS-RSA-WITH-3DES-EDE-CBC-SHA.																				
	<i>TLS-RSA-WITH-RC4-128-MD5</i>	Cipher suite TLS-RSA-WITH-RC4-128-MD5.																				
	<i>TLS-RSA-WITH-RC4-128-SHA</i>	Cipher suite TLS-RSA-WITH-RC4-128-SHA.																				
	<i>TLS-DHE-RSA-WITH-DES-CBC-SHA</i>	Cipher suite TLS-DHE-RSA-WITH-DES-CBC-SHA.																				
	<i>TLS-DHE-DSS-WITH-DES-CBC-SHA</i>	Cipher suite TLS-DHE-DSS-WITH-DES-CBC-SHA.																				
<i>TLS-RSA-WITH-DES-CBC-SHA</i>	Cipher suite TLS-RSA-WITH-DES-CBC-SHA.																					
priority	SSL/TLS cipher suites priority.	integer	Minimum value: 0 0 Maximum value: 4294967295	0																		
versions	SSL/TLS versions that the cipher suite can be used with.	option	-	tls-1.0 tls-1.1 tls-1.2 tls-1.3																		
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>tls-1.0</i></td><td>TLS 1.0.</td></tr><tr><td><i>tls-1.1</i></td><td>TLS 1.1.</td></tr><tr><td><i>tls-1.2</i></td><td>TLS 1.2.</td></tr><tr><td><i>tls-1.3</i></td><td>TLS 1.3.</td></tr></table>	Option	Description	<i>tls-1.0</i>	TLS 1.0.	<i>tls-1.1</i>	TLS 1.1.	<i>tls-1.2</i>	TLS 1.2.	<i>tls-1.3</i>	TLS 1.3.											
	Option	Description																				
	<i>tls-1.0</i>	TLS 1.0.																				
	<i>tls-1.1</i>	TLS 1.1.																				
	<i>tls-1.2</i>	TLS 1.2.																				
<i>tls-1.3</i>	TLS 1.3.																					

config api-gateway6

Parameter	Description	Type	Size	Default						
application <name>	SaaS application controlled by this Access Proxy. SaaS application name.	string	Maximum length: 79							
http-cookie-age	Time in minutes that client web browsers should keep a cookie. Default is 60 minutes. 0 = no time limit.	integer	Minimum value: 60 0 Maximum value: 525600							
http-cookie-domain	Domain that HTTP cookie persistence should apply to.	string	Maximum length: 35							
http-cookie-domain-from-host	Enable/disable use of HTTP cookie domain from host field in HTTP.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Disable use of HTTP cookie domain from host field in HTTP (use http-cooke-domain setting).</td></tr><tr><td>enable</td><td>Enable use of HTTP cookie domain from host field in HTTP.</td></tr></table>				Option	Description	disable	Disable use of HTTP cookie domain from host field in HTTP (use http-cooke-domain setting).	enable	Enable use of HTTP cookie domain from host field in HTTP.
Option	Description									
disable	Disable use of HTTP cookie domain from host field in HTTP (use http-cooke-domain setting).									
enable	Enable use of HTTP cookie domain from host field in HTTP.									
http-cookie-generation	Generation of HTTP cookie to be accepted. Changing invalidates all existing cookies.	integer	Minimum value: 0 0 Maximum value: 4294967295							
http-cookie-path	Limit HTTP cookie persistence to the specified path.	string	Maximum length: 35							
http-cookie-share	Control sharing of cookies across API Gateway. Use of same-ip means a cookie from one virtual server can be used by another. Disable stops cookie sharing.	option	-	same-ip						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Only allow HTTP cookie to match this API Gateway.</td></tr><tr><td>same-ip</td><td>Allow HTTP cookie to match any API Gateway with same IP.</td></tr></table>				Option	Description	disable	Only allow HTTP cookie to match this API Gateway.	same-ip	Allow HTTP cookie to match any API Gateway with same IP.
Option	Description									
disable	Only allow HTTP cookie to match this API Gateway.									
same-ip	Allow HTTP cookie to match any API Gateway with same IP.									
https-cookie-secure	Enable/disable verification that inserted HTTPS cookies are secure.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Do not mark cookie as secure, allow sharing between an HTTP and HTTPS connection.</td></tr><tr><td>enable</td><td>Mark inserted cookie as secure, cookie can only be used for HTTPS a connection.</td></tr></table>				Option	Description	disable	Do not mark cookie as secure, allow sharing between an HTTP and HTTPS connection.	enable	Mark inserted cookie as secure, cookie can only be used for HTTPS a connection.
Option	Description									
disable	Do not mark cookie as secure, allow sharing between an HTTP and HTTPS connection.									
enable	Mark inserted cookie as secure, cookie can only be used for HTTPS a connection.									

Parameter	Description	Type	Size	Default												
id	API Gateway ID.	integer	Minimum value: 0 Maximum value: 4294967295	0												
ldb-method	Method used to distribute sessions to real servers.	option	-	static												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>static</td><td>Distribute to server based on source IP.</td></tr><tr><td>round-robin</td><td>Distribute to server based round robin order.</td></tr><tr><td>weighted</td><td>Distribute to server based on weight.</td></tr><tr><td>first-alive</td><td>Distribute to the first server that is alive.</td></tr><tr><td>http-host</td><td>Distribute to server based on host field in HTTP header.</td></tr></table>	Option	Description	static	Distribute to server based on source IP.	round-robin	Distribute to server based round robin order.	weighted	Distribute to server based on weight.	first-alive	Distribute to the first server that is alive.	http-host	Distribute to server based on host field in HTTP header.			
Option	Description															
static	Distribute to server based on source IP.															
round-robin	Distribute to server based round robin order.															
weighted	Distribute to server based on weight.															
first-alive	Distribute to the first server that is alive.															
http-host	Distribute to server based on host field in HTTP header.															
persistence	Configure how to make sure that clients connect to the same server every time they make a request that is part of the same session.	option	-	none												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>none</td><td>None.</td></tr><tr><td>http-cookie</td><td>HTTP cookie.</td></tr></table>	Option	Description	none	None.	http-cookie	HTTP cookie.									
Option	Description															
none	None.															
http-cookie	HTTP cookie.															
saml-redirect	Enable/disable SAML redirection after successful authentication.	option	-	disable												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Do not support redirection after successful SAML authentication.</td></tr><tr><td>enable</td><td>Support redirection after successful SAML authentication.</td></tr></table>	Option	Description	disable	Do not support redirection after successful SAML authentication.	enable	Support redirection after successful SAML authentication.									
Option	Description															
disable	Do not support redirection after successful SAML authentication.															
enable	Support redirection after successful SAML authentication.															
saml-server	SAML service provider configuration for VIP authentication.	string	Maximum length: 35													
service	Service.	option	-	https												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>http</td><td>HTTP.</td></tr><tr><td>https</td><td>HTTPS.</td></tr><tr><td>tcp-forwarding</td><td>TCP-FORWARDING.</td></tr></table>	Option	Description	http	HTTP.	https	HTTPS.	tcp-forwarding	TCP-FORWARDING.							
Option	Description															
http	HTTP.															
https	HTTPS.															
tcp-forwarding	TCP-FORWARDING.															

Parameter	Description	Type	Size	Default														
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>samlsp</td><td>SAML-SP.</td></tr><tr><td>web-portal</td><td>VPN-SSL-WEB-PORTAL.</td></tr><tr><td>saas</td><td>SAAS.</td></tr></table>	Option	Description	samlsp	SAML-SP.	web-portal	VPN-SSL-WEB-PORTAL.	saas	SAAS.									
	Option	Description																
	samlsp	SAML-SP.																
	web-portal	VPN-SSL-WEB-PORTAL.																
saas	SAAS.																	
ssl-algorithm	Permitted encryption algorithms for the server side of SSL full mode sessions according to encryption strength.	option	-	high														
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>high</td><td>High encryption. Allow only AES and ChaCha.</td></tr><tr><td>medium</td><td>Medium encryption. Allow AES, ChaCha, 3DES, and RC4.</td></tr><tr><td>low</td><td>Low encryption. Allow AES, ChaCha, 3DES, RC4, and DES.</td></tr></table>	Option	Description	high	High encryption. Allow only AES and ChaCha.	medium	Medium encryption. Allow AES, ChaCha, 3DES, and RC4.	low	Low encryption. Allow AES, ChaCha, 3DES, RC4, and DES.									
	Option	Description																
	high	High encryption. Allow only AES and ChaCha.																
	medium	Medium encryption. Allow AES, ChaCha, 3DES, and RC4.																
low	Low encryption. Allow AES, ChaCha, 3DES, RC4, and DES.																	
ssl-dh-bits	Number of bits to use in the Diffie-Hellman exchange for RSA encryption of SSL sessions.	option	-	2048														
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>768</td><td>768-bit Diffie-Hellman prime.</td></tr><tr><td>1024</td><td>1024-bit Diffie-Hellman prime.</td></tr><tr><td>1536</td><td>1536-bit Diffie-Hellman prime.</td></tr><tr><td>2048</td><td>2048-bit Diffie-Hellman prime.</td></tr><tr><td>3072</td><td>3072-bit Diffie-Hellman prime.</td></tr><tr><td>4096</td><td>4096-bit Diffie-Hellman prime.</td></tr></table>	Option	Description	768	768-bit Diffie-Hellman prime.	1024	1024-bit Diffie-Hellman prime.	1536	1536-bit Diffie-Hellman prime.	2048	2048-bit Diffie-Hellman prime.	3072	3072-bit Diffie-Hellman prime.	4096	4096-bit Diffie-Hellman prime.			
	Option	Description																
	768	768-bit Diffie-Hellman prime.																
	1024	1024-bit Diffie-Hellman prime.																
	1536	1536-bit Diffie-Hellman prime.																
	2048	2048-bit Diffie-Hellman prime.																
	3072	3072-bit Diffie-Hellman prime.																
4096	4096-bit Diffie-Hellman prime.																	
ssl-max-version	Highest SSL/TLS version acceptable from a server.	option	-	tls-1.3														
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>tls-1.0</td><td>TLS 1.0.</td></tr><tr><td>tls-1.1</td><td>TLS 1.1.</td></tr><tr><td>tls-1.2</td><td>TLS 1.2.</td></tr><tr><td>tls-1.3</td><td>TLS 1.3.</td></tr></table>	Option	Description	tls-1.0	TLS 1.0.	tls-1.1	TLS 1.1.	tls-1.2	TLS 1.2.	tls-1.3	TLS 1.3.							
	Option	Description																
	tls-1.0	TLS 1.0.																
	tls-1.1	TLS 1.1.																
	tls-1.2	TLS 1.2.																
tls-1.3	TLS 1.3.																	
ssl-min-version	Lowest SSL/TLS version acceptable from a server.	option	-	tls-1.1														

Parameter	Description	Type	Size	Default										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>tls-1.0</i></td><td>TLS 1.0.</td></tr><tr><td><i>tls-1.1</i></td><td>TLS 1.1.</td></tr><tr><td><i>tls-1.2</i></td><td>TLS 1.2.</td></tr><tr><td><i>tls-1.3</i></td><td>TLS 1.3.</td></tr></table>	Option	Description	<i>tls-1.0</i>	TLS 1.0.	<i>tls-1.1</i>	TLS 1.1.	<i>tls-1.2</i>	TLS 1.2.	<i>tls-1.3</i>	TLS 1.3.			
	Option	Description												
	<i>tls-1.0</i>	TLS 1.0.												
	<i>tls-1.1</i>	TLS 1.1.												
	<i>tls-1.2</i>	TLS 1.2.												
<i>tls-1.3</i>	TLS 1.3.													
ssl-renegotiation	Enable/disable secure renegotiation to comply with RFC 5746.	option	-	enable										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable secure renegotiation.</td></tr><tr><td><i>disable</i></td><td>Disable secure renegotiation.</td></tr></table>	Option	Description	<i>enable</i>	Enable secure renegotiation.	<i>disable</i>	Disable secure renegotiation.							
	Option	Description												
	<i>enable</i>	Enable secure renegotiation.												
<i>disable</i>	Disable secure renegotiation.													
ssl-vpn-web-portal	SSL-VPN web portal.	string	Maximum length: 35											
url-map	URL pattern to match.	string	Maximum length: 511	/										
url-map-type	Type of url-map.	option	-	sub-string										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>sub-string</i></td><td>Match the pattern if a string contains the sub-string.</td></tr><tr><td><i>wildcard</i></td><td>Match the pattern with wildcards.</td></tr><tr><td><i>regex</i></td><td>Match the pattern with a regular expression.</td></tr></table>	Option	Description	<i>sub-string</i>	Match the pattern if a string contains the sub-string.	<i>wildcard</i>	Match the pattern with wildcards.	<i>regex</i>	Match the pattern with a regular expression.					
	Option	Description												
	<i>sub-string</i>	Match the pattern if a string contains the sub-string.												
	<i>wildcard</i>	Match the pattern with wildcards.												
<i>regex</i>	Match the pattern with a regular expression.													
virtual-host	Virtual host.	string	Maximum length: 79											

config realservers

Parameter	Description	Type	Size	Default						
addr-type	Type of address.	option	-	ip						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>ip</i></td><td>Standard IPv4 address.</td></tr><tr><td><i>fqdn</i></td><td>Non-wildcard FQDN address object.</td></tr></table>				Option	Description	<i>ip</i>	Standard IPv4 address.	<i>fqdn</i>	Non-wildcard FQDN address object.
	Option	Description								
	<i>ip</i>	Standard IPv4 address.								
<i>fqdn</i>	Non-wildcard FQDN address object.									
address	Address or address group of the real server.	string	Maximum length: 79							

Parameter	Description	Type	Size	Default								
domain	Wildcard domain name of the real server.	string	Maximum length: 255									
health-check	Enable to check the responsiveness of the real server before forwarding traffic.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Disable per server health check.</td></tr><tr><td>enable</td><td>Enable per server health check.</td></tr></table>				Option	Description	disable	Disable per server health check.	enable	Enable per server health check.		
Option	Description											
disable	Disable per server health check.											
enable	Enable per server health check.											
health-check-proto	Protocol of the health check monitor to use when polling to determine server's connectivity status.	option	-	ping								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>ping</td><td>Use PING to test the link with the server.</td></tr><tr><td>http</td><td>Use HTTP-GET to test the link with the server.</td></tr><tr><td>tcp-connect</td><td>Use a full TCP connection to test the link with the server.</td></tr></table>				Option	Description	ping	Use PING to test the link with the server.	http	Use HTTP-GET to test the link with the server.	tcp-connect	Use a full TCP connection to test the link with the server.
Option	Description											
ping	Use PING to test the link with the server.											
http	Use HTTP-GET to test the link with the server.											
tcp-connect	Use a full TCP connection to test the link with the server.											
holddown-interval	Enable/disable holddown timer. Server will be considered active and reachable once the holddown period has expired (30 seconds).	option	-	enable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable per server holddown.</td></tr><tr><td>disable</td><td>Disable per server holddown.</td></tr></table>				Option	Description	enable	Enable per server holddown.	disable	Disable per server holddown.		
Option	Description											
enable	Enable per server holddown.											
disable	Disable per server holddown.											
http-host	HTTP server domain name in HTTP header.	string	Maximum length: 63									
id	Real server ID.	integer	Minimum value: 0 Maximum value: 4294967295									
ip	IPv6 address of the real server.	ipv6-address	Not Specified	::								
mappedport	Port for communicating with the real server.	user	Not Specified									
port	Port for communicating with the real server.	integer	Minimum value: 1 Maximum value: 65535	443								
ssh-client-cert	Set access-proxy SSH client certificate profile.	string	Maximum length: 79									

Parameter	Description	Type	Size	Default								
ssh-host-key <name>	One or more server host key. Server host key name.	string	Maximum length: 79									
ssh-host-key-validation	Enable/disable SSH real server host key validation.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Disable SSH real server host key validation.</td></tr><tr><td>enable</td><td>Enable SSH real server host key validation.</td></tr></table>	Option	Description	disable	Disable SSH real server host key validation.	enable	Enable SSH real server host key validation.					
Option	Description											
disable	Disable SSH real server host key validation.											
enable	Enable SSH real server host key validation.											
status	Set the status of the real server to active so that it can accept traffic, or on standby or disabled so no traffic is sent.	option	-	active								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>active</td><td>Server status active.</td></tr><tr><td>standby</td><td>Server status standby.</td></tr><tr><td>disable</td><td>Server status disable.</td></tr></table>	Option	Description	active	Server status active.	standby	Server status standby.	disable	Server status disable.			
Option	Description											
active	Server status active.											
standby	Server status standby.											
disable	Server status disable.											
translate-host	Enable/disable translation of hostname/IP from virtual server to real server.	option	-	enable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable virtual hostname/IP translation.</td></tr><tr><td>disable</td><td>Disable virtual hostname/IP translation.</td></tr></table>	Option	Description	enable	Enable virtual hostname/IP translation.	disable	Disable virtual hostname/IP translation.					
Option	Description											
enable	Enable virtual hostname/IP translation.											
disable	Disable virtual hostname/IP translation.											
type	TCP forwarding server type.	option	-	tcp-forwarding								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>tcp-forwarding</td><td>TCP forwarding.</td></tr><tr><td>ssh</td><td>SSH.</td></tr></table>	Option	Description	tcp-forwarding	TCP forwarding.	ssh	SSH.					
Option	Description											
tcp-forwarding	TCP forwarding.											
ssh	SSH.											
weight	Weight of the real server. If weighted load balancing is enabled, the server with the highest weight gets more connections.	integer	Minimum value: 1 Maximum value: 255									

config ssl-cipher-suites

Parameter	Description	Type	Size	Default
cipher	Cipher suite name.	option	-	

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>TLS-AES-128-GCM-SHA256</i>	Cipher suite TLS-AES-128-GCM-SHA256.		
	<i>TLS-AES-256-GCM-SHA384</i>	Cipher suite TLS-AES-256-GCM-SHA384.		
	<i>TLS-CHACHA20-POLY1305-SHA256</i>	Cipher suite TLS-CHACHA20-POLY1305-SHA256.		
	<i>TLS-ECDHE-RSA-WITH-CHACHA20-POLY1305-SHA256</i>	Cipher suite TLS-ECDHE-RSA-WITH-CHACHA20-POLY1305-SHA256.		
	<i>TLS-ECDHE-ECDSA-WITH-CHACHA20-POLY1305-SHA256</i>	Cipher suite TLS-ECDHE-ECDSA-WITH-CHACHA20-POLY1305-SHA256.		
	<i>TLS-DHE-RSA-WITH-CHACHA20-POLY1305-SHA256</i>	Cipher suite TLS-DHE-RSA-WITH-CHACHA20-POLY1305-SHA256.		
	<i>TLS-DHE-RSA-WITH-AES-128-CBC-SHA</i>	Cipher suite TLS-DHE-RSA-WITH-AES-128-CBC-SHA.		
	<i>TLS-DHE-RSA-WITH-AES-256-CBC-SHA</i>	Cipher suite TLS-DHE-RSA-WITH-AES-256-CBC-SHA.		
	<i>TLS-DHE-RSA-WITH-AES-128-CBC-SHA256</i>	Cipher suite TLS-DHE-RSA-WITH-AES-128-CBC-SHA256.		
	<i>TLS-DHE-RSA-WITH-AES-128-GCM-SHA256</i>	Cipher suite TLS-DHE-RSA-WITH-AES-128-GCM-SHA256.		

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>TLS-DHE-RSA-WITH-AES-256-CBC-SHA256</i>	Cipher suite TLS-DHE-RSA-WITH-AES-256-CBC-SHA256.		
	<i>TLS-DHE-RSA-WITH-AES-256-GCM-SHA384</i>	Cipher suite TLS-DHE-RSA-WITH-AES-256-GCM-SHA384.		
	<i>TLS-DHE-DSS-WITH-AES-128-CBC-SHA</i>	Cipher suite TLS-DHE-DSS-WITH-AES-128-CBC-SHA.		
	<i>TLS-DHE-DSS-WITH-AES-256-CBC-SHA</i>	Cipher suite TLS-DHE-DSS-WITH-AES-256-CBC-SHA.		
	<i>TLS-DHE-DSS-WITH-AES-128-CBC-SHA256</i>	Cipher suite TLS-DHE-DSS-WITH-AES-128-CBC-SHA256.		
	<i>TLS-DHE-DSS-WITH-AES-128-GCM-SHA256</i>	Cipher suite TLS-DHE-DSS-WITH-AES-128-GCM-SHA256.		
	<i>TLS-DHE-DSS-WITH-AES-256-CBC-SHA256</i>	Cipher suite TLS-DHE-DSS-WITH-AES-256-CBC-SHA256.		
	<i>TLS-DHE-DSS-WITH-AES-256-GCM-SHA384</i>	Cipher suite TLS-DHE-DSS-WITH-AES-256-GCM-SHA384.		
	<i>TLS-ECDHE-RSA-WITH-AES-128-CBC-SHA</i>	Cipher suite TLS-ECDHE-RSA-WITH-AES-128-CBC-SHA.		
	<i>TLS-ECDHE-RSA-WITH-AES-128-CBC-SHA256</i>	Cipher suite TLS-ECDHE-RSA-WITH-AES-128-CBC-SHA256.		

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>TLS-ECDHE-RSA-WITH-AES-128-GCM-SHA256</i>	Cipher suite TLS-ECDHE-RSA-WITH-AES-128-GCM-SHA256.		
	<i>TLS-ECDHE-RSA-WITH-AES-256-CBC-SHA</i>	Cipher suite TLS-ECDHE-RSA-WITH-AES-256-CBC-SHA.		
	<i>TLS-ECDHE-RSA-WITH-AES-256-CBC-SHA384</i>	Cipher suite TLS-ECDHE-RSA-WITH-AES-256-CBC-SHA384.		
	<i>TLS-ECDHE-RSA-WITH-AES-256-GCM-SHA384</i>	Cipher suite TLS-ECDHE-RSA-WITH-AES-256-GCM-SHA384.		
	<i>TLS-ECDHE-ECDSA-WITH-AES-128-CBC-SHA</i>	Cipher suite TLS-ECDHE-ECDSA-WITH-AES-128-CBC-SHA.		
	<i>TLS-ECDHE-ECDSA-WITH-AES-128-CBC-SHA256</i>	Cipher suite TLS-ECDHE-ECDSA-WITH-AES-128-CBC-SHA256.		
	<i>TLS-ECDHE-ECDSA-WITH-AES-128-GCM-SHA256</i>	Cipher suite TLS-ECDHE-ECDSA-WITH-AES-128-GCM-SHA256.		
	<i>TLS-ECDHE-ECDSA-WITH-AES-256-CBC-SHA</i>	Cipher suite TLS-ECDHE-ECDSA-WITH-AES-256-CBC-SHA.		
	<i>TLS-ECDHE-ECDSA-WITH-AES-256-CBC-SHA384</i>	Cipher suite TLS-ECDHE-ECDSA-WITH-AES-256-CBC-SHA384.		

Parameter	Description	Type	Size	Default
	Option	Description		
	TLS-ECDHE-ECDSA-WITH-AES-256-GCM-SHA384	Cipher suite TLS-ECDHE-ECDSA-WITH-AES-256-GCM-SHA384.		
	TLS-RSA-WITH-AES-128-CBC-SHA	Cipher suite TLS-RSA-WITH-AES-128-CBC-SHA.		
	TLS-RSA-WITH-AES-256-CBC-SHA	Cipher suite TLS-RSA-WITH-AES-256-CBC-SHA.		
	TLS-RSA-WITH-AES-128-CBC-SHA256	Cipher suite TLS-RSA-WITH-AES-128-CBC-SHA256.		
	TLS-RSA-WITH-AES-128-GCM-SHA256	Cipher suite TLS-RSA-WITH-AES-128-GCM-SHA256.		
	TLS-RSA-WITH-AES-256-CBC-SHA256	Cipher suite TLS-RSA-WITH-AES-256-CBC-SHA256.		
	TLS-RSA-WITH-AES-256-GCM-SHA384	Cipher suite TLS-RSA-WITH-AES-256-GCM-SHA384.		
	TLS-RSA-WITH-CAMELLIA-128-CBC-SHA	Cipher suite TLS-RSA-WITH-CAMELLIA-128-CBC-SHA.		
	TLS-RSA-WITH-CAMELLIA-256-CBC-SHA	Cipher suite TLS-RSA-WITH-CAMELLIA-256-CBC-SHA.		
TLS-RSA-WITH-CAMELLIA-128-CBC-SHA256	Cipher suite TLS-RSA-WITH-CAMELLIA-128-CBC-SHA256.			

Parameter	Description	Type	Size	Default																				
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>TLS-RSA-WITH-CAMELLIA-256-CBC-SHA256</td><td>Cipher suite TLS-RSA-WITH-CAMELLIA-256-CBC-SHA256.</td></tr><tr><td>TLS-DHE-RSA-WITH-3DES-EDE-CBC-SHA</td><td>Cipher suite TLS-DHE-RSA-WITH-3DES-EDE-CBC-SHA.</td></tr><tr><td>TLS-DHE-RSA-WITH-CAMELLIA-128-CBC-SHA</td><td>Cipher suite TLS-DHE-RSA-WITH-CAMELLIA-128-CBC-SHA.</td></tr><tr><td>TLS-DHE-DSS-WITH-CAMELLIA-128-CBC-SHA</td><td>Cipher suite TLS-DSS-RSA-WITH-CAMELLIA-128-CBC-SHA.</td></tr><tr><td>TLS-DHE-RSA-WITH-CAMELLIA-256-CBC-SHA</td><td>Cipher suite TLS-DHE-RSA-WITH-CAMELLIA-256-CBC-SHA.</td></tr><tr><td>TLS-DHE-DSS-WITH-CAMELLIA-256-CBC-SHA</td><td>Cipher suite TLS-DHE-DSS-WITH-CAMELLIA-256-CBC-SHA.</td></tr><tr><td>TLS-DHE-RSA-WITH-CAMELLIA-128-CBC-SHA256</td><td>Cipher suite TLS-DHE-RSA-WITH-CAMELLIA-128-CBC-SHA256.</td></tr><tr><td>TLS-DHE-DSS-WITH-CAMELLIA-128-CBC-SHA256</td><td>Cipher suite TLS-DHE-DSS-WITH-CAMELLIA-128-CBC-SHA256.</td></tr><tr><td>TLS-DHE-RSA-WITH-CAMELLIA-256-CBC-SHA256</td><td>Cipher suite TLS-DHE-RSA-WITH-CAMELLIA-256-CBC-SHA256.</td></tr></table>	Option	Description	TLS-RSA-WITH-CAMELLIA-256-CBC-SHA256	Cipher suite TLS-RSA-WITH-CAMELLIA-256-CBC-SHA256.	TLS-DHE-RSA-WITH-3DES-EDE-CBC-SHA	Cipher suite TLS-DHE-RSA-WITH-3DES-EDE-CBC-SHA.	TLS-DHE-RSA-WITH-CAMELLIA-128-CBC-SHA	Cipher suite TLS-DHE-RSA-WITH-CAMELLIA-128-CBC-SHA.	TLS-DHE-DSS-WITH-CAMELLIA-128-CBC-SHA	Cipher suite TLS-DSS-RSA-WITH-CAMELLIA-128-CBC-SHA.	TLS-DHE-RSA-WITH-CAMELLIA-256-CBC-SHA	Cipher suite TLS-DHE-RSA-WITH-CAMELLIA-256-CBC-SHA.	TLS-DHE-DSS-WITH-CAMELLIA-256-CBC-SHA	Cipher suite TLS-DHE-DSS-WITH-CAMELLIA-256-CBC-SHA.	TLS-DHE-RSA-WITH-CAMELLIA-128-CBC-SHA256	Cipher suite TLS-DHE-RSA-WITH-CAMELLIA-128-CBC-SHA256.	TLS-DHE-DSS-WITH-CAMELLIA-128-CBC-SHA256	Cipher suite TLS-DHE-DSS-WITH-CAMELLIA-128-CBC-SHA256.	TLS-DHE-RSA-WITH-CAMELLIA-256-CBC-SHA256	Cipher suite TLS-DHE-RSA-WITH-CAMELLIA-256-CBC-SHA256.			
Option	Description																							
TLS-RSA-WITH-CAMELLIA-256-CBC-SHA256	Cipher suite TLS-RSA-WITH-CAMELLIA-256-CBC-SHA256.																							
TLS-DHE-RSA-WITH-3DES-EDE-CBC-SHA	Cipher suite TLS-DHE-RSA-WITH-3DES-EDE-CBC-SHA.																							
TLS-DHE-RSA-WITH-CAMELLIA-128-CBC-SHA	Cipher suite TLS-DHE-RSA-WITH-CAMELLIA-128-CBC-SHA.																							
TLS-DHE-DSS-WITH-CAMELLIA-128-CBC-SHA	Cipher suite TLS-DSS-RSA-WITH-CAMELLIA-128-CBC-SHA.																							
TLS-DHE-RSA-WITH-CAMELLIA-256-CBC-SHA	Cipher suite TLS-DHE-RSA-WITH-CAMELLIA-256-CBC-SHA.																							
TLS-DHE-DSS-WITH-CAMELLIA-256-CBC-SHA	Cipher suite TLS-DHE-DSS-WITH-CAMELLIA-256-CBC-SHA.																							
TLS-DHE-RSA-WITH-CAMELLIA-128-CBC-SHA256	Cipher suite TLS-DHE-RSA-WITH-CAMELLIA-128-CBC-SHA256.																							
TLS-DHE-DSS-WITH-CAMELLIA-128-CBC-SHA256	Cipher suite TLS-DHE-DSS-WITH-CAMELLIA-128-CBC-SHA256.																							
TLS-DHE-RSA-WITH-CAMELLIA-256-CBC-SHA256	Cipher suite TLS-DHE-RSA-WITH-CAMELLIA-256-CBC-SHA256.																							

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>TLS-DHE-DSS-WITH-CAMELLIA-256-CBC-SHA256</i>	Cipher suite TLS-DHE-DSS-WITH-CAMELLIA-256-CBC-SHA256.		
	<i>TLS-DHE-RSA-WITH-SEED-CBC-SHA</i>	Cipher suite TLS-DHE-RSA-WITH-SEED-CBC-SHA.		
	<i>TLS-DHE-DSS-WITH-SEED-CBC-SHA</i>	Cipher suite TLS-DHE-DSS-WITH-SEED-CBC-SHA.		
	<i>TLS-DHE-RSA-WITH-ARIA-128-CBC-SHA256</i>	Cipher suite TLS-DHE-RSA-WITH-ARIA-128-CBC-SHA256.		
	<i>TLS-DHE-RSA-WITH-ARIA-256-CBC-SHA384</i>	Cipher suite TLS-DHE-RSA-WITH-ARIA-256-CBC-SHA384.		
	<i>TLS-DHE-DSS-WITH-ARIA-128-CBC-SHA256</i>	Cipher suite TLS-DHE-DSS-WITH-ARIA-128-CBC-SHA256.		
	<i>TLS-DHE-DSS-WITH-ARIA-256-CBC-SHA384</i>	Cipher suite TLS-DHE-DSS-WITH-ARIA-256-CBC-SHA384.		
	<i>TLS-RSA-WITH-SEED-CBC-SHA</i>	Cipher suite TLS-RSA-WITH-SEED-CBC-SHA.		
	<i>TLS-RSA-WITH-ARIA-128-CBC-SHA256</i>	Cipher suite TLS-RSA-WITH-ARIA-128-CBC-SHA256.		
	<i>TLS-RSA-WITH-ARIA-256-CBC-SHA384</i>	Cipher suite TLS-RSA-WITH-ARIA-256-CBC-SHA384.		

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>TLS-ECDHE-RSA-WITH-ARIA-128-CBC-SHA256</i>	Cipher suite TLS-ECDHE-RSA-WITH-ARIA-128-CBC-SHA256.		
	<i>TLS-ECDHE-RSA-WITH-ARIA-256-CBC-SHA384</i>	Cipher suite TLS-ECDHE-RSA-WITH-ARIA-256-CBC-SHA384.		
	<i>TLS-ECDHE-ECDSA-WITH-ARIA-128-CBC-SHA256</i>	Cipher suite TLS-ECDHE-ECDSA-WITH-ARIA-128-CBC_SHA256.		
	<i>TLS-ECDHE-ECDSA-WITH-ARIA-256-CBC-SHA384</i>	Cipher suite TLS-ECDHE-ECDSA-WITH-ARIA-256-CBC_SHA384.		
	<i>TLS-ECDHE-RSA-WITH-RC4-128-SHA</i>	Cipher suite TLS-ECDHE-RSA-WITH-RC4-128-SHA.		
	<i>TLS-ECDHE-RSA-WITH-3DES-EDE-CBC-SHA</i>	Cipher suite TLS-ECDHE-RSA-WITH-3DES-EDE-CBC-SHA.		
	<i>TLS-DHE-DSS-WITH-3DES-EDE-CBC-SHA</i>	Cipher suite TLS-DHE-DSS-WITH-3DES-EDE-CBC-SHA.		
	<i>TLS-RSA-WITH-3DES-EDE-CBC-SHA</i>	Cipher suite TLS-RSA-WITH-3DES-EDE-CBC-SHA.		
	<i>TLS-RSA-WITH-RC4-128-MD5</i>	Cipher suite TLS-RSA-WITH-RC4-128-MD5.		
	<i>TLS-RSA-WITH-RC4-128-SHA</i>	Cipher suite TLS-RSA-WITH-RC4-128-SHA.		
	<i>TLS-DHE-RSA-WITH-DES-CBC-SHA</i>	Cipher suite TLS-DHE-RSA-WITH-DES-CBC-SHA.		

Parameter	Description	Type	Size	Default										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>TLS-DHE-DSS-WITH-DES-CBC-SHA</i></td><td>Cipher suite TLS-DHE-DSS-WITH-DES-CBC-SHA.</td></tr><tr><td><i>TLS-RSA-WITH-DES-CBC-SHA</i></td><td>Cipher suite TLS-RSA-WITH-DES-CBC-SHA.</td></tr></table>	Option	Description	<i>TLS-DHE-DSS-WITH-DES-CBC-SHA</i>	Cipher suite TLS-DHE-DSS-WITH-DES-CBC-SHA.	<i>TLS-RSA-WITH-DES-CBC-SHA</i>	Cipher suite TLS-RSA-WITH-DES-CBC-SHA.							
	Option	Description												
	<i>TLS-DHE-DSS-WITH-DES-CBC-SHA</i>	Cipher suite TLS-DHE-DSS-WITH-DES-CBC-SHA.												
<i>TLS-RSA-WITH-DES-CBC-SHA</i>	Cipher suite TLS-RSA-WITH-DES-CBC-SHA.													
priority	SSL/TLS cipher suites priority.	integer	Minimum value: 0 Maximum value: 4294967295	0										
versions	SSL/TLS versions that the cipher suite can be used with.	option	-	tls-1.0 tls-1.1 tls-1.2 tls-1.3										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>tls-1.0</i></td><td>TLS 1.0.</td></tr><tr><td><i>tls-1.1</i></td><td>TLS 1.1.</td></tr><tr><td><i>tls-1.2</i></td><td>TLS 1.2.</td></tr><tr><td><i>tls-1.3</i></td><td>TLS 1.3.</td></tr></table>	Option	Description	<i>tls-1.0</i>	TLS 1.0.	<i>tls-1.1</i>	TLS 1.1.	<i>tls-1.2</i>	TLS 1.2.	<i>tls-1.3</i>	TLS 1.3.			
	Option	Description												
	<i>tls-1.0</i>	TLS 1.0.												
	<i>tls-1.1</i>	TLS 1.1.												
	<i>tls-1.2</i>	TLS 1.2.												
<i>tls-1.3</i>	TLS 1.3.													

config firewall access-proxy6

Configure IPv6 access proxy.

```

config firewall access-proxy6
  Description: Configure IPv6 access proxy.
  edit <name>
    set add-vhost-domain-to-dnsdb [enable|disable]
    config api-gateway
      Description: Set IPv4 API Gateway.
      edit <id>
        set application <name1>, <name2>, ...
        set http-cookie-age {integer}
        set http-cookie-domain {string}
        set http-cookie-domain-from-host [disable|enable]
        set http-cookie-generation {integer}
        set http-cookie-path {string}
        set http-cookie-share [disable|same-ip]
        set https-cookie-secure [disable|enable]
        set ldb-method [static|round-robin|...]
        set persistence [none|http-cookie]

```

```

config realservers
    Description: Select the real servers that this Access Proxy will distribute
traffic to.
    edit <id>
        set addr-type [ip|fqdn]
        set address {string}
        set domain {string}
        set health-check [disable|enable]
        set health-check-proto [ping|http|...]
        set holddown-interval [enable|disable]
        set http-host {string}
        set ip {ipv4-address-any}
        set mappedport {user}
        set port {integer}
        set ssh-client-cert {string}
        set ssh-host-key <name1>, <name2>, ...
        set ssh-host-key-validation [disable|enable]
        set status [active|standby|...]
        set translate-host [enable|disable]
        set type [tcp-forwarding|ssh]
        set weight {integer}
    next
end
set saml-redirect [disable|enable]
set saml-server {string}
set service [http|https|...]
set ssl-algorithm [high|medium|...]
config ssl-cipher-suites
    Description: SSL/TLS cipher suites to offer to a server, ordered by priority.
    edit <priority>
        set cipher [TLS-AES-128-GCM-SHA256|TLS-AES-256-GCM-SHA384|...]
        set versions {option1}, {option2}, ...
    next
end
set ssl-dh-bits [768|1024|...]
set ssl-max-version [tls-1.0|tls-1.1|...]
set ssl-min-version [tls-1.0|tls-1.1|...]
set ssl-renegotiation [enable|disable]
set ssl-vpn-web-portal {string}
set url-map {string}
set url-map-type [sub-string|wildcard|...]
set virtual-host {string}
next
end
config api-gateway6
    Description: Set IPv6 API Gateway.
    edit <id>
        set application <name1>, <name2>, ...
        set http-cookie-age {integer}
        set http-cookie-domain {string}
        set http-cookie-domain-from-host [disable|enable]
        set http-cookie-generation {integer}

```



```

set http-cookie-path {string}
set http-cookie-share [disable|same-ip]
set https-cookie-secure [disable|enable]
set ldb-method [static|round-robin|...]
set persistence [none|http-cookie]
config realservers
    Description: Select the real servers that this Access Proxy will distribute
traffic to.
    edit <id>
        set addr-type [ip|fqdn]
        set address {string}
        set domain {string}
        set health-check [disable|enable]
        set health-check-proto [ping|http|...]
        set holddown-interval [enable|disable]
        set http-host {string}
        set ip {ipv6-address}
        set mappedport {user}
        set port {integer}
        set ssh-client-cert {string}
        set ssh-host-key <name1>, <name2>, ...
        set ssh-host-key-validation [disable|enable]
        set status [active|standby|...]
        set translate-host [enable|disable]
        set type [tcp-forwarding|ssh]
        set weight {integer}
    next
end
set saml-redirect [disable|enable]
set saml-server {string}
set service [http|https|...]
set ssl-algorithm [high|medium|...]
config ssl-cipher-suites
    Description: SSL/TLS cipher suites to offer to a server, ordered by priority.
    edit <priority>
        set cipher [TLS-AES-128-GCM-SHA256|TLS-AES-256-GCM-SHA384|...]
        set versions {option1}, {option2}, ...
    next
end
set ssl-dh-bits [768|1024|...]
set ssl-max-version [tls-1.0|tls-1.1|...]
set ssl-min-version [tls-1.0|tls-1.1|...]
set ssl-renegotiation [enable|disable]
set ssl-vpn-web-portal {string}
set url-map {string}
set url-map-type [sub-string|wildcard|...]
set virtual-host {string}
next
end
set auth-portal [disable|enable]
set auth-virtual-host {string}
set client-cert [disable|enable]

```

```

set decrypted-traffic-mirror {string}
set empty-cert-action [accept|block|...]
set http-supported-max-version [http1|http2]
set log-blocked-traffic [enable|disable]
set svr-pool-multiplex [enable|disable]
set svr-pool-server-max-request {integer}
set svr-pool-ttl {integer}
set user-agent-detect [disable|enable]
set vip {string}
next
end

```

config firewall access-proxy6

Parameter	Description	Type	Size	Default						
add-vhost-domain-to-dnsdb	Enable/disable adding vhost/domain to dnsdb for ztna dox tunnel.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>add dns entry for all vhosts used by access proxy.</td></tr><tr><td>disable</td><td>Do not add dns entry for all vhosts used by access proxy.</td></tr></table>	Option	Description	enable	add dns entry for all vhosts used by access proxy.	disable	Do not add dns entry for all vhosts used by access proxy.			
Option	Description									
enable	add dns entry for all vhosts used by access proxy.									
disable	Do not add dns entry for all vhosts used by access proxy.									
auth-portal	Enable/disable authentication portal.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Disable authentication portal.</td></tr><tr><td>enable</td><td>Enable authentication portal.</td></tr></table>	Option	Description	disable	Disable authentication portal.	enable	Enable authentication portal.			
Option	Description									
disable	Disable authentication portal.									
enable	Enable authentication portal.									
auth-virtual-host	Virtual host for authentication portal.	string	Maximum length: 79							
client-cert	Enable/disable to request client certificate.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Disable client certificate request.</td></tr><tr><td>enable</td><td>Enable client certificate request.</td></tr></table>	Option	Description	disable	Disable client certificate request.	enable	Enable client certificate request.			
Option	Description									
disable	Disable client certificate request.									
enable	Enable client certificate request.									
decrypted-traffic-mirror	Decrypted traffic mirror.	string	Maximum length: 35							
empty-cert-action	Action of an empty client certificate.	option	-	block						

Parameter	Description	Type	Size	Default								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>accept</i></td><td>Accept the SSL handshake if the client certificate is empty.</td></tr><tr><td><i>block</i></td><td>Block the SSL handshake if the client certificate is empty.</td></tr><tr><td><i>accept-unmanageable</i></td><td>Accept the SSL handshake only if the end-point is unmanageable.</td></tr></table>	Option	Description	<i>accept</i>	Accept the SSL handshake if the client certificate is empty.	<i>block</i>	Block the SSL handshake if the client certificate is empty.	<i>accept-unmanageable</i>	Accept the SSL handshake only if the end-point is unmanageable.			
	Option	Description										
	<i>accept</i>	Accept the SSL handshake if the client certificate is empty.										
	<i>block</i>	Block the SSL handshake if the client certificate is empty.										
<i>accept-unmanageable</i>	Accept the SSL handshake only if the end-point is unmanageable.											
http-supported-max-version	Maximum supported HTTP versions. default = HTTP2	option	-	http2								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>http1</i></td><td>Support HTTP 1.1 and HTTP1.</td></tr><tr><td><i>http2</i></td><td>Support HTTP2, HTTP 1.1, and HTTP1.</td></tr></table>	Option	Description	<i>http1</i>	Support HTTP 1.1 and HTTP1.	<i>http2</i>	Support HTTP2, HTTP 1.1, and HTTP1.					
	Option	Description										
	<i>http1</i>	Support HTTP 1.1 and HTTP1.										
<i>http2</i>	Support HTTP2, HTTP 1.1, and HTTP1.											
log-blocked-traffic	Enable/disable logging of blocked traffic.	option	-	enable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Log all traffic denied by this access proxy.</td></tr><tr><td><i>disable</i></td><td>Do not log all traffic denied by this access proxy.</td></tr></table>	Option	Description	<i>enable</i>	Log all traffic denied by this access proxy.	<i>disable</i>	Do not log all traffic denied by this access proxy.					
	Option	Description										
	<i>enable</i>	Log all traffic denied by this access proxy.										
<i>disable</i>	Do not log all traffic denied by this access proxy.											
name	Access Proxy name.	string	Maximum length: 79									
svr-pool-multiplex	Enable/disable server pool multiplexing. Share connected server in HTTP, HTTPS, and web-portal api-gateway.	option	-	enable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable server pool multiplexing. Share connected server.</td></tr><tr><td><i>disable</i></td><td>Disable server pool multiplexing. Do not share connected server.</td></tr></table>	Option	Description	<i>enable</i>	Enable server pool multiplexing. Share connected server.	<i>disable</i>	Disable server pool multiplexing. Do not share connected server.					
	Option	Description										
	<i>enable</i>	Enable server pool multiplexing. Share connected server.										
<i>disable</i>	Disable server pool multiplexing. Do not share connected server.											
svr-pool-server-max-request	Maximum number of requests that servers in server pool handle before disconnecting (default = unlimited).	integer	Minimum value: 0 Maximum value: 2147483647	0								
svr-pool-ttl	Time-to-live in the server pool for idle connections to servers.	integer	Minimum value: 0 Maximum value: 2147483647	15								

Parameter	Description	Type	Size	Default
user-agent-detect	Enable/disable to detect device type by HTTP user-agent if no client certificate provided.	option	-	enable
	Option	Description		
	disable	Disable to detect unknown device by HTTP user-agent if no client certificate provided.		
	enable	Enable to detect unknown device by HTTP user-agent if no client certificate provided.		
vip	Virtual IP name.	string	Maximum length: 79	

config api-gateway

Parameter	Description	Type	Size	Default						
application <name>	SaaS application controlled by this Access Proxy. SaaS application name.	string	Maximum length: 79							
http-cookie-age	Time in minutes that client web browsers should keep a cookie. Default is 60 minutes. 0 = no time limit.	integer	Minimum value: 60 0 Maximum value: 525600							
http-cookie-domain	Domain that HTTP cookie persistence should apply to.	string	Maximum length: 35							
http-cookie-domain-from-host	Enable/disable use of HTTP cookie domain from host field in HTTP.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>disable</i></td><td>Disable use of HTTP cookie domain from host field in HTTP (use http-cooke-domain setting).</td></tr><tr><td><i>enable</i></td><td>Enable use of HTTP cookie domain from host field in HTTP.</td></tr></table>				Option	Description	<i>disable</i>	Disable use of HTTP cookie domain from host field in HTTP (use http-cooke-domain setting).	<i>enable</i>	Enable use of HTTP cookie domain from host field in HTTP.
Option	Description									
<i>disable</i>	Disable use of HTTP cookie domain from host field in HTTP (use http-cooke-domain setting).									
<i>enable</i>	Enable use of HTTP cookie domain from host field in HTTP.									
http-cookie-generation	Generation of HTTP cookie to be accepted. Changing invalidates all existing cookies.	integer	Minimum value: 0 0 Maximum value: 4294967295							
http-cookie-path	Limit HTTP cookie persistence to the specified path.	string	Maximum length: 35							

Parameter	Description	Type	Size	Default												
http-cookie-share	Control sharing of cookies across API Gateway. Use of same-ip means a cookie from one virtual server can be used by another. Disable stops cookie sharing.	option	-	same-ip												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Only allow HTTP cookie to match this API Gateway.</td></tr><tr><td>same-ip</td><td>Allow HTTP cookie to match any API Gateway with same IP.</td></tr></table>	Option	Description	disable	Only allow HTTP cookie to match this API Gateway.	same-ip	Allow HTTP cookie to match any API Gateway with same IP.									
Option	Description															
disable	Only allow HTTP cookie to match this API Gateway.															
same-ip	Allow HTTP cookie to match any API Gateway with same IP.															
https-cookie-secure	Enable/disable verification that inserted HTTPS cookies are secure.	option	-	disable												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Do not mark cookie as secure, allow sharing between an HTTP and HTTPS connection.</td></tr><tr><td>enable</td><td>Mark inserted cookie as secure, cookie can only be used for HTTPS a connection.</td></tr></table>	Option	Description	disable	Do not mark cookie as secure, allow sharing between an HTTP and HTTPS connection.	enable	Mark inserted cookie as secure, cookie can only be used for HTTPS a connection.									
Option	Description															
disable	Do not mark cookie as secure, allow sharing between an HTTP and HTTPS connection.															
enable	Mark inserted cookie as secure, cookie can only be used for HTTPS a connection.															
id	API Gateway ID.	integer	Minimum value: 0 0 Maximum value: 4294967295													
ldb-method	Method used to distribute sessions to real servers.	option	-	static												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>static</td><td>Distribute to server based on source IP.</td></tr><tr><td>round-robin</td><td>Distribute to server based round robin order.</td></tr><tr><td>weighted</td><td>Distribute to server based on weight.</td></tr><tr><td>first-alive</td><td>Distribute to the first server that is alive.</td></tr><tr><td>http-host</td><td>Distribute to server based on host field in HTTP header.</td></tr></table>	Option	Description	static	Distribute to server based on source IP.	round-robin	Distribute to server based round robin order.	weighted	Distribute to server based on weight.	first-alive	Distribute to the first server that is alive.	http-host	Distribute to server based on host field in HTTP header.			
Option	Description															
static	Distribute to server based on source IP.															
round-robin	Distribute to server based round robin order.															
weighted	Distribute to server based on weight.															
first-alive	Distribute to the first server that is alive.															
http-host	Distribute to server based on host field in HTTP header.															
persistence	Configure how to make sure that clients connect to the same server every time they make a request that is part of the same session.	option	-	none												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>none</td><td>None.</td></tr><tr><td>http-cookie</td><td>HTTP cookie.</td></tr></table>	Option	Description	none	None.	http-cookie	HTTP cookie.									
Option	Description															
none	None.															
http-cookie	HTTP cookie.															

Parameter	Description	Type	Size	Default
saml-redirect	Enable/disable SAML redirection after successful authentication.	option	-	disable
	Option	Description		
	<i>disable</i>	Do not support redirection after successful SAML authentication.		
	<i>enable</i>	Support redirection after successful SAML authentication.		
saml-server	SAML service provider configuration for VIP authentication.	string	Maximum length: 35	
service	Service.	option	-	https
	Option	Description		
	<i>http</i>	HTTP.		
	<i>https</i>	HTTPS.		
	<i>tcp-forwarding</i>	TCP-FORWARDING.		
	<i>samlsp</i>	SAML-SP.		
	<i>web-portal</i>	VPN-SSL-WEB-PORTAL.		
	<i>saas</i>	SAAS.		
ssl-algorithm	Permitted encryption algorithms for the server side of SSL full mode sessions according to encryption strength.	option	-	high
	Option	Description		
	<i>high</i>	High encryption. Allow only AES and ChaCha.		
	<i>medium</i>	Medium encryption. Allow AES, ChaCha, 3DES, and RC4.		
	<i>low</i>	Low encryption. Allow AES, ChaCha, 3DES, RC4, and DES.		
ssl-dh-bits	Number of bits to use in the Diffie-Hellman exchange for RSA encryption of SSL sessions.	option	-	2048
	Option	Description		
	<i>768</i>	768-bit Diffie-Hellman prime.		
	<i>1024</i>	1024-bit Diffie-Hellman prime.		
	<i>1536</i>	1536-bit Diffie-Hellman prime.		
	<i>2048</i>	2048-bit Diffie-Hellman prime.		
	<i>3072</i>	3072-bit Diffie-Hellman prime.		
	<i>4096</i>	4096-bit Diffie-Hellman prime.		

Parameter	Description	Type	Size	Default										
ssl-max-version	Highest SSL/TLS version acceptable from a server.	option	-	tls-1.3										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>tls-1.0</td><td>TLS 1.0.</td></tr><tr><td>tls-1.1</td><td>TLS 1.1.</td></tr><tr><td>tls-1.2</td><td>TLS 1.2.</td></tr><tr><td>tls-1.3</td><td>TLS 1.3.</td></tr></table>	Option	Description	tls-1.0	TLS 1.0.	tls-1.1	TLS 1.1.	tls-1.2	TLS 1.2.	tls-1.3	TLS 1.3.			
Option	Description													
tls-1.0	TLS 1.0.													
tls-1.1	TLS 1.1.													
tls-1.2	TLS 1.2.													
tls-1.3	TLS 1.3.													
ssl-min-version	Lowest SSL/TLS version acceptable from a server.	option	-	tls-1.1										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>tls-1.0</td><td>TLS 1.0.</td></tr><tr><td>tls-1.1</td><td>TLS 1.1.</td></tr><tr><td>tls-1.2</td><td>TLS 1.2.</td></tr><tr><td>tls-1.3</td><td>TLS 1.3.</td></tr></table>	Option	Description	tls-1.0	TLS 1.0.	tls-1.1	TLS 1.1.	tls-1.2	TLS 1.2.	tls-1.3	TLS 1.3.			
Option	Description													
tls-1.0	TLS 1.0.													
tls-1.1	TLS 1.1.													
tls-1.2	TLS 1.2.													
tls-1.3	TLS 1.3.													
ssl-renegotiation	Enable/disable secure renegotiation to comply with RFC 5746.	option	-	enable										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable secure renegotiation.</td></tr><tr><td>disable</td><td>Disable secure renegotiation.</td></tr></table>	Option	Description	enable	Enable secure renegotiation.	disable	Disable secure renegotiation.							
Option	Description													
enable	Enable secure renegotiation.													
disable	Disable secure renegotiation.													
ssl-vpn-web-portal	SSL-VPN web portal.	string	Maximum length: 35											
url-map	URL pattern to match.	string	Maximum length: 511	/										
url-map-type	Type of url-map.	option	-	sub-string										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>sub-string</td><td>Match the pattern if a string contains the sub-string.</td></tr><tr><td>wildcard</td><td>Match the pattern with wildcards.</td></tr><tr><td>regex</td><td>Match the pattern with a regular expression.</td></tr></table>	Option	Description	sub-string	Match the pattern if a string contains the sub-string.	wildcard	Match the pattern with wildcards.	regex	Match the pattern with a regular expression.					
Option	Description													
sub-string	Match the pattern if a string contains the sub-string.													
wildcard	Match the pattern with wildcards.													
regex	Match the pattern with a regular expression.													
virtual-host	Virtual host.	string	Maximum length: 79											

config realservers

Parameter	Description	Type	Size	Default								
addr-type	Type of address.	option	-	ip								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>ip</td><td>Standard IPv4 address.</td></tr><tr><td>fqdn</td><td>Non-wildcard FQDN address object.</td></tr></table>	Option	Description	ip	Standard IPv4 address.	fqdn	Non-wildcard FQDN address object.					
Option	Description											
ip	Standard IPv4 address.											
fqdn	Non-wildcard FQDN address object.											
address	Address or address group of the real server.	string	Maximum length: 79									
domain	Wildcard domain name of the real server.	string	Maximum length: 255									
health-check	Enable to check the responsiveness of the real server before forwarding traffic.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Disable per server health check.</td></tr><tr><td>enable</td><td>Enable per server health check.</td></tr></table>	Option	Description	disable	Disable per server health check.	enable	Enable per server health check.					
Option	Description											
disable	Disable per server health check.											
enable	Enable per server health check.											
health-check-proto	Protocol of the health check monitor to use when polling to determine server's connectivity status.	option	-	ping								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>ping</td><td>Use PING to test the link with the server.</td></tr><tr><td>http</td><td>Use HTTP-GET to test the link with the server.</td></tr><tr><td>tcp-connect</td><td>Use a full TCP connection to test the link with the server.</td></tr></table>	Option	Description	ping	Use PING to test the link with the server.	http	Use HTTP-GET to test the link with the server.	tcp-connect	Use a full TCP connection to test the link with the server.			
Option	Description											
ping	Use PING to test the link with the server.											
http	Use HTTP-GET to test the link with the server.											
tcp-connect	Use a full TCP connection to test the link with the server.											
holddown-interval	Enable/disable holddown timer. Server will be considered active and reachable once the holddown period has expired (30 seconds).	option	-	enable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable per server holddown.</td></tr><tr><td>disable</td><td>Disable per server holddown.</td></tr></table>	Option	Description	enable	Enable per server holddown.	disable	Disable per server holddown.					
Option	Description											
enable	Enable per server holddown.											
disable	Disable per server holddown.											
http-host	HTTP server domain name in HTTP header.	string	Maximum length: 63									
id	Real server ID.	integer	Minimum value: 0 0 Maximum value: 4294967295									

Parameter	Description	Type	Size	Default								
ip	IP address of the real server.	ipv4-address-any	Not Specified	0.0.0.0								
mappedport	Port for communicating with the real server.	user	Not Specified									
port	Port for communicating with the real server.	integer	Minimum value: 1 Maximum value: 65535	443								
ssh-client-cert	Set access-proxy SSH client certificate profile.	string	Maximum length: 79									
ssh-host-key <name>	One or more server host key. Server host key name.	string	Maximum length: 79									
ssh-host-key-validation	Enable/disable SSH real server host key validation.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Disable SSH real server host key validation.</td></tr><tr><td>enable</td><td>Enable SSH real server host key validation.</td></tr></table>				Option	Description	disable	Disable SSH real server host key validation.	enable	Enable SSH real server host key validation.		
Option	Description											
disable	Disable SSH real server host key validation.											
enable	Enable SSH real server host key validation.											
status	Set the status of the real server to active so that it can accept traffic, or on standby or disabled so no traffic is sent.	option	-	active								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>active</td><td>Server status active.</td></tr><tr><td>standby</td><td>Server status standby.</td></tr><tr><td>disable</td><td>Server status disable.</td></tr></table>				Option	Description	active	Server status active.	standby	Server status standby.	disable	Server status disable.
Option	Description											
active	Server status active.											
standby	Server status standby.											
disable	Server status disable.											
translate-host	Enable/disable translation of hostname/IP from virtual server to real server.	option	-	enable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable virtual hostname/IP translation.</td></tr><tr><td>disable</td><td>Disable virtual hostname/IP translation.</td></tr></table>				Option	Description	enable	Enable virtual hostname/IP translation.	disable	Disable virtual hostname/IP translation.		
Option	Description											
enable	Enable virtual hostname/IP translation.											
disable	Disable virtual hostname/IP translation.											
type	TCP forwarding server type.	option	-	tcp-forwarding								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>tcp-forwarding</td><td>TCP forwarding.</td></tr><tr><td>ssh</td><td>SSH.</td></tr></table>				Option	Description	tcp-forwarding	TCP forwarding.	ssh	SSH.		
Option	Description											
tcp-forwarding	TCP forwarding.											
ssh	SSH.											

Parameter	Description	Type	Size	Default
weight	Weight of the real server. If weighted load balancing is enabled, the server with the highest weight gets more connections.	integer	Minimum value: 1 Maximum value: 255	1

config ssl-cipher-suites

Parameter	Description	Type	Size	Default																		
cipher	Cipher suite name.	option	-																			
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>TLS-AES-128-GCM-SHA256</i></td><td>Cipher suite TLS-AES-128-GCM-SHA256.</td></tr><tr><td><i>TLS-AES-256-GCM-SHA384</i></td><td>Cipher suite TLS-AES-256-GCM-SHA384.</td></tr><tr><td><i>TLS-CHACHA20-POLY1305-SHA256</i></td><td>Cipher suite TLS-CHACHA20-POLY1305-SHA256.</td></tr><tr><td><i>TLS-ECDHE-RSA-WITH-CHACHA20-POLY1305-SHA256</i></td><td>Cipher suite TLS-ECDHE-RSA-WITH-CHACHA20-POLY1305-SHA256.</td></tr><tr><td><i>TLS-ECDHE-ECDSA-WITH-CHACHA20-POLY1305-SHA256</i></td><td>Cipher suite TLS-ECDHE-ECDSA-WITH-CHACHA20-POLY1305-SHA256.</td></tr><tr><td><i>TLS-DHE-RSA-WITH-CHACHA20-POLY1305-SHA256</i></td><td>Cipher suite TLS-DHE-RSA-WITH-CHACHA20-POLY1305-SHA256.</td></tr><tr><td><i>TLS-DHE-RSA-WITH-AES-128-CBC-SHA</i></td><td>Cipher suite TLS-DHE-RSA-WITH-AES-128-CBC-SHA.</td></tr><tr><td><i>TLS-DHE-RSA-WITH-AES-256-CBC-SHA</i></td><td>Cipher suite TLS-DHE-RSA-WITH-AES-256-CBC-SHA.</td></tr></table>	Option	Description	<i>TLS-AES-128-GCM-SHA256</i>	Cipher suite TLS-AES-128-GCM-SHA256.	<i>TLS-AES-256-GCM-SHA384</i>	Cipher suite TLS-AES-256-GCM-SHA384.	<i>TLS-CHACHA20-POLY1305-SHA256</i>	Cipher suite TLS-CHACHA20-POLY1305-SHA256.	<i>TLS-ECDHE-RSA-WITH-CHACHA20-POLY1305-SHA256</i>	Cipher suite TLS-ECDHE-RSA-WITH-CHACHA20-POLY1305-SHA256.	<i>TLS-ECDHE-ECDSA-WITH-CHACHA20-POLY1305-SHA256</i>	Cipher suite TLS-ECDHE-ECDSA-WITH-CHACHA20-POLY1305-SHA256.	<i>TLS-DHE-RSA-WITH-CHACHA20-POLY1305-SHA256</i>	Cipher suite TLS-DHE-RSA-WITH-CHACHA20-POLY1305-SHA256.	<i>TLS-DHE-RSA-WITH-AES-128-CBC-SHA</i>	Cipher suite TLS-DHE-RSA-WITH-AES-128-CBC-SHA.	<i>TLS-DHE-RSA-WITH-AES-256-CBC-SHA</i>	Cipher suite TLS-DHE-RSA-WITH-AES-256-CBC-SHA.			
Option	Description																					
<i>TLS-AES-128-GCM-SHA256</i>	Cipher suite TLS-AES-128-GCM-SHA256.																					
<i>TLS-AES-256-GCM-SHA384</i>	Cipher suite TLS-AES-256-GCM-SHA384.																					
<i>TLS-CHACHA20-POLY1305-SHA256</i>	Cipher suite TLS-CHACHA20-POLY1305-SHA256.																					
<i>TLS-ECDHE-RSA-WITH-CHACHA20-POLY1305-SHA256</i>	Cipher suite TLS-ECDHE-RSA-WITH-CHACHA20-POLY1305-SHA256.																					
<i>TLS-ECDHE-ECDSA-WITH-CHACHA20-POLY1305-SHA256</i>	Cipher suite TLS-ECDHE-ECDSA-WITH-CHACHA20-POLY1305-SHA256.																					
<i>TLS-DHE-RSA-WITH-CHACHA20-POLY1305-SHA256</i>	Cipher suite TLS-DHE-RSA-WITH-CHACHA20-POLY1305-SHA256.																					
<i>TLS-DHE-RSA-WITH-AES-128-CBC-SHA</i>	Cipher suite TLS-DHE-RSA-WITH-AES-128-CBC-SHA.																					
<i>TLS-DHE-RSA-WITH-AES-256-CBC-SHA</i>	Cipher suite TLS-DHE-RSA-WITH-AES-256-CBC-SHA.																					

Parameter	Description	Type	Size	Default																								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>TLS-DHE-RSA-WITH-AES-128-CBC-SHA256</i></td><td>Cipher suite TLS-DHE-RSA-WITH-AES-128-CBC-SHA256.</td></tr><tr><td><i>TLS-DHE-RSA-WITH-AES-128-GCM-SHA256</i></td><td>Cipher suite TLS-DHE-RSA-WITH-AES-128-GCM-SHA256.</td></tr><tr><td><i>TLS-DHE-RSA-WITH-AES-256-CBC-SHA256</i></td><td>Cipher suite TLS-DHE-RSA-WITH-AES-256-CBC-SHA256.</td></tr><tr><td><i>TLS-DHE-RSA-WITH-AES-256-GCM-SHA384</i></td><td>Cipher suite TLS-DHE-RSA-WITH-AES-256-GCM-SHA384.</td></tr><tr><td><i>TLS-DHE-DSS-WITH-AES-128-CBC-SHA</i></td><td>Cipher suite TLS-DHE-DSS-WITH-AES-128-CBC-SHA.</td></tr><tr><td><i>TLS-DHE-DSS-WITH-AES-256-CBC-SHA</i></td><td>Cipher suite TLS-DHE-DSS-WITH-AES-256-CBC-SHA.</td></tr><tr><td><i>TLS-DHE-DSS-WITH-AES-128-CBC-SHA256</i></td><td>Cipher suite TLS-DHE-DSS-WITH-AES-128-CBC-SHA256.</td></tr><tr><td><i>TLS-DHE-DSS-WITH-AES-128-GCM-SHA256</i></td><td>Cipher suite TLS-DHE-DSS-WITH-AES-128-GCM-SHA256.</td></tr><tr><td><i>TLS-DHE-DSS-WITH-AES-256-CBC-SHA256</i></td><td>Cipher suite TLS-DHE-DSS-WITH-AES-256-CBC-SHA256.</td></tr><tr><td><i>TLS-DHE-DSS-WITH-AES-256-GCM-SHA384</i></td><td>Cipher suite TLS-DHE-DSS-WITH-AES-256-GCM-SHA384.</td></tr><tr><td><i>TLS-ECDHE-RSA-WITH-AES-128-CBC-SHA</i></td><td>Cipher suite TLS-ECDHE-RSA-WITH-AES-128-CBC-SHA.</td></tr></table>	Option	Description	<i>TLS-DHE-RSA-WITH-AES-128-CBC-SHA256</i>	Cipher suite TLS-DHE-RSA-WITH-AES-128-CBC-SHA256.	<i>TLS-DHE-RSA-WITH-AES-128-GCM-SHA256</i>	Cipher suite TLS-DHE-RSA-WITH-AES-128-GCM-SHA256.	<i>TLS-DHE-RSA-WITH-AES-256-CBC-SHA256</i>	Cipher suite TLS-DHE-RSA-WITH-AES-256-CBC-SHA256.	<i>TLS-DHE-RSA-WITH-AES-256-GCM-SHA384</i>	Cipher suite TLS-DHE-RSA-WITH-AES-256-GCM-SHA384.	<i>TLS-DHE-DSS-WITH-AES-128-CBC-SHA</i>	Cipher suite TLS-DHE-DSS-WITH-AES-128-CBC-SHA.	<i>TLS-DHE-DSS-WITH-AES-256-CBC-SHA</i>	Cipher suite TLS-DHE-DSS-WITH-AES-256-CBC-SHA.	<i>TLS-DHE-DSS-WITH-AES-128-CBC-SHA256</i>	Cipher suite TLS-DHE-DSS-WITH-AES-128-CBC-SHA256.	<i>TLS-DHE-DSS-WITH-AES-128-GCM-SHA256</i>	Cipher suite TLS-DHE-DSS-WITH-AES-128-GCM-SHA256.	<i>TLS-DHE-DSS-WITH-AES-256-CBC-SHA256</i>	Cipher suite TLS-DHE-DSS-WITH-AES-256-CBC-SHA256.	<i>TLS-DHE-DSS-WITH-AES-256-GCM-SHA384</i>	Cipher suite TLS-DHE-DSS-WITH-AES-256-GCM-SHA384.	<i>TLS-ECDHE-RSA-WITH-AES-128-CBC-SHA</i>	Cipher suite TLS-ECDHE-RSA-WITH-AES-128-CBC-SHA.			
Option	Description																											
<i>TLS-DHE-RSA-WITH-AES-128-CBC-SHA256</i>	Cipher suite TLS-DHE-RSA-WITH-AES-128-CBC-SHA256.																											
<i>TLS-DHE-RSA-WITH-AES-128-GCM-SHA256</i>	Cipher suite TLS-DHE-RSA-WITH-AES-128-GCM-SHA256.																											
<i>TLS-DHE-RSA-WITH-AES-256-CBC-SHA256</i>	Cipher suite TLS-DHE-RSA-WITH-AES-256-CBC-SHA256.																											
<i>TLS-DHE-RSA-WITH-AES-256-GCM-SHA384</i>	Cipher suite TLS-DHE-RSA-WITH-AES-256-GCM-SHA384.																											
<i>TLS-DHE-DSS-WITH-AES-128-CBC-SHA</i>	Cipher suite TLS-DHE-DSS-WITH-AES-128-CBC-SHA.																											
<i>TLS-DHE-DSS-WITH-AES-256-CBC-SHA</i>	Cipher suite TLS-DHE-DSS-WITH-AES-256-CBC-SHA.																											
<i>TLS-DHE-DSS-WITH-AES-128-CBC-SHA256</i>	Cipher suite TLS-DHE-DSS-WITH-AES-128-CBC-SHA256.																											
<i>TLS-DHE-DSS-WITH-AES-128-GCM-SHA256</i>	Cipher suite TLS-DHE-DSS-WITH-AES-128-GCM-SHA256.																											
<i>TLS-DHE-DSS-WITH-AES-256-CBC-SHA256</i>	Cipher suite TLS-DHE-DSS-WITH-AES-256-CBC-SHA256.																											
<i>TLS-DHE-DSS-WITH-AES-256-GCM-SHA384</i>	Cipher suite TLS-DHE-DSS-WITH-AES-256-GCM-SHA384.																											
<i>TLS-ECDHE-RSA-WITH-AES-128-CBC-SHA</i>	Cipher suite TLS-ECDHE-RSA-WITH-AES-128-CBC-SHA.																											

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>TLS-ECDHE-RSA-WITH-AES-128-CBC-SHA256</i>	Cipher suite TLS-ECDHE-RSA-WITH-AES-128-CBC-SHA256.		
	<i>TLS-ECDHE-RSA-WITH-AES-128-GCM-SHA256</i>	Cipher suite TLS-ECDHE-RSA-WITH-AES-128-GCM-SHA256.		
	<i>TLS-ECDHE-RSA-WITH-AES-256-CBC-SHA</i>	Cipher suite TLS-ECDHE-RSA-WITH-AES-256-CBC-SHA.		
	<i>TLS-ECDHE-RSA-WITH-AES-256-CBC-SHA384</i>	Cipher suite TLS-ECDHE-RSA-WITH-AES-256-CBC-SHA384.		
	<i>TLS-ECDHE-RSA-WITH-AES-256-GCM-SHA384</i>	Cipher suite TLS-ECDHE-RSA-WITH-AES-256-GCM-SHA384.		
	<i>TLS-ECDHE-ECDSA-WITH-AES-128-CBC-SHA</i>	Cipher suite TLS-ECDHE-ECDSA-WITH-AES-128-CBC-SHA.		
	<i>TLS-ECDHE-ECDSA-WITH-AES-128-CBC-SHA256</i>	Cipher suite TLS-ECDHE-ECDSA-WITH-AES-128-CBC-SHA256.		
	<i>TLS-ECDHE-ECDSA-WITH-AES-128-GCM-SHA256</i>	Cipher suite TLS-ECDHE-ECDSA-WITH-AES-128-GCM-SHA256.		
	<i>TLS-ECDHE-ECDSA-WITH-AES-256-CBC-SHA</i>	Cipher suite TLS-ECDHE-ECDSA-WITH-AES-256-CBC-SHA.		

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>TLS-ECDHE-ECDSA-WITH-AES-256-CBC-SHA384</i>	Cipher suite TLS-ECDHE-ECDSA-WITH-AES-256-CBC-SHA384.		
	<i>TLS-ECDHE-ECDSA-WITH-AES-256-GCM-SHA384</i>	Cipher suite TLS-ECDHE-ECDSA-WITH-AES-256-GCM-SHA384.		
	<i>TLS-RSA-WITH-AES-128-CBC-SHA</i>	Cipher suite TLS-RSA-WITH-AES-128-CBC-SHA.		
	<i>TLS-RSA-WITH-AES-256-CBC-SHA</i>	Cipher suite TLS-RSA-WITH-AES-256-CBC-SHA.		
	<i>TLS-RSA-WITH-AES-128-CBC-SHA256</i>	Cipher suite TLS-RSA-WITH-AES-128-CBC-SHA256.		
	<i>TLS-RSA-WITH-AES-128-GCM-SHA256</i>	Cipher suite TLS-RSA-WITH-AES-128-GCM-SHA256.		
	<i>TLS-RSA-WITH-AES-256-CBC-SHA256</i>	Cipher suite TLS-RSA-WITH-AES-256-CBC-SHA256.		
	<i>TLS-RSA-WITH-AES-256-GCM-SHA384</i>	Cipher suite TLS-RSA-WITH-AES-256-GCM-SHA384.		
	<i>TLS-RSA-WITH-CAMELLIA-128-CBC-SHA</i>	Cipher suite TLS-RSA-WITH-CAMELLIA-128-CBC-SHA.		
	<i>TLS-RSA-WITH-CAMELLIA-256-CBC-SHA</i>	Cipher suite TLS-RSA-WITH-CAMELLIA-256-CBC-SHA.		

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>TLS-RSA-WITH-CAMELLIA-128-CBC-SHA256</i>	Cipher suite TLS-RSA-WITH-CAMELLIA-128-CBC-SHA256.		
	<i>TLS-RSA-WITH-CAMELLIA-256-CBC-SHA256</i>	Cipher suite TLS-RSA-WITH-CAMELLIA-256-CBC-SHA256.		
	<i>TLS-DHE-RSA-WITH-3DES-EDE-CBC-SHA</i>	Cipher suite TLS-DHE-RSA-WITH-3DES-EDE-CBC-SHA.		
	<i>TLS-DHE-RSA-WITH-CAMELLIA-128-CBC-SHA</i>	Cipher suite TLS-DHE-RSA-WITH-CAMELLIA-128-CBC-SHA.		
	<i>TLS-DHE-DSS-WITH-CAMELLIA-128-CBC-SHA</i>	Cipher suite TLS-DSS-RSA-WITH-CAMELLIA-128-CBC-SHA.		
	<i>TLS-DHE-RSA-WITH-CAMELLIA-256-CBC-SHA</i>	Cipher suite TLS-DHE-RSA-WITH-CAMELLIA-256-CBC-SHA.		
	<i>TLS-DHE-DSS-WITH-CAMELLIA-256-CBC-SHA</i>	Cipher suite TLS-DHE-DSS-WITH-CAMELLIA-256-CBC-SHA.		
	<i>TLS-DHE-RSA-WITH-CAMELLIA-128-CBC-SHA256</i>	Cipher suite TLS-DHE-RSA-WITH-CAMELLIA-128-CBC-SHA256.		
	<i>TLS-DHE-DSS-WITH-CAMELLIA-128-CBC-SHA256</i>	Cipher suite TLS-DHE-DSS-WITH-CAMELLIA-128-CBC-SHA256.		

Parameter	Description	Type	Size	Default
	Option	Description		
	TLS-DHE-RSA-WITH-CAMELLIA-256-CBC-SHA256	Cipher suite TLS-DHE-RSA-WITH-CAMELLIA-256-CBC-SHA256.		
	TLS-DHE-DSS-WITH-CAMELLIA-256-CBC-SHA256	Cipher suite TLS-DHE-DSS-WITH-CAMELLIA-256-CBC-SHA256.		
	TLS-DHE-RSA-WITH-SEED-CBC-SHA	Cipher suite TLS-DHE-RSA-WITH-SEED-CBC-SHA.		
	TLS-DHE-DSS-WITH-SEED-CBC-SHA	Cipher suite TLS-DHE-DSS-WITH-SEED-CBC-SHA.		
	TLS-DHE-RSA-WITH-ARIA-128-CBC-SHA256	Cipher suite TLS-DHE-RSA-WITH-ARIA-128-CBC-SHA256.		
	TLS-DHE-RSA-WITH-ARIA-256-CBC-SHA384	Cipher suite TLS-DHE-RSA-WITH-ARIA-256-CBC-SHA384.		
	TLS-DHE-DSS-WITH-ARIA-128-CBC-SHA256	Cipher suite TLS-DHE-DSS-WITH-ARIA-128-CBC-SHA256.		
	TLS-DHE-DSS-WITH-ARIA-256-CBC-SHA384	Cipher suite TLS-DHE-DSS-WITH-ARIA-256-CBC-SHA384.		
	TLS-RSA-WITH-SEED-CBC-SHA	Cipher suite TLS-RSA-WITH-SEED-CBC-SHA.		
TLS-RSA-WITH-ARIA-128-CBC-SHA256	Cipher suite TLS-RSA-WITH-ARIA-128-CBC-SHA256.			

Parameter	Description	Type	Size	Default																						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>TLS-RSA-WITH-ARIA-256-CBC-SHA384</td><td>Cipher suite TLS-RSA-WITH-ARIA-256-CBC-SHA384.</td></tr><tr><td>TLS-ECDHE-RSA-WITH-ARIA-128-CBC-SHA256</td><td>Cipher suite TLS-ECDHE-RSA-WITH-ARIA-128-CBC-SHA256.</td></tr><tr><td>TLS-ECDHE-RSA-WITH-ARIA-256-CBC-SHA384</td><td>Cipher suite TLS-ECDHE-RSA-WITH-ARIA-256-CBC-SHA384.</td></tr><tr><td>TLS-ECDHE-ECDSA-WITH-ARIA-128-CBC-SHA256</td><td>Cipher suite TLS-ECDHE-ECDSA-WITH-ARIA-128-CBC_SHA256.</td></tr><tr><td>TLS-ECDHE-ECDSA-WITH-ARIA-256-CBC-SHA384</td><td>Cipher suite TLS-ECDHE-ECDSA-WITH-ARIA-256-CBC_SHA384.</td></tr><tr><td>TLS-ECDHE-RSA-WITH-RC4-128-SHA</td><td>Cipher suite TLS-ECDHE-RSA-WITH-RC4-128-SHA.</td></tr><tr><td>TLS-ECDHE-RSA-WITH-3DES-EDE-CBC-SHA</td><td>Cipher suite TLS-ECDHE-RSA-WITH-3DES-EDE-CBC-SHA.</td></tr><tr><td>TLS-DHE-DSS-WITH-3DES-EDE-CBC-SHA</td><td>Cipher suite TLS-DHE-DSS-WITH-3DES-EDE-CBC-SHA.</td></tr><tr><td>TLS-RSA-WITH-3DES-EDE-CBC-SHA</td><td>Cipher suite TLS-RSA-WITH-3DES-EDE-CBC-SHA.</td></tr><tr><td>TLS-RSA-WITH-RC4-128-MD5</td><td>Cipher suite TLS-RSA-WITH-RC4-128-MD5.</td></tr></table>	Option	Description	TLS-RSA-WITH-ARIA-256-CBC-SHA384	Cipher suite TLS-RSA-WITH-ARIA-256-CBC-SHA384.	TLS-ECDHE-RSA-WITH-ARIA-128-CBC-SHA256	Cipher suite TLS-ECDHE-RSA-WITH-ARIA-128-CBC-SHA256.	TLS-ECDHE-RSA-WITH-ARIA-256-CBC-SHA384	Cipher suite TLS-ECDHE-RSA-WITH-ARIA-256-CBC-SHA384.	TLS-ECDHE-ECDSA-WITH-ARIA-128-CBC-SHA256	Cipher suite TLS-ECDHE-ECDSA-WITH-ARIA-128-CBC_SHA256.	TLS-ECDHE-ECDSA-WITH-ARIA-256-CBC-SHA384	Cipher suite TLS-ECDHE-ECDSA-WITH-ARIA-256-CBC_SHA384.	TLS-ECDHE-RSA-WITH-RC4-128-SHA	Cipher suite TLS-ECDHE-RSA-WITH-RC4-128-SHA.	TLS-ECDHE-RSA-WITH-3DES-EDE-CBC-SHA	Cipher suite TLS-ECDHE-RSA-WITH-3DES-EDE-CBC-SHA.	TLS-DHE-DSS-WITH-3DES-EDE-CBC-SHA	Cipher suite TLS-DHE-DSS-WITH-3DES-EDE-CBC-SHA.	TLS-RSA-WITH-3DES-EDE-CBC-SHA	Cipher suite TLS-RSA-WITH-3DES-EDE-CBC-SHA.	TLS-RSA-WITH-RC4-128-MD5	Cipher suite TLS-RSA-WITH-RC4-128-MD5.			
Option	Description																									
TLS-RSA-WITH-ARIA-256-CBC-SHA384	Cipher suite TLS-RSA-WITH-ARIA-256-CBC-SHA384.																									
TLS-ECDHE-RSA-WITH-ARIA-128-CBC-SHA256	Cipher suite TLS-ECDHE-RSA-WITH-ARIA-128-CBC-SHA256.																									
TLS-ECDHE-RSA-WITH-ARIA-256-CBC-SHA384	Cipher suite TLS-ECDHE-RSA-WITH-ARIA-256-CBC-SHA384.																									
TLS-ECDHE-ECDSA-WITH-ARIA-128-CBC-SHA256	Cipher suite TLS-ECDHE-ECDSA-WITH-ARIA-128-CBC_SHA256.																									
TLS-ECDHE-ECDSA-WITH-ARIA-256-CBC-SHA384	Cipher suite TLS-ECDHE-ECDSA-WITH-ARIA-256-CBC_SHA384.																									
TLS-ECDHE-RSA-WITH-RC4-128-SHA	Cipher suite TLS-ECDHE-RSA-WITH-RC4-128-SHA.																									
TLS-ECDHE-RSA-WITH-3DES-EDE-CBC-SHA	Cipher suite TLS-ECDHE-RSA-WITH-3DES-EDE-CBC-SHA.																									
TLS-DHE-DSS-WITH-3DES-EDE-CBC-SHA	Cipher suite TLS-DHE-DSS-WITH-3DES-EDE-CBC-SHA.																									
TLS-RSA-WITH-3DES-EDE-CBC-SHA	Cipher suite TLS-RSA-WITH-3DES-EDE-CBC-SHA.																									
TLS-RSA-WITH-RC4-128-MD5	Cipher suite TLS-RSA-WITH-RC4-128-MD5.																									

Parameter	Description	Type	Size	Default										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>TLS-RSA-WITH-RC4-128-SHA</i></td><td>Cipher suite TLS-RSA-WITH-RC4-128-SHA.</td></tr><tr><td><i>TLS-DHE-RSA-WITH-DES-CBC-SHA</i></td><td>Cipher suite TLS-DHE-RSA-WITH-DES-CBC-SHA.</td></tr><tr><td><i>TLS-DHE-DSS-WITH-DES-CBC-SHA</i></td><td>Cipher suite TLS-DHE-DSS-WITH-DES-CBC-SHA.</td></tr><tr><td><i>TLS-RSA-WITH-DES-CBC-SHA</i></td><td>Cipher suite TLS-RSA-WITH-DES-CBC-SHA.</td></tr></table>	Option	Description	<i>TLS-RSA-WITH-RC4-128-SHA</i>	Cipher suite TLS-RSA-WITH-RC4-128-SHA.	<i>TLS-DHE-RSA-WITH-DES-CBC-SHA</i>	Cipher suite TLS-DHE-RSA-WITH-DES-CBC-SHA.	<i>TLS-DHE-DSS-WITH-DES-CBC-SHA</i>	Cipher suite TLS-DHE-DSS-WITH-DES-CBC-SHA.	<i>TLS-RSA-WITH-DES-CBC-SHA</i>	Cipher suite TLS-RSA-WITH-DES-CBC-SHA.			
	Option	Description												
	<i>TLS-RSA-WITH-RC4-128-SHA</i>	Cipher suite TLS-RSA-WITH-RC4-128-SHA.												
	<i>TLS-DHE-RSA-WITH-DES-CBC-SHA</i>	Cipher suite TLS-DHE-RSA-WITH-DES-CBC-SHA.												
	<i>TLS-DHE-DSS-WITH-DES-CBC-SHA</i>	Cipher suite TLS-DHE-DSS-WITH-DES-CBC-SHA.												
<i>TLS-RSA-WITH-DES-CBC-SHA</i>	Cipher suite TLS-RSA-WITH-DES-CBC-SHA.													
priority	SSL/TLS cipher suites priority.	integer	Minimum value: 0 Maximum value: 4294967295	0										
versions	SSL/TLS versions that the cipher suite can be used with.	option	-	tls-1.0 tls-1.1 tls-1.2 tls-1.3										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>tls-1.0</i></td><td>TLS 1.0.</td></tr><tr><td><i>tls-1.1</i></td><td>TLS 1.1.</td></tr><tr><td><i>tls-1.2</i></td><td>TLS 1.2.</td></tr><tr><td><i>tls-1.3</i></td><td>TLS 1.3.</td></tr></table>	Option	Description	<i>tls-1.0</i>	TLS 1.0.	<i>tls-1.1</i>	TLS 1.1.	<i>tls-1.2</i>	TLS 1.2.	<i>tls-1.3</i>	TLS 1.3.			
	Option	Description												
	<i>tls-1.0</i>	TLS 1.0.												
	<i>tls-1.1</i>	TLS 1.1.												
	<i>tls-1.2</i>	TLS 1.2.												
<i>tls-1.3</i>	TLS 1.3.													

config api-gateway6

Parameter	Description	Type	Size	Default
application <name>	SaaS application controlled by this Access Proxy. SaaS application name.	string	Maximum length: 79	
http-cookie-age	Time in minutes that client web browsers should keep a cookie. Default is 60 minutes. 0 = no time limit.	integer	Minimum value: 0 Maximum value: 525600	60
http-cookie-domain	Domain that HTTP cookie persistence should apply to.	string	Maximum length: 35	

Parameter	Description	Type	Size	Default
http-cookie-domain-from-host	Enable/disable use of HTTP cookie domain from host field in HTTP.	option	-	disable
	Option	Description		
	disable	Disable use of HTTP cookie domain from host field in HTTP (use http-cooke-domain setting).		
	enable	Enable use of HTTP cookie domain from host field in HTTP.		
http-cookie-generation	Generation of HTTP cookie to be accepted. Changing invalidates all existing cookies.	integer	Minimum value: 0 0 Maximum value: 4294967295	
http-cookie-path	Limit HTTP cookie persistence to the specified path.	string	Maximum length: 35	
http-cookie-share	Control sharing of cookies across API Gateway. Use of same-ip means a cookie from one virtual server can be used by another. Disable stops cookie sharing.	option	-	same-ip
	Option	Description		
	disable	Only allow HTTP cookie to match this API Gateway.		
	same-ip	Allow HTTP cookie to match any API Gateway with same IP.		
https-cookie-secure	Enable/disable verification that inserted HTTPS cookies are secure.	option	-	disable
	Option	Description		
	disable	Do not mark cookie as secure, allow sharing between an HTTP and HTTPS connection.		
	enable	Mark inserted cookie as secure, cookie can only be used for HTTPS a connection.		
id	API Gateway ID.	integer	Minimum value: 0 0 Maximum value: 4294967295	
ldb-method	Method used to distribute sessions to real servers.	option	-	static

Parameter	Description	Type	Size	Default														
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>static</i></td><td>Distribute to server based on source IP.</td></tr><tr><td><i>round-robin</i></td><td>Distribute to server based round robin order.</td></tr><tr><td><i>weighted</i></td><td>Distribute to server based on weight.</td></tr><tr><td><i>first-alive</i></td><td>Distribute to the first server that is alive.</td></tr><tr><td><i>http-host</i></td><td>Distribute to server based on host field in HTTP header.</td></tr></table>	Option	Description	<i>static</i>	Distribute to server based on source IP.	<i>round-robin</i>	Distribute to server based round robin order.	<i>weighted</i>	Distribute to server based on weight.	<i>first-alive</i>	Distribute to the first server that is alive.	<i>http-host</i>	Distribute to server based on host field in HTTP header.					
	Option	Description																
	<i>static</i>	Distribute to server based on source IP.																
	<i>round-robin</i>	Distribute to server based round robin order.																
	<i>weighted</i>	Distribute to server based on weight.																
	<i>first-alive</i>	Distribute to the first server that is alive.																
<i>http-host</i>	Distribute to server based on host field in HTTP header.																	
persistence	Configure how to make sure that clients connect to the same server every time they make a request that is part of the same session.	option	-	none														
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>none</i></td><td>None.</td></tr><tr><td><i>http-cookie</i></td><td>HTTP cookie.</td></tr></table>	Option	Description	<i>none</i>	None.	<i>http-cookie</i>	HTTP cookie.											
	Option	Description																
	<i>none</i>	None.																
<i>http-cookie</i>	HTTP cookie.																	
saml-redirect	Enable/disable SAML redirection after successful authentication.	option	-	disable														
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>disable</i></td><td>Do not support redirection after successful SAML authentication.</td></tr><tr><td><i>enable</i></td><td>Support redirection after successful SAML authentication.</td></tr></table>	Option	Description	<i>disable</i>	Do not support redirection after successful SAML authentication.	<i>enable</i>	Support redirection after successful SAML authentication.											
	Option	Description																
	<i>disable</i>	Do not support redirection after successful SAML authentication.																
<i>enable</i>	Support redirection after successful SAML authentication.																	
saml-server	SAML service provider configuration for VIP authentication.	string	Maximum length: 35															
service	Service.	option	-	https														
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>http</i></td><td>HTTP.</td></tr><tr><td><i>https</i></td><td>HTTPS.</td></tr><tr><td><i>tcp-forwarding</i></td><td>TCP-FORWARDING.</td></tr><tr><td><i>samlsp</i></td><td>SAML-SP.</td></tr><tr><td><i>web-portal</i></td><td>VPN-SSL-WEB-PORTAL.</td></tr><tr><td><i>saas</i></td><td>SAAS.</td></tr></table>	Option	Description	<i>http</i>	HTTP.	<i>https</i>	HTTPS.	<i>tcp-forwarding</i>	TCP-FORWARDING.	<i>samlsp</i>	SAML-SP.	<i>web-portal</i>	VPN-SSL-WEB-PORTAL.	<i>saas</i>	SAAS.			
	Option	Description																
	<i>http</i>	HTTP.																
	<i>https</i>	HTTPS.																
	<i>tcp-forwarding</i>	TCP-FORWARDING.																
	<i>samlsp</i>	SAML-SP.																
	<i>web-portal</i>	VPN-SSL-WEB-PORTAL.																
<i>saas</i>	SAAS.																	
ssl-algorithm	Permitted encryption algorithms for the server side of SSL full mode sessions according to encryption strength.	option	-	high														

Parameter	Description	Type	Size	Default														
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>high</td><td>High encryption. Allow only AES and ChaCha.</td></tr><tr><td>medium</td><td>Medium encryption. Allow AES, ChaCha, 3DES, and RC4.</td></tr><tr><td>low</td><td>Low encryption. Allow AES, ChaCha, 3DES, RC4, and DES.</td></tr></table>	Option	Description	high	High encryption. Allow only AES and ChaCha.	medium	Medium encryption. Allow AES, ChaCha, 3DES, and RC4.	low	Low encryption. Allow AES, ChaCha, 3DES, RC4, and DES.									
	Option	Description																
	high	High encryption. Allow only AES and ChaCha.																
	medium	Medium encryption. Allow AES, ChaCha, 3DES, and RC4.																
low	Low encryption. Allow AES, ChaCha, 3DES, RC4, and DES.																	
ssl-dh-bits	Number of bits to use in the Diffie-Hellman exchange for RSA encryption of SSL sessions.	option	-	2048														
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>768</td><td>768-bit Diffie-Hellman prime.</td></tr><tr><td>1024</td><td>1024-bit Diffie-Hellman prime.</td></tr><tr><td>1536</td><td>1536-bit Diffie-Hellman prime.</td></tr><tr><td>2048</td><td>2048-bit Diffie-Hellman prime.</td></tr><tr><td>3072</td><td>3072-bit Diffie-Hellman prime.</td></tr><tr><td>4096</td><td>4096-bit Diffie-Hellman prime.</td></tr></table>	Option	Description	768	768-bit Diffie-Hellman prime.	1024	1024-bit Diffie-Hellman prime.	1536	1536-bit Diffie-Hellman prime.	2048	2048-bit Diffie-Hellman prime.	3072	3072-bit Diffie-Hellman prime.	4096	4096-bit Diffie-Hellman prime.			
	Option	Description																
	768	768-bit Diffie-Hellman prime.																
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	2048	2048-bit Diffie-Hellman prime.																
	3072	3072-bit Diffie-Hellman prime.																
4096	4096-bit Diffie-Hellman prime.																	
ssl-max-version	Highest SSL/TLS version acceptable from a server.	option	-	tls-1.3														
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>tls-1.0</td><td>TLS 1.0.</td></tr><tr><td>tls-1.1</td><td>TLS 1.1.</td></tr><tr><td>tls-1.2</td><td>TLS 1.2.</td></tr><tr><td>tls-1.3</td><td>TLS 1.3.</td></tr></table>	Option	Description	tls-1.0	TLS 1.0.	tls-1.1	TLS 1.1.	tls-1.2	TLS 1.2.	tls-1.3	TLS 1.3.							
	Option	Description																
	tls-1.0	TLS 1.0.																
	tls-1.1	TLS 1.1.																
	tls-1.2	TLS 1.2.																
tls-1.3	TLS 1.3.																	
ssl-min-version	Lowest SSL/TLS version acceptable from a server.	option	-	tls-1.1														
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>tls-1.0</td><td>TLS 1.0.</td></tr><tr><td>tls-1.1</td><td>TLS 1.1.</td></tr><tr><td>tls-1.2</td><td>TLS 1.2.</td></tr><tr><td>tls-1.3</td><td>TLS 1.3.</td></tr></table>	Option	Description	tls-1.0	TLS 1.0.	tls-1.1	TLS 1.1.	tls-1.2	TLS 1.2.	tls-1.3	TLS 1.3.							
	Option	Description																
	tls-1.0	TLS 1.0.																
	tls-1.1	TLS 1.1.																
	tls-1.2	TLS 1.2.																
tls-1.3	TLS 1.3.																	
ssl-renegotiation	Enable/disable secure renegotiation to comply with RFC 5746.	option	-	enable														

Parameter	Description	Type	Size	Default
	Option Description			
	<i>enable</i>	Enable secure renegotiation.		
	<i>disable</i>	Disable secure renegotiation.		
ssl-vpn-web-portal	SSL-VPN web portal.	string	Maximum length: 35	
url-map	URL pattern to match.	string	Maximum length: 511	/
url-map-type	Type of url-map.	option	-	sub-string
	Option Description			
	<i>sub-string</i>	Match the pattern if a string contains the sub-string.		
	<i>wildcard</i>	Match the pattern with wildcards.		
	<i>regex</i>	Match the pattern with a regular expression.		
virtual-host	Virtual host.	string	Maximum length: 79	

config realservers

Parameter	Description	Type	Size	Default
addr-type	Type of address.	option	-	ip
	Option Description			
	<i>ip</i>	Standard IPv4 address.		
	<i>fqdn</i>	Non-wildcard FQDN address object.		
address	Address or address group of the real server.	string	Maximum length: 79	
domain	Wildcard domain name of the real server.	string	Maximum length: 255	
health-check	Enable to check the responsiveness of the real server before forwarding traffic.	option	-	disable
	Option Description			
	<i>disable</i>	Disable per server health check.		
	<i>enable</i>	Enable per server health check.		

Parameter	Description	Type	Size	Default								
health-check-proto	Protocol of the health check monitor to use when polling to determine server's connectivity status.	option	-	ping								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>ping</td><td>Use PING to test the link with the server.</td></tr><tr><td>http</td><td>Use HTTP-GET to test the link with the server.</td></tr><tr><td>tcp-connect</td><td>Use a full TCP connection to test the link with the server.</td></tr></table>	Option	Description	ping	Use PING to test the link with the server.	http	Use HTTP-GET to test the link with the server.	tcp-connect	Use a full TCP connection to test the link with the server.			
Option	Description											
ping	Use PING to test the link with the server.											
http	Use HTTP-GET to test the link with the server.											
tcp-connect	Use a full TCP connection to test the link with the server.											
holddown-interval	Enable/disable holddown timer. Server will be considered active and reachable once the holddown period has expired (30 seconds).	option	-	enable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable per server holddown.</td></tr><tr><td>disable</td><td>Disable per server holddown.</td></tr></table>	Option	Description	enable	Enable per server holddown.	disable	Disable per server holddown.					
Option	Description											
enable	Enable per server holddown.											
disable	Disable per server holddown.											
http-host	HTTP server domain name in HTTP header.	string	Maximum length: 63									
id	Real server ID.	integer	Minimum value: 0 Maximum value: 4294967295	0								
ip	IPv6 address of the real server.	ipv6-address	Not Specified	::								
mappedport	Port for communicating with the real server.	user	Not Specified									
port	Port for communicating with the real server.	integer	Minimum value: 1 Maximum value: 65535	443								
ssh-client-cert	Set access-proxy SSH client certificate profile.	string	Maximum length: 79									
ssh-host-key <name>	One or more server host key. Server host key name.	string	Maximum length: 79									
ssh-host-key-validation	Enable/disable SSH real server host key validation.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Disable SSH real server host key validation.</td></tr><tr><td>enable</td><td>Enable SSH real server host key validation.</td></tr></table>	Option	Description	disable	Disable SSH real server host key validation.	enable	Enable SSH real server host key validation.					
Option	Description											
disable	Disable SSH real server host key validation.											
enable	Enable SSH real server host key validation.											

Parameter	Description	Type	Size	Default								
status	Set the status of the real server to active so that it can accept traffic, or on standby or disabled so no traffic is sent.	option	-	active								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>active</td><td>Server status active.</td></tr><tr><td>standby</td><td>Server status standby.</td></tr><tr><td>disable</td><td>Server status disable.</td></tr></table>	Option	Description	active	Server status active.	standby	Server status standby.	disable	Server status disable.			
Option	Description											
active	Server status active.											
standby	Server status standby.											
disable	Server status disable.											
translate-host	Enable/disable translation of hostname/IP from virtual server to real server.	option	-	enable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable virtual hostname/IP translation.</td></tr><tr><td>disable</td><td>Disable virtual hostname/IP translation.</td></tr></table>	Option	Description	enable	Enable virtual hostname/IP translation.	disable	Disable virtual hostname/IP translation.					
Option	Description											
enable	Enable virtual hostname/IP translation.											
disable	Disable virtual hostname/IP translation.											
type	TCP forwarding server type.	option	-	tcp-forwarding								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>tcp-forwarding</td><td>TCP forwarding.</td></tr><tr><td>ssh</td><td>SSH.</td></tr></table>	Option	Description	tcp-forwarding	TCP forwarding.	ssh	SSH.					
Option	Description											
tcp-forwarding	TCP forwarding.											
ssh	SSH.											
weight	Weight of the real server. If weighted load balancing is enabled, the server with the highest weight gets more connections.	integer	Minimum value: 1 Maximum value: 255									

config ssl-cipher-suites

Parameter	Description	Type	Size	Default						
cipher	Cipher suite name.	option	-							
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>TLS-AES-128-GCM-SHA256</i></td><td>Cipher suite TLS-AES-128-GCM-SHA256.</td></tr><tr><td><i>TLS-AES-256-GCM-SHA384</i></td><td>Cipher suite TLS-AES-256-GCM-SHA384.</td></tr></table>	Option	Description	<i>TLS-AES-128-GCM-SHA256</i>	Cipher suite TLS-AES-128-GCM-SHA256.	<i>TLS-AES-256-GCM-SHA384</i>	Cipher suite TLS-AES-256-GCM-SHA384.			
Option	Description									
<i>TLS-AES-128-GCM-SHA256</i>	Cipher suite TLS-AES-128-GCM-SHA256.									
<i>TLS-AES-256-GCM-SHA384</i>	Cipher suite TLS-AES-256-GCM-SHA384.									

Parameter	Description	Type	Size	Default																						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>TLS-CHACHA20-POLY1305-SHA256</i></td><td>Cipher suite TLS-CHACHA20-POLY1305-SHA256.</td></tr><tr><td><i>TLS-ECDHE-RSA-WITH-CHACHA20-POLY1305-SHA256</i></td><td>Cipher suite TLS-ECDHE-RSA-WITH-CHACHA20-POLY1305-SHA256.</td></tr><tr><td><i>TLS-ECDHE-ECDSA-WITH-CHACHA20-POLY1305-SHA256</i></td><td>Cipher suite TLS-ECDHE-ECDSA-WITH-CHACHA20-POLY1305-SHA256.</td></tr><tr><td><i>TLS-DHE-RSA-WITH-CHACHA20-POLY1305-SHA256</i></td><td>Cipher suite TLS-DHE-RSA-WITH-CHACHA20-POLY1305-SHA256.</td></tr><tr><td><i>TLS-DHE-RSA-WITH-AES-128-CBC-SHA</i></td><td>Cipher suite TLS-DHE-RSA-WITH-AES-128-CBC-SHA.</td></tr><tr><td><i>TLS-DHE-RSA-WITH-AES-256-CBC-SHA</i></td><td>Cipher suite TLS-DHE-RSA-WITH-AES-256-CBC-SHA.</td></tr><tr><td><i>TLS-DHE-RSA-WITH-AES-128-CBC-SHA256</i></td><td>Cipher suite TLS-DHE-RSA-WITH-AES-128-CBC-SHA256.</td></tr><tr><td><i>TLS-DHE-RSA-WITH-AES-128-GCM-SHA256</i></td><td>Cipher suite TLS-DHE-RSA-WITH-AES-128-GCM-SHA256.</td></tr><tr><td><i>TLS-DHE-RSA-WITH-AES-256-CBC-SHA256</i></td><td>Cipher suite TLS-DHE-RSA-WITH-AES-256-CBC-SHA256.</td></tr><tr><td><i>TLS-DHE-RSA-WITH-AES-256-GCM-SHA384</i></td><td>Cipher suite TLS-DHE-RSA-WITH-AES-256-GCM-SHA384.</td></tr></table>	Option	Description	<i>TLS-CHACHA20-POLY1305-SHA256</i>	Cipher suite TLS-CHACHA20-POLY1305-SHA256.	<i>TLS-ECDHE-RSA-WITH-CHACHA20-POLY1305-SHA256</i>	Cipher suite TLS-ECDHE-RSA-WITH-CHACHA20-POLY1305-SHA256.	<i>TLS-ECDHE-ECDSA-WITH-CHACHA20-POLY1305-SHA256</i>	Cipher suite TLS-ECDHE-ECDSA-WITH-CHACHA20-POLY1305-SHA256.	<i>TLS-DHE-RSA-WITH-CHACHA20-POLY1305-SHA256</i>	Cipher suite TLS-DHE-RSA-WITH-CHACHA20-POLY1305-SHA256.	<i>TLS-DHE-RSA-WITH-AES-128-CBC-SHA</i>	Cipher suite TLS-DHE-RSA-WITH-AES-128-CBC-SHA.	<i>TLS-DHE-RSA-WITH-AES-256-CBC-SHA</i>	Cipher suite TLS-DHE-RSA-WITH-AES-256-CBC-SHA.	<i>TLS-DHE-RSA-WITH-AES-128-CBC-SHA256</i>	Cipher suite TLS-DHE-RSA-WITH-AES-128-CBC-SHA256.	<i>TLS-DHE-RSA-WITH-AES-128-GCM-SHA256</i>	Cipher suite TLS-DHE-RSA-WITH-AES-128-GCM-SHA256.	<i>TLS-DHE-RSA-WITH-AES-256-CBC-SHA256</i>	Cipher suite TLS-DHE-RSA-WITH-AES-256-CBC-SHA256.	<i>TLS-DHE-RSA-WITH-AES-256-GCM-SHA384</i>	Cipher suite TLS-DHE-RSA-WITH-AES-256-GCM-SHA384.			
Option	Description																									
<i>TLS-CHACHA20-POLY1305-SHA256</i>	Cipher suite TLS-CHACHA20-POLY1305-SHA256.																									
<i>TLS-ECDHE-RSA-WITH-CHACHA20-POLY1305-SHA256</i>	Cipher suite TLS-ECDHE-RSA-WITH-CHACHA20-POLY1305-SHA256.																									
<i>TLS-ECDHE-ECDSA-WITH-CHACHA20-POLY1305-SHA256</i>	Cipher suite TLS-ECDHE-ECDSA-WITH-CHACHA20-POLY1305-SHA256.																									
<i>TLS-DHE-RSA-WITH-CHACHA20-POLY1305-SHA256</i>	Cipher suite TLS-DHE-RSA-WITH-CHACHA20-POLY1305-SHA256.																									
<i>TLS-DHE-RSA-WITH-AES-128-CBC-SHA</i>	Cipher suite TLS-DHE-RSA-WITH-AES-128-CBC-SHA.																									
<i>TLS-DHE-RSA-WITH-AES-256-CBC-SHA</i>	Cipher suite TLS-DHE-RSA-WITH-AES-256-CBC-SHA.																									
<i>TLS-DHE-RSA-WITH-AES-128-CBC-SHA256</i>	Cipher suite TLS-DHE-RSA-WITH-AES-128-CBC-SHA256.																									
<i>TLS-DHE-RSA-WITH-AES-128-GCM-SHA256</i>	Cipher suite TLS-DHE-RSA-WITH-AES-128-GCM-SHA256.																									
<i>TLS-DHE-RSA-WITH-AES-256-CBC-SHA256</i>	Cipher suite TLS-DHE-RSA-WITH-AES-256-CBC-SHA256.																									
<i>TLS-DHE-RSA-WITH-AES-256-GCM-SHA384</i>	Cipher suite TLS-DHE-RSA-WITH-AES-256-GCM-SHA384.																									

Parameter	Description	Type	Size	Default																						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>TLS-DHE-DSS-WITH-AES-128-CBC-SHA</i></td><td>Cipher suite TLS-DHE-DSS-WITH-AES-128-CBC-SHA.</td></tr><tr><td><i>TLS-DHE-DSS-WITH-AES-256-CBC-SHA</i></td><td>Cipher suite TLS-DHE-DSS-WITH-AES-256-CBC-SHA.</td></tr><tr><td><i>TLS-DHE-DSS-WITH-AES-128-CBC-SHA256</i></td><td>Cipher suite TLS-DHE-DSS-WITH-AES-128-CBC-SHA256.</td></tr><tr><td><i>TLS-DHE-DSS-WITH-AES-128-GCM-SHA256</i></td><td>Cipher suite TLS-DHE-DSS-WITH-AES-128-GCM-SHA256.</td></tr><tr><td><i>TLS-DHE-DSS-WITH-AES-256-CBC-SHA256</i></td><td>Cipher suite TLS-DHE-DSS-WITH-AES-256-CBC-SHA256.</td></tr><tr><td><i>TLS-DHE-DSS-WITH-AES-256-GCM-SHA384</i></td><td>Cipher suite TLS-DHE-DSS-WITH-AES-256-GCM-SHA384.</td></tr><tr><td><i>TLS-ECDHE-RSA-WITH-AES-128-CBC-SHA</i></td><td>Cipher suite TLS-ECDHE-RSA-WITH-AES-128-CBC-SHA.</td></tr><tr><td><i>TLS-ECDHE-RSA-WITH-AES-128-CBC-SHA256</i></td><td>Cipher suite TLS-ECDHE-RSA-WITH-AES-128-CBC-SHA256.</td></tr><tr><td><i>TLS-ECDHE-RSA-WITH-AES-128-GCM-SHA256</i></td><td>Cipher suite TLS-ECDHE-RSA-WITH-AES-128-GCM-SHA256.</td></tr><tr><td><i>TLS-ECDHE-RSA-WITH-AES-256-CBC-SHA</i></td><td>Cipher suite TLS-ECDHE-RSA-WITH-AES-256-CBC-SHA.</td></tr></table>	Option	Description	<i>TLS-DHE-DSS-WITH-AES-128-CBC-SHA</i>	Cipher suite TLS-DHE-DSS-WITH-AES-128-CBC-SHA.	<i>TLS-DHE-DSS-WITH-AES-256-CBC-SHA</i>	Cipher suite TLS-DHE-DSS-WITH-AES-256-CBC-SHA.	<i>TLS-DHE-DSS-WITH-AES-128-CBC-SHA256</i>	Cipher suite TLS-DHE-DSS-WITH-AES-128-CBC-SHA256.	<i>TLS-DHE-DSS-WITH-AES-128-GCM-SHA256</i>	Cipher suite TLS-DHE-DSS-WITH-AES-128-GCM-SHA256.	<i>TLS-DHE-DSS-WITH-AES-256-CBC-SHA256</i>	Cipher suite TLS-DHE-DSS-WITH-AES-256-CBC-SHA256.	<i>TLS-DHE-DSS-WITH-AES-256-GCM-SHA384</i>	Cipher suite TLS-DHE-DSS-WITH-AES-256-GCM-SHA384.	<i>TLS-ECDHE-RSA-WITH-AES-128-CBC-SHA</i>	Cipher suite TLS-ECDHE-RSA-WITH-AES-128-CBC-SHA.	<i>TLS-ECDHE-RSA-WITH-AES-128-CBC-SHA256</i>	Cipher suite TLS-ECDHE-RSA-WITH-AES-128-CBC-SHA256.	<i>TLS-ECDHE-RSA-WITH-AES-128-GCM-SHA256</i>	Cipher suite TLS-ECDHE-RSA-WITH-AES-128-GCM-SHA256.	<i>TLS-ECDHE-RSA-WITH-AES-256-CBC-SHA</i>	Cipher suite TLS-ECDHE-RSA-WITH-AES-256-CBC-SHA.			
Option	Description																									
<i>TLS-DHE-DSS-WITH-AES-128-CBC-SHA</i>	Cipher suite TLS-DHE-DSS-WITH-AES-128-CBC-SHA.																									
<i>TLS-DHE-DSS-WITH-AES-256-CBC-SHA</i>	Cipher suite TLS-DHE-DSS-WITH-AES-256-CBC-SHA.																									
<i>TLS-DHE-DSS-WITH-AES-128-CBC-SHA256</i>	Cipher suite TLS-DHE-DSS-WITH-AES-128-CBC-SHA256.																									
<i>TLS-DHE-DSS-WITH-AES-128-GCM-SHA256</i>	Cipher suite TLS-DHE-DSS-WITH-AES-128-GCM-SHA256.																									
<i>TLS-DHE-DSS-WITH-AES-256-CBC-SHA256</i>	Cipher suite TLS-DHE-DSS-WITH-AES-256-CBC-SHA256.																									
<i>TLS-DHE-DSS-WITH-AES-256-GCM-SHA384</i>	Cipher suite TLS-DHE-DSS-WITH-AES-256-GCM-SHA384.																									
<i>TLS-ECDHE-RSA-WITH-AES-128-CBC-SHA</i>	Cipher suite TLS-ECDHE-RSA-WITH-AES-128-CBC-SHA.																									
<i>TLS-ECDHE-RSA-WITH-AES-128-CBC-SHA256</i>	Cipher suite TLS-ECDHE-RSA-WITH-AES-128-CBC-SHA256.																									
<i>TLS-ECDHE-RSA-WITH-AES-128-GCM-SHA256</i>	Cipher suite TLS-ECDHE-RSA-WITH-AES-128-GCM-SHA256.																									
<i>TLS-ECDHE-RSA-WITH-AES-256-CBC-SHA</i>	Cipher suite TLS-ECDHE-RSA-WITH-AES-256-CBC-SHA.																									

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>TLS-ECDHE-RSA-WITH-AES-256-CBC-SHA384</i>	Cipher suite TLS-ECDHE-RSA-WITH-AES-256-CBC-SHA384.		
	<i>TLS-ECDHE-RSA-WITH-AES-256-GCM-SHA384</i>	Cipher suite TLS-ECDHE-RSA-WITH-AES-256-GCM-SHA384.		
	<i>TLS-ECDHE-ECDSA-WITH-AES-128-CBC-SHA</i>	Cipher suite TLS-ECDHE-ECDSA-WITH-AES-128-CBC-SHA.		
	<i>TLS-ECDHE-ECDSA-WITH-AES-128-CBC-SHA256</i>	Cipher suite TLS-ECDHE-ECDSA-WITH-AES-128-CBC-SHA256.		
	<i>TLS-ECDHE-ECDSA-WITH-AES-128-GCM-SHA256</i>	Cipher suite TLS-ECDHE-ECDSA-WITH-AES-128-GCM-SHA256.		
	<i>TLS-ECDHE-ECDSA-WITH-AES-256-CBC-SHA</i>	Cipher suite TLS-ECDHE-ECDSA-WITH-AES-256-CBC-SHA.		
	<i>TLS-ECDHE-ECDSA-WITH-AES-256-CBC-SHA384</i>	Cipher suite TLS-ECDHE-ECDSA-WITH-AES-256-CBC-SHA384.		
	<i>TLS-ECDHE-ECDSA-WITH-AES-256-GCM-SHA384</i>	Cipher suite TLS-ECDHE-ECDSA-WITH-AES-256-GCM-SHA384.		
	<i>TLS-RSA-WITH-AES-128-CBC-SHA</i>	Cipher suite TLS-RSA-WITH-AES-128-CBC-SHA.		
	<i>TLS-RSA-WITH-AES-256-CBC-SHA</i>	Cipher suite TLS-RSA-WITH-AES-256-CBC-SHA.		

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>TLS-RSA-WITH-AES-128-CBC-SHA256</i>	Cipher suite TLS-RSA-WITH-AES-128-CBC-SHA256.		
	<i>TLS-RSA-WITH-AES-128-GCM-SHA256</i>	Cipher suite TLS-RSA-WITH-AES-128-GCM-SHA256.		
	<i>TLS-RSA-WITH-AES-256-CBC-SHA256</i>	Cipher suite TLS-RSA-WITH-AES-256-CBC-SHA256.		
	<i>TLS-RSA-WITH-AES-256-GCM-SHA384</i>	Cipher suite TLS-RSA-WITH-AES-256-GCM-SHA384.		
	<i>TLS-RSA-WITH-CAMELLIA-128-CBC-SHA</i>	Cipher suite TLS-RSA-WITH-CAMELLIA-128-CBC-SHA.		
	<i>TLS-RSA-WITH-CAMELLIA-256-CBC-SHA</i>	Cipher suite TLS-RSA-WITH-CAMELLIA-256-CBC-SHA.		
	<i>TLS-RSA-WITH-CAMELLIA-128-CBC-SHA256</i>	Cipher suite TLS-RSA-WITH-CAMELLIA-128-CBC-SHA256.		
	<i>TLS-RSA-WITH-CAMELLIA-256-CBC-SHA256</i>	Cipher suite TLS-RSA-WITH-CAMELLIA-256-CBC-SHA256.		
	<i>TLS-DHE-RSA-WITH-3DES-EDE-CBC-SHA</i>	Cipher suite TLS-DHE-RSA-WITH-3DES-EDE-CBC-SHA.		
	<i>TLS-DHE-RSA-WITH-CAMELLIA-128-CBC-SHA</i>	Cipher suite TLS-DHE-RSA-WITH-CAMELLIA-128-CBC-SHA.		

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>TLS-DHE-DSS-WITH-CAMELLIA-128-CBC-SHA</i>	Cipher suite TLS-DSS-RSA-WITH-CAMELLIA-128-CBC-SHA.		
	<i>TLS-DHE-RSA-WITH-CAMELLIA-256-CBC-SHA</i>	Cipher suite TLS-DHE-RSA-WITH-CAMELLIA-256-CBC-SHA.		
	<i>TLS-DHE-DSS-WITH-CAMELLIA-256-CBC-SHA</i>	Cipher suite TLS-DHE-DSS-WITH-CAMELLIA-256-CBC-SHA.		
	<i>TLS-DHE-RSA-WITH-CAMELLIA-128-CBC-SHA256</i>	Cipher suite TLS-DHE-RSA-WITH-CAMELLIA-128-CBC-SHA256.		
	<i>TLS-DHE-DSS-WITH-CAMELLIA-128-CBC-SHA256</i>	Cipher suite TLS-DHE-DSS-WITH-CAMELLIA-128-CBC-SHA256.		
	<i>TLS-DHE-RSA-WITH-CAMELLIA-256-CBC-SHA256</i>	Cipher suite TLS-DHE-RSA-WITH-CAMELLIA-256-CBC-SHA256.		
	<i>TLS-DHE-DSS-WITH-CAMELLIA-256-CBC-SHA256</i>	Cipher suite TLS-DHE-DSS-WITH-CAMELLIA-256-CBC-SHA256.		
	<i>TLS-DHE-RSA-WITH-SEED-CBC-SHA</i>	Cipher suite TLS-DHE-RSA-WITH-SEED-CBC-SHA.		
	<i>TLS-DHE-DSS-WITH-SEED-CBC-SHA</i>	Cipher suite TLS-DHE-DSS-WITH-SEED-CBC-SHA.		

Parameter	Description	Type	Size	Default																						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>TLS-DHE-RSA-WITH-ARIA-128-CBC-SHA256</i></td><td>Cipher suite TLS-DHE-RSA-WITH-ARIA-128-CBC-SHA256.</td></tr><tr><td><i>TLS-DHE-RSA-WITH-ARIA-256-CBC-SHA384</i></td><td>Cipher suite TLS-DHE-RSA-WITH-ARIA-256-CBC-SHA384.</td></tr><tr><td><i>TLS-DHE-DSS-WITH-ARIA-128-CBC-SHA256</i></td><td>Cipher suite TLS-DHE-DSS-WITH-ARIA-128-CBC-SHA256.</td></tr><tr><td><i>TLS-DHE-DSS-WITH-ARIA-256-CBC-SHA384</i></td><td>Cipher suite TLS-DHE-DSS-WITH-ARIA-256-CBC-SHA384.</td></tr><tr><td><i>TLS-RSA-WITH-SEED-CBC-SHA</i></td><td>Cipher suite TLS-RSA-WITH-SEED-CBC-SHA.</td></tr><tr><td><i>TLS-RSA-WITH-ARIA-128-CBC-SHA256</i></td><td>Cipher suite TLS-RSA-WITH-ARIA-128-CBC-SHA256.</td></tr><tr><td><i>TLS-RSA-WITH-ARIA-256-CBC-SHA384</i></td><td>Cipher suite TLS-RSA-WITH-ARIA-256-CBC-SHA384.</td></tr><tr><td><i>TLS-ECDHE-RSA-WITH-ARIA-128-CBC-SHA256</i></td><td>Cipher suite TLS-ECDHE-RSA-WITH-ARIA-128-CBC-SHA256.</td></tr><tr><td><i>TLS-ECDHE-RSA-WITH-ARIA-256-CBC-SHA384</i></td><td>Cipher suite TLS-ECDHE-RSA-WITH-ARIA-256-CBC-SHA384.</td></tr><tr><td><i>TLS-ECDHE-ECDSA-WITH-ARIA-128-CBC-SHA256</i></td><td>Cipher suite TLS-ECDHE-ECDSA-WITH-ARIA-128-CBC-SHA256.</td></tr></table>	Option	Description	<i>TLS-DHE-RSA-WITH-ARIA-128-CBC-SHA256</i>	Cipher suite TLS-DHE-RSA-WITH-ARIA-128-CBC-SHA256.	<i>TLS-DHE-RSA-WITH-ARIA-256-CBC-SHA384</i>	Cipher suite TLS-DHE-RSA-WITH-ARIA-256-CBC-SHA384.	<i>TLS-DHE-DSS-WITH-ARIA-128-CBC-SHA256</i>	Cipher suite TLS-DHE-DSS-WITH-ARIA-128-CBC-SHA256.	<i>TLS-DHE-DSS-WITH-ARIA-256-CBC-SHA384</i>	Cipher suite TLS-DHE-DSS-WITH-ARIA-256-CBC-SHA384.	<i>TLS-RSA-WITH-SEED-CBC-SHA</i>	Cipher suite TLS-RSA-WITH-SEED-CBC-SHA.	<i>TLS-RSA-WITH-ARIA-128-CBC-SHA256</i>	Cipher suite TLS-RSA-WITH-ARIA-128-CBC-SHA256.	<i>TLS-RSA-WITH-ARIA-256-CBC-SHA384</i>	Cipher suite TLS-RSA-WITH-ARIA-256-CBC-SHA384.	<i>TLS-ECDHE-RSA-WITH-ARIA-128-CBC-SHA256</i>	Cipher suite TLS-ECDHE-RSA-WITH-ARIA-128-CBC-SHA256.	<i>TLS-ECDHE-RSA-WITH-ARIA-256-CBC-SHA384</i>	Cipher suite TLS-ECDHE-RSA-WITH-ARIA-256-CBC-SHA384.	<i>TLS-ECDHE-ECDSA-WITH-ARIA-128-CBC-SHA256</i>	Cipher suite TLS-ECDHE-ECDSA-WITH-ARIA-128-CBC-SHA256.			
Option	Description																									
<i>TLS-DHE-RSA-WITH-ARIA-128-CBC-SHA256</i>	Cipher suite TLS-DHE-RSA-WITH-ARIA-128-CBC-SHA256.																									
<i>TLS-DHE-RSA-WITH-ARIA-256-CBC-SHA384</i>	Cipher suite TLS-DHE-RSA-WITH-ARIA-256-CBC-SHA384.																									
<i>TLS-DHE-DSS-WITH-ARIA-128-CBC-SHA256</i>	Cipher suite TLS-DHE-DSS-WITH-ARIA-128-CBC-SHA256.																									
<i>TLS-DHE-DSS-WITH-ARIA-256-CBC-SHA384</i>	Cipher suite TLS-DHE-DSS-WITH-ARIA-256-CBC-SHA384.																									
<i>TLS-RSA-WITH-SEED-CBC-SHA</i>	Cipher suite TLS-RSA-WITH-SEED-CBC-SHA.																									
<i>TLS-RSA-WITH-ARIA-128-CBC-SHA256</i>	Cipher suite TLS-RSA-WITH-ARIA-128-CBC-SHA256.																									
<i>TLS-RSA-WITH-ARIA-256-CBC-SHA384</i>	Cipher suite TLS-RSA-WITH-ARIA-256-CBC-SHA384.																									
<i>TLS-ECDHE-RSA-WITH-ARIA-128-CBC-SHA256</i>	Cipher suite TLS-ECDHE-RSA-WITH-ARIA-128-CBC-SHA256.																									
<i>TLS-ECDHE-RSA-WITH-ARIA-256-CBC-SHA384</i>	Cipher suite TLS-ECDHE-RSA-WITH-ARIA-256-CBC-SHA384.																									
<i>TLS-ECDHE-ECDSA-WITH-ARIA-128-CBC-SHA256</i>	Cipher suite TLS-ECDHE-ECDSA-WITH-ARIA-128-CBC-SHA256.																									

Parameter	Description	Type	Size	Default																						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>TLS-ECDHE-ECDSA-WITH-ARIA-256-CBC-SHA384</i></td><td>Cipher suite TLS-ECDHE-ECDSA-WITH-ARIA-256-CBC_SHA384.</td></tr><tr><td><i>TLS-ECDHE-RSA-WITH-RC4-128-SHA</i></td><td>Cipher suite TLS-ECDHE-RSA-WITH-RC4-128-SHA.</td></tr><tr><td><i>TLS-ECDHE-RSA-WITH-3DES-EDE-CBC-SHA</i></td><td>Cipher suite TLS-ECDHE-RSA-WITH-3DES-EDE-CBC-SHA.</td></tr><tr><td><i>TLS-DHE-DSS-WITH-3DES-EDE-CBC-SHA</i></td><td>Cipher suite TLS-DHE-DSS-WITH-3DES-EDE-CBC-SHA.</td></tr><tr><td><i>TLS-RSA-WITH-3DES-EDE-CBC-SHA</i></td><td>Cipher suite TLS-RSA-WITH-3DES-EDE-CBC-SHA.</td></tr><tr><td><i>TLS-RSA-WITH-RC4-128-MD5</i></td><td>Cipher suite TLS-RSA-WITH-RC4-128-MD5.</td></tr><tr><td><i>TLS-RSA-WITH-RC4-128-SHA</i></td><td>Cipher suite TLS-RSA-WITH-RC4-128-SHA.</td></tr><tr><td><i>TLS-DHE-RSA-WITH-DES-CBC-SHA</i></td><td>Cipher suite TLS-DHE-RSA-WITH-DES-CBC-SHA.</td></tr><tr><td><i>TLS-DHE-DSS-WITH-DES-CBC-SHA</i></td><td>Cipher suite TLS-DHE-DSS-WITH-DES-CBC-SHA.</td></tr><tr><td><i>TLS-RSA-WITH-DES-CBC-SHA</i></td><td>Cipher suite TLS-RSA-WITH-DES-CBC-SHA.</td></tr></table>	Option	Description	<i>TLS-ECDHE-ECDSA-WITH-ARIA-256-CBC-SHA384</i>	Cipher suite TLS-ECDHE-ECDSA-WITH-ARIA-256-CBC_SHA384.	<i>TLS-ECDHE-RSA-WITH-RC4-128-SHA</i>	Cipher suite TLS-ECDHE-RSA-WITH-RC4-128-SHA.	<i>TLS-ECDHE-RSA-WITH-3DES-EDE-CBC-SHA</i>	Cipher suite TLS-ECDHE-RSA-WITH-3DES-EDE-CBC-SHA.	<i>TLS-DHE-DSS-WITH-3DES-EDE-CBC-SHA</i>	Cipher suite TLS-DHE-DSS-WITH-3DES-EDE-CBC-SHA.	<i>TLS-RSA-WITH-3DES-EDE-CBC-SHA</i>	Cipher suite TLS-RSA-WITH-3DES-EDE-CBC-SHA.	<i>TLS-RSA-WITH-RC4-128-MD5</i>	Cipher suite TLS-RSA-WITH-RC4-128-MD5.	<i>TLS-RSA-WITH-RC4-128-SHA</i>	Cipher suite TLS-RSA-WITH-RC4-128-SHA.	<i>TLS-DHE-RSA-WITH-DES-CBC-SHA</i>	Cipher suite TLS-DHE-RSA-WITH-DES-CBC-SHA.	<i>TLS-DHE-DSS-WITH-DES-CBC-SHA</i>	Cipher suite TLS-DHE-DSS-WITH-DES-CBC-SHA.	<i>TLS-RSA-WITH-DES-CBC-SHA</i>	Cipher suite TLS-RSA-WITH-DES-CBC-SHA.			
	Option	Description																								
	<i>TLS-ECDHE-ECDSA-WITH-ARIA-256-CBC-SHA384</i>	Cipher suite TLS-ECDHE-ECDSA-WITH-ARIA-256-CBC_SHA384.																								
	<i>TLS-ECDHE-RSA-WITH-RC4-128-SHA</i>	Cipher suite TLS-ECDHE-RSA-WITH-RC4-128-SHA.																								
	<i>TLS-ECDHE-RSA-WITH-3DES-EDE-CBC-SHA</i>	Cipher suite TLS-ECDHE-RSA-WITH-3DES-EDE-CBC-SHA.																								
	<i>TLS-DHE-DSS-WITH-3DES-EDE-CBC-SHA</i>	Cipher suite TLS-DHE-DSS-WITH-3DES-EDE-CBC-SHA.																								
	<i>TLS-RSA-WITH-3DES-EDE-CBC-SHA</i>	Cipher suite TLS-RSA-WITH-3DES-EDE-CBC-SHA.																								
	<i>TLS-RSA-WITH-RC4-128-MD5</i>	Cipher suite TLS-RSA-WITH-RC4-128-MD5.																								
	<i>TLS-RSA-WITH-RC4-128-SHA</i>	Cipher suite TLS-RSA-WITH-RC4-128-SHA.																								
	<i>TLS-DHE-RSA-WITH-DES-CBC-SHA</i>	Cipher suite TLS-DHE-RSA-WITH-DES-CBC-SHA.																								
<i>TLS-DHE-DSS-WITH-DES-CBC-SHA</i>	Cipher suite TLS-DHE-DSS-WITH-DES-CBC-SHA.																									
<i>TLS-RSA-WITH-DES-CBC-SHA</i>	Cipher suite TLS-RSA-WITH-DES-CBC-SHA.																									
priority	SSL/TLS cipher suites priority.	integer	Minimum value: 0 0 Maximum value: 4294967295																							

Parameter	Description	Type	Size	Default
versions	SSL/TLS versions that the cipher suite can be used with.	option	-	tls-1.0 tls-1.1 tls-1.2 tls-1.3
Option	Description			
tls-1.0	TLS 1.0.			
tls-1.1	TLS 1.1.			
tls-1.2	TLS 1.2.			
tls-1.3	TLS 1.3.			

config firewall access-proxy-ssh-client-cert

Configure Access Proxy SSH client certificate.

```
config firewall access-proxy-ssh-client-cert
    Description: Configure Access Proxy SSH client certificate.
    edit <name>
        set auth-ca {string}
        config cert-extension
            Description: Configure certificate extension for user certificate.
            edit <name>
                set critical [no|yes]
                set data {string}
                set type [fixed|user]
            next
        next
    end
    set permit-agent-forwarding [enable|disable]
    set permit-port-forwarding [enable|disable]
    set permit-pty [enable|disable]
    set permit-user-rc [enable|disable]
    set permit-x11-forwarding [enable|disable]
    set source-address [enable|disable]
next
end
```

config firewall access-proxy-ssh-client-cert

Parameter	Description	Type	Size	Default
auth-ca	Name of the SSH server public key authentication CA.	string	Maximum length: 79	

Parameter	Description	Type	Size	Default						
name	SSH client certificate name.	string	Maximum length: 79							
permit-agent-forwarding	Enable/disable appending permit-agent-forwarding certificate extension.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable setting.</td></tr><tr><td>disable</td><td>Disable setting.</td></tr></table>	Option	Description	enable	Enable setting.	disable	Disable setting.			
Option	Description									
enable	Enable setting.									
disable	Disable setting.									
permit-port-forwarding	Enable/disable appending permit-port-forwarding certificate extension.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable setting.</td></tr><tr><td>disable</td><td>Disable setting.</td></tr></table>	Option	Description	enable	Enable setting.	disable	Disable setting.			
Option	Description									
enable	Enable setting.									
disable	Disable setting.									
permit-pty	Enable/disable appending permit-pty certificate extension.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable setting.</td></tr><tr><td>disable</td><td>Disable setting.</td></tr></table>	Option	Description	enable	Enable setting.	disable	Disable setting.			
Option	Description									
enable	Enable setting.									
disable	Disable setting.									
permit-user-rc	Enable/disable appending permit-user-rc certificate extension.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable setting.</td></tr><tr><td>disable</td><td>Disable setting.</td></tr></table>	Option	Description	enable	Enable setting.	disable	Disable setting.			
Option	Description									
enable	Enable setting.									
disable	Disable setting.									
permit-x11-forwarding	Enable/disable appending permit-x11-forwarding certificate extension.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable setting.</td></tr><tr><td>disable</td><td>Disable setting.</td></tr></table>	Option	Description	enable	Enable setting.	disable	Disable setting.			
Option	Description									
enable	Enable setting.									
disable	Disable setting.									
source-address	Enable/disable appending source-address certificate critical option. This option ensure certificate only accepted from FortiGate source address.	option	-	disable						

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		

config cert-extension

Parameter	Description	Type	Size	Default
critical	Critical option.	option	-	no
	Option	Description		
	<i>no</i>	Certificate extension, server ignores the unsupported certificate extension.		
	<i>yes</i>	Critical option, server refuses to authorize if it cannot recognize the critical option.		
data	Data of certificate extension.	string	Maximum length: 127	
name	Name of certificate extension.	string	Maximum length: 127	
type	Type of certificate extension.	option	-	fixed
	Option	Description		
	<i>fixed</i>	Fixed certificate extension entry.		
	<i>user</i>	Certificate extension entry filled with authenticated username.		

config firewall access-proxy-virtual-host

Configure Access Proxy virtual hosts.

```

config firewall access-proxy-virtual-host
  Description: Configure Access Proxy virtual hosts.
  edit <name>
    set host {string}
    set host-type [sub-string|wildcard]
    set replacemsg-group {string}
    set ssl-certificate {string}
  next
end

```

config firewall access-proxy-virtual-host

Parameter	Description	Type	Size	Default
host	The host name.	string	Maximum length: 79	
host-type	Type of host pattern.	option	-	sub-string
	Option	Description		
	sub-string	Match the pattern if a string contains the sub-string.		
	wildcard	Match the pattern with wildcards.		
name	Virtual host name.	string	Maximum length: 79	
replacemsg-group	Access-proxy-virtual-host replacement message override group.	string	Maximum length: 35	
ssl-certificate	SSL certificate for this host.	string	Maximum length: 35	

config firewall acl



This command is available for model(s): FortiGate 1000F, FortiGate 1001F, FortiGate 100EF, FortiGate 100E, FortiGate 100F, FortiGate 101F, FortiGate 1100E, FortiGate 1101E, FortiGate 140E-POE, FortiGate 140E, FortiGate 1500DT, FortiGate 1500D, FortiGate 1800F, FortiGate 1801F, FortiGate 2000E, FortiGate 200F, FortiGate 201F, FortiGate 2201E, FortiGate 2500E, FortiGate 2600F, FortiGate 2601F, FortiGate 3000D, FortiGate 3000F, FortiGate 3001F, FortiGate 300E, FortiGate 301E, FortiGate 3100D, FortiGate 3200D, FortiGate 3200F, FortiGate 3201F, FortiGate 3300E, FortiGate 3301E, FortiGate 3400E, FortiGate 3401E, FortiGate 3501F, FortiGate 3600E, FortiGate 3601E, FortiGate 3700D, FortiGate 3700F, FortiGate 3701F, FortiGate 3960E, FortiGate 3980E, FortiGate 400E Bypass, FortiGate 400E, FortiGate 400F, FortiGate 401E, FortiGate 401F, FortiGate 4200F, FortiGate 4201F, FortiGate 4400F, FortiGate 4401F, FortiGate 500E, FortiGate 501E, FortiGate 600E, FortiGate 601E.

It is not available for: FortiGate 1000D, FortiGate 200E, FortiGate 201E, FortiGate 40F 3G4G, FortiGate 5001E1, FortiGate 5001E, FortiGate 60E-POE, FortiGate 60E, FortiGate 60F, FortiGate 61E, FortiGate 70F, FortiGate 71F, FortiGate 800D, FortiGate 80E-POE, FortiGate 80E, FortiGate 80F Bypass, FortiGate 80F DSL, FortiGate 80F-POE, FortiGate 80F, FortiGate 81E-POE, FortiGate 81E, FortiGate 81F-POE, FortiGate 81F, FortiGate 900D, FortiGate 90E, FortiGate 91E, FortiGate-VM64 Aliyun, FortiGate-VM64 AWS, FortiGate-VM64 Azure, FortiGate-VM64 GCP, FortiGate-VM64 OPC, FortiGate-VM64, FortiGateRugged 60F 3G4G, FortiGateRugged 60F, FortiGateRugged 70F 3G4G, FortiGateRugged 70F, FortiWiFi 40F 3G4G, FortiWiFi 40F, FortiWiFi 60E, FortiWiFi 60F, FortiWiFi 61E, FortiWiFi 61F, FortiWiFi 80F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G-POE, FortiWiFi 81F 2R-POE, FortiWiFi 81F 2R.

Configure IPv4 access control list.

```
config firewall acl
  Description: Configure IPv4 access control list.
  edit <policyid>
    set comments {var-string}
    set dstaddr <name1>, <name2>, ...
    set interface {string}
    set name {string}
    set service <name1>, <name2>, ...
    set srcaddr <name1>, <name2>, ...
    set status [enable|disable]
  next
end
```

config firewall acl

Parameter	Description	Type	Size	Default
comments	Comment.	var-string	Maximum length: 1023	
dstaddr <name>	Destination address name. Address name.	string	Maximum length: 79	
interface	Interface name.	string	Maximum length: 35	
name	Policy name.	string	Maximum length: 35	
policyid	Policy ID.	integer	Minimum value: 0 Maximum value: 9999	0
service <name>	Service name. Service name.	string	Maximum length: 79	
srcaddr <name>	Source address name. Address name.	string	Maximum length: 79	
status	Enable/disable access control list status.	option	-	enable
		Option	Description	
		enable	Enable access control list status.	
		disable	Disable access control list status.	

config firewall acl6



This command is available for model(s): FortiGate 1000F, FortiGate 1001F, FortiGate 100EF, FortiGate 100E, FortiGate 100F, FortiGate 101F, FortiGate 1100E, FortiGate 1101E, FortiGate 140E-POE, FortiGate 140E, FortiGate 1500DT, FortiGate 1500D, FortiGate 1800F, FortiGate 1801F, FortiGate 2000E, FortiGate 200F, FortiGate 201F, FortiGate 2201E, FortiGate 2500E, FortiGate 2600F, FortiGate 2601F, FortiGate 3000D, FortiGate 3000F, FortiGate 3001F, FortiGate 300E, FortiGate 301E, FortiGate 3100D, FortiGate 3200D, FortiGate 3200F, FortiGate 3201F, FortiGate 3300E, FortiGate 3301E, FortiGate 3400E, FortiGate 3401E, FortiGate 3501F, FortiGate 3600E, FortiGate 3601E, FortiGate 3700D, FortiGate 3700F, FortiGate 3701F, FortiGate 3960E, FortiGate 3980E, FortiGate 400E Bypass, FortiGate 400E, FortiGate 400F, FortiGate 401E, FortiGate 401F, FortiGate 4200F, FortiGate 4201F, FortiGate 4400F, FortiGate 4401F, FortiGate 500E, FortiGate 501E, FortiGate 600E, FortiGate 601E.

It is not available for: FortiGate 1000D, FortiGate 200E, FortiGate 201E, FortiGate 40F 3G4G, FortiGate 5001E1, FortiGate 5001E, FortiGate 60E-POE, FortiGate 60E, FortiGate 60F, FortiGate 61E, FortiGate 70F, FortiGate 71F, FortiGate 800D, FortiGate 80E-POE, FortiGate 80E, FortiGate 80F Bypass, FortiGate 80F DSL, FortiGate 80F-POE, FortiGate 80F, FortiGate 81E-POE, FortiGate 81E, FortiGate 81F-POE, FortiGate 81F, FortiGate 900D, FortiGate 90E, FortiGate 91E, FortiGate-VM64 Aliyun, FortiGate-VM64 AWS, FortiGate-VM64 Azure, FortiGate-VM64 GCP, FortiGate-VM64 OPC, FortiGate-VM64, FortiGateRugged 60F 3G4G, FortiGateRugged 60F, FortiGateRugged 70F 3G4G, FortiGateRugged 70F, FortiWiFi 40F 3G4G, FortiWiFi 40F, FortiWiFi 60E, FortiWiFi 60F, FortiWiFi 61E, FortiWiFi 61F, FortiWiFi 80F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G-POE, FortiWiFi 81F 2R-POE, FortiWiFi 81F 2R.

Configure IPv6 access control list.

```
config firewall acl6
  Description: Configure IPv6 access control list.
  edit <policyid>
    set comments {var-string}
    set dstaddr <name1>, <name2>, ...
    set interface {string}
    set name {string}
    set service <name1>, <name2>, ...
    set srcaddr <name1>, <name2>, ...
    set status [enable|disable]
  next
end
```

config firewall acl6

Parameter	Description	Type	Size	Default
comments	Comment.	var-string	Maximum length: 1023	
dstaddr <name>	Destination address name. Address name.	string	Maximum length: 79	
interface	Interface name.	string	Maximum length: 35	
name	Policy name.	string	Maximum length: 35	
policyid	Policy ID.	integer	Minimum value: 0 Maximum value: 9999	0
service <name>	Service name. Service name.	string	Maximum length: 79	
srcaddr <name>	Source address name. Address name.	string	Maximum length: 79	
status	Enable/disable access control list status.	option	-	enable
		Option	Description	
		enable	Enable access control list status.	
		disable	Disable access control list status.	

config firewall address

Configure IPv4 addresses.

```
config firewall address
  Description: Configure IPv4 addresses.
  edit <name>
    set allow-routing [enable|disable]
    set associated-interface {string}
    set cache-ttl {integer}
    set clearpass-spt [unknown|healthy|...]
    set color {integer}
    set comment {var-string}
    set country {string}
    set end-ip {ipv4-address-any}
```

```

set epg-name {string}
set fabric-object [enable|disable]
set filter {var-string}
set fqdn {string}
set fsso-group <name1>, <name2>, ...
set interface {string}
config list
    Description: IP address list.
    edit <ip>
    next
end
set macaddr <macaddr1>, <macaddr2>, ...
set node-ip-only [enable|disable]
set obj-id {var-string}
set obj-tag {string}
set obj-type [ip|mac]
set organization {string}
set policy-group {string}
set sdn {string}
set sdn-addr-type [private|public|...]
set sdn-tag {string}
set start-ip {ipv4-address-any}
set sub-type [sdn|clearpass-spt|...]
set subnet {ipv4-classnet-any}
set subnet-name {string}
set tag-detection-level {string}
set tag-type {string}
config tagging
    Description: Config object tagging.
    edit <name>
        set category {string}
        set tags <name1>, <name2>, ...
    next
end
set tenant {string}
set type [ipmask|iprange|...]
set uuid {uuid}
set wildcard {ipv4-classnet-any}
set wildcard-fqdn {string}
next
end

```

config firewall address

Parameter	Description	Type	Size	Default
allow-routing	Enable/disable use of this address in the static route configuration.	option	-	disable

Parameter	Description	Type	Size	Default														
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable use of this address in the static route configuration.</td></tr><tr><td><i>disable</i></td><td>Disable use of this address in the static route configuration.</td></tr></table>	Option	Description	<i>enable</i>	Enable use of this address in the static route configuration.	<i>disable</i>	Disable use of this address in the static route configuration.											
	Option	Description																
	<i>enable</i>	Enable use of this address in the static route configuration.																
<i>disable</i>	Disable use of this address in the static route configuration.																	
associated-interface	Network interface associated with address.	string	Maximum length: 35															
cache-ttl	Defines the minimal TTL of individual IP addresses in FQDN cache measured in seconds.	integer	Minimum value: 0 Maximum value: 86400	0														
clearpass-spt	SPT (System Posture Token) value.	option	-	unknown														
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>unknown</i></td><td>UNKNOWN.</td></tr><tr><td><i>healthy</i></td><td>HEALTHY.</td></tr><tr><td><i>quarantine</i></td><td>QUARANTINE.</td></tr><tr><td><i>checkup</i></td><td>CHECKUP.</td></tr><tr><td><i>transient</i></td><td>TRANSIENT.</td></tr><tr><td><i>infected</i></td><td>INFECTED.</td></tr></table>	Option	Description	<i>unknown</i>	UNKNOWN.	<i>healthy</i>	HEALTHY.	<i>quarantine</i>	QUARANTINE.	<i>checkup</i>	CHECKUP.	<i>transient</i>	TRANSIENT.	<i>infected</i>	INFECTED.			
	Option	Description																
	<i>unknown</i>	UNKNOWN.																
	<i>healthy</i>	HEALTHY.																
	<i>quarantine</i>	QUARANTINE.																
	<i>checkup</i>	CHECKUP.																
	<i>transient</i>	TRANSIENT.																
<i>infected</i>	INFECTED.																	
color	Color of icon on the GUI.	integer	Minimum value: 0 Maximum value: 32	0														
comment	Comment.	var-string	Maximum length: 255															
country	IP addresses associated to a specific country.	string	Maximum length: 2															
end-ip	Final IP address (inclusive) in the range for the address.	ipv4-address-any	Not Specified	0.0.0.0														
epg-name	Endpoint group name.	string	Maximum length: 255															
fabric-object	Security Fabric global object setting.	option	-	disable														
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Object is set as a security fabric-wide global object.</td></tr></table>	Option	Description	<i>enable</i>	Object is set as a security fabric-wide global object.													
	Option	Description																
<i>enable</i>	Object is set as a security fabric-wide global object.																	

Parameter	Description	Type	Size	Default						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>disable</i></td><td>Object is local to this security fabric member.</td></tr></table>	Option	Description	<i>disable</i>	Object is local to this security fabric member.					
	Option	Description								
	<i>disable</i>	Object is local to this security fabric member.								
filter	Match criteria filter.	var-string	Maximum length: 2047							
fqdn	Fully Qualified Domain Name address.	string	Maximum length: 255							
fsso-group <name>	FSSO group(s). FSSO group name.	string	Maximum length: 511							
interface	Name of interface whose IP address is to be used.	string	Maximum length: 35							
macaddr <macaddr>	Multiple MAC address ranges. MAC address ranges <start>[-<end>] separated by space.	string	Maximum length: 127							
name	Address name.	string	Maximum length: 79							
node-ip-only	Enable/disable collection of node addresses only in Kubernetes.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable collection of node addresses only in Kubernetes.</td></tr><tr><td><i>disable</i></td><td>Disable collection of node addresses only in Kubernetes.</td></tr></table>	Option	Description	<i>enable</i>	Enable collection of node addresses only in Kubernetes.	<i>disable</i>	Disable collection of node addresses only in Kubernetes.			
	Option	Description								
	<i>enable</i>	Enable collection of node addresses only in Kubernetes.								
<i>disable</i>	Disable collection of node addresses only in Kubernetes.									
obj-id	Object ID for NSX.	var-string	Maximum length: 255							
obj-tag	Tag of dynamic address object.	string	Maximum length: 255							
obj-type	Object type.	option	-	ip						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>ip</i></td><td>IP address.</td></tr><tr><td><i>mac</i></td><td>MAC address</td></tr></table>	Option	Description	<i>ip</i>	IP address.	<i>mac</i>	MAC address			
	Option	Description								
	<i>ip</i>	IP address.								
<i>mac</i>	MAC address									
organization	Organization domain name (Syntax: organization/domain).	string	Maximum length: 35							
policy-group	Policy group name.	string	Maximum length: 15							

Parameter	Description	Type	Size	Default																		
sdn	SDN.	string	Maximum length: 35																			
sdn-addr-type	Type of addresses to collect.	option	-	private																		
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>private</td><td>Collect private addresses only.</td></tr><tr><td>public</td><td>Collect public addresses only.</td></tr><tr><td>all</td><td>Collect both public and private addresses.</td></tr></table>	Option	Description	private	Collect private addresses only.	public	Collect public addresses only.	all	Collect both public and private addresses.													
Option	Description																					
private	Collect private addresses only.																					
public	Collect public addresses only.																					
all	Collect both public and private addresses.																					
sdn-tag	SDN Tag.	string	Maximum length: 15																			
start-ip	First IP address (inclusive) in the range for the address.	ipv4-address-any	Not Specified	0.0.0.0																		
sub-type	Sub-type of address.	option	-	sdn																		
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>sdn</td><td>SDN address.</td></tr><tr><td>clearpass-spt</td><td>ClearPass SPT (System Posture Token) address.</td></tr><tr><td>fsso</td><td>FSSO address.</td></tr><tr><td>ems-tag</td><td>FortiClient EMS tag.</td></tr><tr><td>fortivoice-tag</td><td>FortiVoice tag.</td></tr><tr><td>fortinac-tag</td><td>FortiNAC tag.</td></tr><tr><td>fortipolicy-tag</td><td>FortiPolicy tag.</td></tr><tr><td>swc-tag</td><td>Switch Controller NAC policy tag.</td></tr></table>	Option	Description	sdn	SDN address.	clearpass-spt	ClearPass SPT (System Posture Token) address.	fsso	FSSO address.	ems-tag	FortiClient EMS tag.	fortivoice-tag	FortiVoice tag.	fortinac-tag	FortiNAC tag.	fortipolicy-tag	FortiPolicy tag.	swc-tag	Switch Controller NAC policy tag.			
Option	Description																					
sdn	SDN address.																					
clearpass-spt	ClearPass SPT (System Posture Token) address.																					
fsso	FSSO address.																					
ems-tag	FortiClient EMS tag.																					
fortivoice-tag	FortiVoice tag.																					
fortinac-tag	FortiNAC tag.																					
fortipolicy-tag	FortiPolicy tag.																					
swc-tag	Switch Controller NAC policy tag.																					
subnet	IP address and subnet mask of address.	ipv4-classnet-any	Not Specified	0.0.0.0 0.0.0.0																		
subnet-name	Subnet name.	string	Maximum length: 255																			
tag-detection-level	Tag detection level of dynamic address object.	string	Maximum length: 15																			
tag-type	Tag type of dynamic address object.	string	Maximum length: 63																			
tenant	Tenant.	string	Maximum length: 35																			

Parameter	Description	Type	Size	Default
type	Type of address.	option	-	ipmask
	Option	Description		
	<i>ipmask</i>	Standard IPv4 address with subnet mask.		
	<i>iprange</i>	Range of IPv4 addresses between two specified addresses (inclusive).		
	<i>fqdn</i>	Fully Qualified Domain Name address.		
	<i>geography</i>	IP addresses from a specified country.		
	<i>wildcard</i>	Standard IPv4 using a wildcard subnet mask.		
	<i>dynamic</i>	Dynamic address object.		
	<i>interface-subnet</i>	IP and subnet of interface.		
	<i>mac</i>	Range of MAC addresses.		
uuid	Universally Unique Identifier (UUID; automatically assigned but can be manually reset).	uuid	Not Specified	00000000-0000-0000-0000-000000000000
wildcard	IP address and wildcard netmask.	ipv4-classnet-any	Not Specified	0.0.0.0 0.0.0.0
wildcard-fqdn	Fully Qualified Domain Name with wildcard characters.	string	Maximum length: 255	

config list

Parameter	Description	Type	Size	Default
ip	IP.	string	Maximum length: 35	

config tagging

Parameter	Description	Type	Size	Default
category	Tag category.	string	Maximum length: 63	
name	Tagging entry name.	string	Maximum length: 63	
tags <name>	Tags. Tag name.	string	Maximum length: 79	

config firewall address6

Configure IPv6 firewall addresses.

```
config firewall address6
  Description: Configure IPv6 firewall addresses.
  edit <name>
    set cache-ttl {integer}
    set color {integer}
    set comment {var-string}
    set country {string}
    set end-ip {ipv6-address}
    set epg-name {string}
    set fabric-object [enable|disable]
    set fqdn {string}
    set host {ipv6-address}
    set host-type [any|specific]
    set ip6 {ipv6-network}
  config list
    Description: IP address list.
    edit <ip>
      next
    end
    set macaddr <macaddr1>, <macaddr2>, ...
    set obj-id {var-string}
    set sdn {string}
    set sdn-tag {string}
    set start-ip {ipv6-address}
  config subnet-segment
    Description: IPv6 subnet segments.
    edit <name>
      set type [any|specific]
      set value {string}
    next
  end
  config tagging
    Description: Config object tagging.
    edit <name>
      set category {string}
      set tags <name1>, <name2>, ...
    next
  end
  set template {string}
  set tenant {string}
  set type [ipprefix|iprange|...]
  set uuid {uuid}
next
end
```

config firewall address6

Parameter	Description	Type	Size	Default						
cache-ttl	Minimal TTL of individual IPv6 addresses in FQDN cache.	integer	Minimum value: 0 Maximum value: 86400	0						
color	Integer value to determine the color of the icon in the GUI (range 1 to 32, default = 0, which sets the value to 1).	integer	Minimum value: 0 Maximum value: 32	0						
comment	Comment.	var-string	Maximum length: 255							
country	IPv6 addresses associated to a specific country.	string	Maximum length: 2							
end-ip	Final IP address (inclusive) in the range for the address (format: xxxx:xxxx:xxxx:xxxx:xxxx:xxxx:xxxx:xxxx).	ipv6-address	Not Specified	::						
epg-name	Endpoint group name.	string	Maximum length: 255							
fabric-object	Security Fabric global object setting.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Object is set as a security fabric-wide global object.</td></tr><tr><td>disable</td><td>Object is local to this security fabric member.</td></tr></table>				Option	Description	enable	Object is set as a security fabric-wide global object.	disable	Object is local to this security fabric member.
Option	Description									
enable	Object is set as a security fabric-wide global object.									
disable	Object is local to this security fabric member.									
fqdn	Fully qualified domain name.	string	Maximum length: 255							
host	Host Address.	ipv6-address	Not Specified	::						
host-type	Host type.	option	-	any						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>any</td><td>Wildcard.</td></tr><tr><td>specific</td><td>Specific host address.</td></tr></table>				Option	Description	any	Wildcard.	specific	Specific host address.
Option	Description									
any	Wildcard.									
specific	Specific host address.									
ip6	IPv6 address prefix (format: xxxx:xxxx:xxxx:xxxx:xxxx:xxxx:xxxx:xxxx/xxx).	ipv6-network	Not Specified	::/0						
macaddr <macaddr>	Multiple MAC address ranges.	string	Maximum length: 127							

Parameter	Description	Type	Size	Default																
	MAC address ranges <start>[-<end>] separated by space.																			
name	Address name.	string	Maximum length: 79																	
obj-id	Object ID for NSX.	var-string	Maximum length: 255																	
sdn	SDN.	string	Maximum length: 35																	
sdn-tag	SDN Tag.	string	Maximum length: 15																	
start-ip	First IP address (inclusive) in the range for the address (format: xxxx:xxxx:xxxx:xxxx:xxxx:xxxx:xxxx:xxxx).	ipv6-address	Not Specified	::																
template	IPv6 address template.	string	Maximum length: 63																	
tenant	Tenant.	string	Maximum length: 35																	
type	Type of IPv6 address object (default = ipprefix).	option	-	ipprefix																
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>ipprefix</td><td>Uses the IP prefix to define a range of IPv6 addresses.</td></tr><tr><td>iprange</td><td>Range of IPv6 addresses between two specified addresses (inclusive).</td></tr><tr><td>fqdn</td><td>Fully qualified domain name.</td></tr><tr><td>geography</td><td>IPv6 addresses from a specified country.</td></tr><tr><td>dynamic</td><td>Dynamic address object for SDN.</td></tr><tr><td>template</td><td>Template.</td></tr><tr><td>mac</td><td>Range of MAC addresses.</td></tr></table>				Option	Description	ipprefix	Uses the IP prefix to define a range of IPv6 addresses.	iprange	Range of IPv6 addresses between two specified addresses (inclusive).	fqdn	Fully qualified domain name.	geography	IPv6 addresses from a specified country.	dynamic	Dynamic address object for SDN.	template	Template.	mac	Range of MAC addresses.
Option	Description																			
ipprefix	Uses the IP prefix to define a range of IPv6 addresses.																			
iprange	Range of IPv6 addresses between two specified addresses (inclusive).																			
fqdn	Fully qualified domain name.																			
geography	IPv6 addresses from a specified country.																			
dynamic	Dynamic address object for SDN.																			
template	Template.																			
mac	Range of MAC addresses.																			
uuid	Universally Unique Identifier (UUID; automatically assigned but can be manually reset).	uuid	Not Specified	00000000-0000-0000-0000-000000000000																

config list

Parameter	Description	Type	Size	Default
ip	IP.	string	Maximum length: 89	

config subnet-segment

Parameter	Description	Type	Size	Default
name	Name.	string	Maximum length: 63	
type	Subnet segment type.	option	-	any
	Option Description			
	any	Wildcard.		
	specific	Specific subnet segment address.		
value	Subnet segment value.	string	Maximum length: 35	

config tagging

Parameter	Description	Type	Size	Default
category	Tag category.	string	Maximum length: 63	
name	Tagging entry name.	string	Maximum length: 63	
tags <name>	Tags. Tag name.	string	Maximum length: 79	

config firewall address6-template

Configure IPv6 address templates.

```
config firewall address6-template
  Description: Configure IPv6 address templates.
  edit <name>
    set fabric-object [enable|disable]
    set ip6 {ipv6-network}
    config subnet-segment
      Description: IPv6 subnet segments.
      edit <id>
        set bits {integer}
        set exclusive [enable|disable]
        set name {string}
        config values
          Description: Subnet segment values.
          edit <name>
            set value {string}
          next
      next
  next
```

```

        end
    next
end
    set subnet-segment-count {integer}
next
end

```

config firewall address6-template

Parameter	Description	Type	Size	Default						
fabric-object	Security Fabric global object setting.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Object is set as a security fabric-wide global object.</td></tr><tr><td>disable</td><td>Object is local to this security fabric member.</td></tr></table>				Option	Description	enable	Object is set as a security fabric-wide global object.	disable	Object is local to this security fabric member.
Option	Description									
enable	Object is set as a security fabric-wide global object.									
disable	Object is local to this security fabric member.									
ip6	IPv6 address prefix.	ipv6-network	Not Specified	::/0						
name	IPv6 address template name.	string	Maximum length: 63							
subnet-segment-count	Number of IPv6 subnet segments.	integer	Minimum value: 1 Maximum value: 6	0						

config subnet-segment

Parameter	Description	Type	Size	Default
bits	Number of bits.	integer	Minimum value: 1 Maximum value: 16	0
exclusive	Enable/disable exclusive value.	option	-	disable
	Option	Description		
	enable	Enable exclusive value.		
	disable	Disable exclusive value.		
id	Subnet segment ID.	integer	Minimum value: 0 Maximum value: 4294967295	0
name	Subnet segment name.	string	Maximum length: 63	

config values

Parameter	Description	Type	Size	Default
name	Subnet segment value name.	string	Maximum length: 63	
value	Subnet segment value.	string	Maximum length: 35	

config firewall addrgrp

Configure IPv4 address groups.

```
config firewall addrgrp
  Description: Configure IPv4 address groups.
  edit <name>
    set allow-routing [enable|disable]
    set category [default|ztna-ems-tag|...]
    set color {integer}
    set comment {var-string}
    set exclude [enable|disable]
    set exclude-member <name1>, <name2>, ...
    set fabric-object [enable|disable]
    set member <name1>, <name2>, ...
    config tagging
      Description: Config object tagging.
      edit <name>
        set category {string}
        set tags <name1>, <name2>, ...
      next
    end
    set type [default|folder]
    set uuid {uuid}
  next
end
```

config firewall addrgrp

Parameter	Description	Type	Size	Default
allow-routing	Enable/disable use of this group in the static route configuration.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable use of this group in the static route configuration.		
	<i>disable</i>	Disable use of this group in the static route configuration.		

Parameter	Description	Type	Size	Default
category	Address group category.	option	-	default
	Option	Description		
	default	Default address group category (cannot be used as ztna-ems-tag/ztna-geo-tag in policy).		
	ztna-ems-tag	Members must be ztna-ems-tag group or ems-tag address, can be used as ztna-ems-tag in policy.		
	ztna-geo-tag	Members must be ztna-geo-tag group or geographic address, can be used as ztna-geo-tag in policy.		
color	Color of icon on the GUI.	integer	Minimum value: 0 Maximum value: 32	0
comment	Comment.	var-string	Maximum length: 255	
exclude	Enable/disable address exclusion.	option	-	disable
	Option	Description		
	enable	Enable address exclusion.		
	disable	Disable address exclusion.		
exclude-member <name>	Address exclusion member. Address name.	string	Maximum length: 79	
fabric-object	Security Fabric global object setting.	option	-	disable
	Option	Description		
	enable	Object is set as a security fabric-wide global object.		
	disable	Object is local to this security fabric member.		
member <name>	Address objects contained within the group. Address name.	string	Maximum length: 79	
name	Address group name.	string	Maximum length: 79	
type	Address group type.	option	-	default
	Option	Description		
	default	Default address group type (address may belong to multiple groups).		
	folder	Address folder group (members may not belong to any other group).		

Parameter	Description	Type	Size	Default
uuid	Universally Unique Identifier (UUID; automatically assigned but can be manually reset).	uuid	Not Specified	00000000-0000-0000-0000-000000000000

config tagging

Parameter	Description	Type	Size	Default
category	Tag category.	string	Maximum length: 63	
name	Tagging entry name.	string	Maximum length: 63	
tags <name>	Tags. Tag name.	string	Maximum length: 79	

config firewall addrgrp6

Configure IPv6 address groups.

```
config firewall addrgrp6
  Description: Configure IPv6 address groups.
  edit <name>
    set color {integer}
    set comment {var-string}
    set fabric-object [enable|disable]
    set member <name1>, <name2>, ...
    config tagging
      Description: Config object tagging.
      edit <name>
        set category {string}
        set tags <name1>, <name2>, ...
      next
    end
    set uuid {uuid}
  next
end
```

config firewall addrgrp6

Parameter	Description	Type	Size	Default						
color	Integer value to determine the color of the icon in the GUI (1 - 32, default = 0, which sets the value to 1).	integer	Minimum value: 0 Maximum value: 32	0						
comment	Comment.	var-string	Maximum length: 255							
fabric-object	Security Fabric global object setting.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Object is set as a security fabric-wide global object.</td></tr><tr><td><i>disable</i></td><td>Object is local to this security fabric member.</td></tr></table>				Option	Description	<i>enable</i>	Object is set as a security fabric-wide global object.	<i>disable</i>	Object is local to this security fabric member.
	Option	Description								
	<i>enable</i>	Object is set as a security fabric-wide global object.								
<i>disable</i>	Object is local to this security fabric member.									
member <name>	Address objects contained within the group. Address6/addrgrp6 name.	string	Maximum length: 79							
name	IPv6 address group name.	string	Maximum length: 79							
uuid	Universally Unique Identifier (UUID; automatically assigned but can be manually reset).	uuid	Not Specified	00000000-0000-0000-0000-000000000000						

config tagging

Parameter	Description	Type	Size	Default
category	Tag category.	string	Maximum length: 63	
name	Tagging entry name.	string	Maximum length: 63	
tags <name>	Tags. Tag name.	string	Maximum length: 79	

config firewall auth-portal

Configure firewall authentication portals.

```
config firewall auth-portal
  Description: Configure firewall authentication portals.
  set groups <name1>, <name2>, ...
  set identity-based-route {string}
```

```

set portal-addr {string}
set portal-addr6 {string}
set proxy-auth [enable|disable]
end

```

config firewall auth-portal

Parameter	Description	Type	Size	Default
groups <name>	Firewall user groups permitted to authenticate through this portal. Separate group names with spaces. Group name.	string	Maximum length: 79	
identity-based-route	Name of the identity-based route that applies to this portal.	string	Maximum length: 35	
portal-addr	Address (or FQDN) of the authentication portal.	string	Maximum length: 63	
portal-addr6	IPv6 address (or FQDN) of authentication portal.	string	Maximum length: 63	
proxy-auth	Enable/disable authentication by proxy daemon (default = disable).	option	-	disable
		Option	Description	
		enable	Users are authenticated by proxy daemon.	
		disable	Users are not authenticated by proxy daemon.	

config firewall central-snat-map

Configure IPv4 and IPv6 central SNAT policies.

```

config firewall central-snat-map
  Description: Configure IPv4 and IPv6 central SNAT policies.
  edit <policyid>
    set comments {var-string}
    set dst-addr <name1>, <name2>, ...
    set dst-addr6 <name1>, <name2>, ...
    set dst-port {user}
    set dstintf <name1>, <name2>, ...
    set nat [disable|enable]
    set nat-ippool <name1>, <name2>, ...
    set nat-ippool6 <name1>, <name2>, ...
    set nat-port {user}
    set nat46 [enable|disable]
    set nat64 [enable|disable]
  end
end

```

```

    set orig-addr <name1>, <name2>, ...
    set orig-addr6 <name1>, <name2>, ...
    set orig-port {user}
    set protocol {integer}
    set srcintf <name1>, <name2>, ...
    set status [enable|disable]
    set type [ipv4|ipv6]
    set uuid {uuid}
next
end

```

config firewall central-snat-map

Parameter	Description	Type	Size	Default						
comments	Comment.	var-string	Maximum length: 1023							
dst-addr <name>	IPv4 Destination address. Address name.	string	Maximum length: 79							
dst-addr6 <name>	IPv6 Destination address. Address name.	string	Maximum length: 79							
dst-port	Destination port or port range (1 to 65535, 0 means any port).	user	Not Specified							
dstintf <name>	Destination interface name from available interfaces. Interface name.	string	Maximum length: 79							
nat	Enable/disable source NAT.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>disable</i></td><td>Disable source NAT.</td></tr><tr><td><i>enable</i></td><td>Enable source NAT.</td></tr></table>				Option	Description	<i>disable</i>	Disable source NAT.	<i>enable</i>	Enable source NAT.
Option	Description									
<i>disable</i>	Disable source NAT.									
<i>enable</i>	Enable source NAT.									
nat-ippool <name>	Name of the IP pools to be used to translate addresses from available IP Pools. IP pool name.	string	Maximum length: 79							
nat-ippool6 <name>	IPv6 pools to be used for source NAT. IPv6 pool name.	string	Maximum length: 79							
nat-port	Translated port or port range (1 to 65535, 0 means any port).	user	Not Specified							
nat46	Enable/disable NAT46.	option	-	disable						

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>enable</i>	Enable NAT46.		
	<i>disable</i>	Disable NAT46.		
nat64	Enable/disable NAT64.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable NAT64.		
	<i>disable</i>	Disable NAT64.		
orig-addr <name>	IPv4 Original address. Address name.	string	Maximum length: 79	
orig-addr6 <name>	IPv6 Original address. Address name.	string	Maximum length: 79	
orig-port	Original TCP port (1 to 65535, 0 means any port).	user	Not Specified	
policyid	Policy ID.	integer	Minimum value: 0 0 Maximum value: 4294967295	
protocol	Integer value for the protocol type (0 - 255).	integer	Minimum value: 0 0 Maximum value: 255	
srcintf <name>	Source interface name from available interfaces. Interface name.	string	Maximum length: 79	
status	Enable/disable the active status of this policy.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable this policy.		
	<i>disable</i>	Disable this policy.		
type	IPv4/IPv6 source NAT.	option	-	ipv4
	Option	Description		
	<i>ipv4</i>	Perform IPv4 source NAT.		
	<i>ipv6</i>	Perform IPv6 source NAT.		

Parameter	Description	Type	Size	Default
uuid	Universally Unique Identifier (UUID; automatically assigned but can be manually reset).	uuid	Not Specified	00000000-0000-0000-0000-000000000000

config firewall city

Define city table. Read-only.

```
config firewall city
    Description: Define city table. Read-only.
    edit <id>
        set name {string}
    next
end
```

config firewall city

Parameter	Description	Type	Size	Default
id	City ID.	integer	Minimum value: 0 Maximum value: 65535	0
name	City name.	string	Maximum length: 63	

config firewall country

Define country table. Read-only.

```
config firewall country
    Description: Define country table. Read-only.
    edit <id>
        set name {string}
        set region <id1>, <id2>, ...
    next
end
```

config firewall country

Parameter	Description	Type	Size	Default
id	Country ID.	integer	Minimum value: 0 Maximum value: 65535	0
name	Country name.	string	Maximum length: 63	
region <id>	Region ID list. Region ID.	integer	Minimum value: 0 Maximum value: 65535	

config firewall decrypted-traffic-mirror

Configure decrypted traffic mirror.

```
config firewall decrypted-traffic-mirror
  Description: Configure decrypted traffic mirror.
  edit <name>
    set dstmac {mac-address}
    set interface <name1>, <name2>, ...
    set traffic-source [client|server|...]
    set traffic-type {option1}, {option2}, ...
  next
end
```

config firewall decrypted-traffic-mirror

Parameter	Description	Type	Size	Default
dstmac	Set destination MAC address for mirrored traffic.	mac-address	Not Specified	ff:ff:ff:ff:ff:ff
interface <name>	Decrypted traffic mirror interface. Decrypted traffic mirror interface.	string	Maximum length: 79	
name	Name.	string	Maximum length: 35	
traffic-source	Source of decrypted traffic to be mirrored.	option	-	client

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>client</i>	Mirror client side decrypted traffic.		
	<i>server</i>	Mirror server side decrypted traffic.		
	<i>both</i>	Mirror both client and server side decrypted traffic.		
traffic-type	Types of decrypted traffic to be mirrored.	option	-	ssl
	Option	Description		
	<i>ssl</i>	Mirror decrypted SSL traffic.		
	<i>ssh</i>	Mirror decrypted SSH traffic.		

config firewall dnstranslation

Configure DNS translation.

```
config firewall dnstranslation
  Description: Configure DNS translation.
  edit <id>
    set dst {ipv4-address}
    set netmask {ipv4-netmask}
    set src {ipv4-address}
  next
end
```

config firewall dnstranslation

Parameter	Description	Type	Size	Default
dst	IPv4 address or subnet on the external network to substitute for the resolved address in DNS query replies. Can be single IP address or subnet on the external network, but number of addresses must equal number of mapped IP addresses in src.	ipv4-address	Not Specified	0.0.0.0
id	ID.	integer	Minimum value: 0 0 Maximum value: 4294967295	

Parameter	Description	Type	Size	Default
netmask	If src and dst are subnets rather than single IP addresses, enter the netmask for both src and dst.	ipv4-netmask	Not Specified	255.255.255.255
src	IPv4 address or subnet on the internal network to compare with the resolved address in DNS query replies. If the resolved address matches, the resolved address is substituted with dst.	ipv4-address	Not Specified	0.0.0.0

config firewall global

Global firewall settings.

```
config firewall global
    Description: Global firewall settings.
    set banned-ip-persistency [disabled|permanent-only|...]
end
```

config firewall global

Parameter	Description	Type	Size	Default
banned-ip-persistency	Persistency of banned IPs across power cycling.	option	-	disabled
	Option	Description		
	<i>disabled</i>	No entries are kept across power cycling.		
	<i>permanent-only</i>	Only permanent IP bans are kept across power cycling.		
	<i>all</i>	All IP bans are kept across power cycling.		

config firewall identity-based-route

Configure identity based routing.

```
config firewall identity-based-route
    Description: Configure identity based routing.
    edit <name>
        set comments {string}
        config rule
            Description: Rule.
```

```

        edit <id>
            set device {string}
            set gateway {ipv4-address}
            set groups <name1>, <name2>, ...
        next
    end
next
end

```

config firewall identity-based-route

Parameter	Description	Type	Size	Default
comments	Comments.	string	Maximum length: 127	
name	Name.	string	Maximum length: 35	

config rule

Parameter	Description	Type	Size	Default
device	Outgoing interface for the rule.	string	Maximum length: 35	
gateway	IPv4 address of the gateway (Format: xxx.xxx.xxx.xxx , Default: 0.0.0.0).	ipv4-address	Not Specified	0.0.0.0
groups <name>	Select one or more group(s) from available groups that are allowed to use this route. Separate group names with a space. Group name.	string	Maximum length: 79	
id	Rule ID.	integer	Minimum value: 0 Maximum value: 4294967295	

config firewall interface-policy

Configure IPv4 interface policies.

```

config firewall interface-policy
    Description: Configure IPv4 interface policies.
    edit <policyid>
        set application-list {string}
        set application-list-status [enable|disable]
        set av-profile {string}
    end
end

```

```

set av-profile-status [enable|disable]
set comments {var-string}
set dlp-profile {string}
set dlp-profile-status [enable|disable]
set dsri [enable|disable]
set dstaddr <name1>, <name2>, ...
set emailfilter-profile {string}
set emailfilter-profile-status [enable|disable]
set interface {string}
set ips-sensor {string}
set ips-sensor-status [enable|disable]
set logtraffic [all|utm|...]
set service <name1>, <name2>, ...
set srcaddr <name1>, <name2>, ...
set status [enable|disable]
set uuid {uuid}
set webfilter-profile {string}
set webfilter-profile-status [enable|disable]
next
end

```

config firewall interface-policy

Parameter	Description	Type	Size	Default
application-list	Application list name.	string	Maximum length: 35	
application-list-status	Enable/disable application control.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable application control		
	<i>disable</i>	Disable application control		
av-profile	Antivirus profile.	string	Maximum length: 35	
av-profile-status	Enable/disable antivirus.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable antivirus		
	<i>disable</i>	Disable antivirus		
comments	Comments.	var-string	Maximum length: 1023	

Parameter	Description	Type	Size	Default						
dlp-profile	DLP profile name.	string	Maximum length: 35							
dlp-profile-status	Enable/disable DLP.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable setting.</td></tr><tr><td><i>disable</i></td><td>Disable setting.</td></tr></table>	Option	Description	<i>enable</i>	Enable setting.	<i>disable</i>	Disable setting.			
Option	Description									
<i>enable</i>	Enable setting.									
<i>disable</i>	Disable setting.									
dsri	Enable/disable DSRI.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable DSRI.</td></tr><tr><td><i>disable</i></td><td>Disable DSRI.</td></tr></table>	Option	Description	<i>enable</i>	Enable DSRI.	<i>disable</i>	Disable DSRI.			
Option	Description									
<i>enable</i>	Enable DSRI.									
<i>disable</i>	Disable DSRI.									
dstaddr <name>	Address object to limit traffic monitoring to network traffic sent to the specified address or range. Address name.	string	Maximum length: 79							
emailfilter-profile	Email filter profile.	string	Maximum length: 35							
emailfilter-profile-status	Enable/disable email filter.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable Email filter.</td></tr><tr><td><i>disable</i></td><td>Disable Email filter.</td></tr></table>	Option	Description	<i>enable</i>	Enable Email filter.	<i>disable</i>	Disable Email filter.			
Option	Description									
<i>enable</i>	Enable Email filter.									
<i>disable</i>	Disable Email filter.									
interface	Monitored interface name from available interfaces.	string	Maximum length: 35							
ips-sensor	IPS sensor name.	string	Maximum length: 35							
ips-sensor-status	Enable/disable IPS.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable IPS.</td></tr><tr><td><i>disable</i></td><td>Disable IPS.</td></tr></table>	Option	Description	<i>enable</i>	Enable IPS.	<i>disable</i>	Disable IPS.			
Option	Description									
<i>enable</i>	Enable IPS.									
<i>disable</i>	Disable IPS.									

Parameter	Description	Type	Size	Default								
logtraffic	Logging type to be used in this policy (Options: all utm disable, Default: utm).	option	-	utm								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>all</td><td>Log all sessions accepted or denied by this policy.</td></tr><tr><td>utm</td><td>Log traffic that has a security profile applied to it.</td></tr><tr><td>disable</td><td>Disable all logging for this policy.</td></tr></table>	Option	Description	all	Log all sessions accepted or denied by this policy.	utm	Log traffic that has a security profile applied to it.	disable	Disable all logging for this policy.			
Option	Description											
all	Log all sessions accepted or denied by this policy.											
utm	Log traffic that has a security profile applied to it.											
disable	Disable all logging for this policy.											
policyid	Policy ID (0 - 4294967295).	integer	Minimum value: 0 0 Maximum value: 4294967295									
service <name>	Service object from available options. Service name.	string	Maximum length: 79									
srcaddr <name>	Address object to limit traffic monitoring to network traffic sent from the specified address or range. Address name.	string	Maximum length: 79									
status	Enable/disable this policy.	option	-	enable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable this policy.</td></tr><tr><td>disable</td><td>Disable this policy.</td></tr></table>	Option	Description	enable	Enable this policy.	disable	Disable this policy.					
Option	Description											
enable	Enable this policy.											
disable	Disable this policy.											
uuid	Universally Unique Identifier (UUID; automatically assigned but can be manually reset).	uuid	Not Specified	00000000-0000- 0000-0000- 000000000000								
webfilter- profile	Web filter profile.	string	Maximum length: 35									
webfilter- profile-status	Enable/disable web filtering.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable web filtering.</td></tr><tr><td>disable</td><td>Disable web filtering.</td></tr></table>	Option	Description	enable	Enable web filtering.	disable	Disable web filtering.					
Option	Description											
enable	Enable web filtering.											
disable	Disable web filtering.											

config firewall interface-policy6

Configure IPv6 interface policies.

```

config firewall interface-policy6
    Description: Configure IPv6 interface policies.
    edit <policyid>
        set application-list {string}
        set application-list-status [enable|disable]
        set av-profile {string}
        set av-profile-status [enable|disable]
        set comments {var-string}
        set dlp-profile {string}
        set dlp-profile-status [enable|disable]
        set dsri [enable|disable]
        set dstaddr6 <name1>, <name2>, ...
        set emailfilter-profile {string}
        set emailfilter-profile-status [enable|disable]
        set interface {string}
        set ips-sensor {string}
        set ips-sensor-status [enable|disable]
        set logtraffic [all|utm|...]
        set service6 <name1>, <name2>, ...
        set srcaddr6 <name1>, <name2>, ...
        set status [enable|disable]
        set uuid {uuid}
        set webfilter-profile {string}
        set webfilter-profile-status [enable|disable]
    next
end

```

config firewall interface-policy6

Parameter	Description	Type	Size	Default
application-list	Application list name.	string	Maximum length: 35	
application-list-status	Enable/disable application control.	option	-	disable
	Option	Description		
	enable	Enable application control		
	disable	Disable application control		
av-profile	Antivirus profile.	string	Maximum length: 35	
av-profile-status	Enable/disable antivirus.	option	-	disable

Parameter	Description	Type	Size	Default
	Option Description			
	<i>enable</i>	Enable antivirus		
	<i>disable</i>	Disable antivirus		
comments	Comments.	var-string	Maximum length: 1023	
dlp-profile	DLP profile name.	string	Maximum length: 35	
dlp-profile-status	Enable/disable DLP.	option	-	disable
	Option Description			
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		
dsri	Enable/disable DSRI.	option	-	disable
	Option Description			
	<i>enable</i>	Enable DSRI.		
	<i>disable</i>	Disable DSRI.		
dstaddr6 <name>	IPv6 address object to limit traffic monitoring to network traffic sent to the specified address or range. Address name.	string	Maximum length: 79	
emailfilter-profile	Email filter profile.	string	Maximum length: 35	
emailfilter-profile-status	Enable/disable email filter.	option	-	disable
	Option Description			
	<i>enable</i>	Enable Email filter.		
	<i>disable</i>	Disable Email filter.		
interface	Monitored interface name from available interfaces.	string	Maximum length: 35	
ips-sensor	IPS sensor name.	string	Maximum length: 35	

Parameter	Description	Type	Size	Default								
ips-sensor-status	Enable/disable IPS.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable IPS.</td></tr><tr><td>disable</td><td>Disable IPS.</td></tr></table>	Option	Description	enable	Enable IPS.	disable	Disable IPS.					
Option	Description											
enable	Enable IPS.											
disable	Disable IPS.											
logtraffic	Logging type to be used in this policy (Options: all utm disable, Default: utm).	option	-	utm								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>all</td><td>Log all sessions accepted or denied by this policy.</td></tr><tr><td>utm</td><td>Log traffic that has a security profile applied to it.</td></tr><tr><td>disable</td><td>Disable all logging for this policy.</td></tr></table>	Option	Description	all	Log all sessions accepted or denied by this policy.	utm	Log traffic that has a security profile applied to it.	disable	Disable all logging for this policy.			
Option	Description											
all	Log all sessions accepted or denied by this policy.											
utm	Log traffic that has a security profile applied to it.											
disable	Disable all logging for this policy.											
policyid	Policy ID (0 - 4294967295).	integer	Minimum value: 0 0 Maximum value: 4294967295									
service6 <name>	Service name. Service name.	string	Maximum length: 79									
srcaddr6 <name>	IPv6 address object to limit traffic monitoring to network traffic sent from the specified address or range. Address name.	string	Maximum length: 79									
status	Enable/disable this policy.	option	-	enable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable this policy.</td></tr><tr><td>disable</td><td>Disable this policy.</td></tr></table>	Option	Description	enable	Enable this policy.	disable	Disable this policy.					
Option	Description											
enable	Enable this policy.											
disable	Disable this policy.											
uuid	Universally Unique Identifier (UUID; automatically assigned but can be manually reset).	uuid	Not Specified	00000000-0000-0000-0000-000000000000								
webfilter-profile	Web filter profile.	string	Maximum length: 35									
webfilter-profile-status	Enable/disable web filtering.	option	-	disable								

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>enable</i>	Enable web filtering.		
	<i>disable</i>	Disable web filtering.		

config firewall internet-service

Show Internet Service application. Read-only.

```

config firewall internet-service
  Description: Show Internet Service application. Read-only.
  edit <id>
    set database [isdb|irdb]
    set direction [src|dst|...]
    set extra-ip-range-number {integer}
    set extra-ip6-range-number {integer}
    set icon-id {integer}
    set ip-number {integer}
    set ip-range-number {integer}
    set ip6-range-number {integer}
    set name {string}
    set obsolete {integer}
    set singularity {integer}
  next
end

```

config firewall internet-service

Parameter	Description	Type	Size	Default
database	Database name this Internet Service belongs to. Read-only.	option	-	isdb
	Option	Description		
	<i>isdb</i>	Internet Service Database.		
	<i>irdb</i>	Internet RRR Database.		
direction	How this service may be used in a firewall policy (source, destination or both). Read-only.	option	-	both
	Option	Description		
	<i>src</i>	As source in the firewall policy.		

Parameter	Description	Type	Size	Default						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>dst</i></td><td>As destination in the firewall policy.</td></tr><tr><td><i>both</i></td><td>Both directions in the firewall policy.</td></tr></table>				Option	Description	<i>dst</i>	As destination in the firewall policy.	<i>both</i>	Both directions in the firewall policy.
	Option	Description								
	<i>dst</i>	As destination in the firewall policy.								
<i>both</i>	Both directions in the firewall policy.									
extra-ip-range-number	Extra number of IPv4 ranges. Read-only.	integer	Minimum value: 0 0 Maximum value: 4294967295							
extra-ip6-range-number	Extra number of IPv6 ranges. Read-only.	integer	Minimum value: 0 0 Maximum value: 4294967295							
icon-id	Icon ID of Internet Service. Read-only.	integer	Minimum value: 0 0 Maximum value: 4294967295							
id	Internet Service ID. Read-only.	integer	Minimum value: 0 0 Maximum value: 4294967295							
ip-number	Total number of IPv4 addresses. Read-only.	integer	Minimum value: 0 0 Maximum value: 4294967295							
ip-range-number	Number of IPv4 ranges. Read-only.	integer	Minimum value: 0 0 Maximum value: 4294967295							
ip6-range-number	Number of IPv6 ranges. Read-only.	integer	Minimum value: 0 0 Maximum value: 4294967295							
name	Internet Service name. Read-only.	string	Maximum length: 63							
obsolete	Indicates whether the Internet Service can be used. Read-only.	integer	Minimum value: 0 0 Maximum value: 255							
singularity	Singular level of the Internet Service. Read-only.	integer	Minimum value: 0 0 Maximum value: 65535							

config firewall internet-service-addition

Configure Internet Services Addition.

```
config firewall internet-service-addition
  Description: Configure Internet Services Addition.
  edit <id>
    set comment {var-string}
    config entry
      Description: Entries added to the Internet Service addition database.
      edit <id>
        set addr-mode [ipv4|ipv6]
        config port-range
          Description: Port ranges in the custom entry.
          edit <id>
            set end-port {integer}
            set start-port {integer}
          next
        end
        set protocol {integer}
      next
    end
  next
end
```

config firewall internet-service-addition

Parameter	Description	Type	Size	Default
comment	Comment.	var-string	Maximum length: 255	
id	Internet Service ID in the Internet Service database.	integer	Minimum value: 0 Maximum value: 4294967295	

config entry

Parameter	Description	Type	Size	Default						
addr-mode	Address mode (IPv4 or IPv6).	option	-	ipv4						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>ipv4</td><td>IPv4 mode.</td></tr><tr><td>ipv6</td><td>IPv6 mode.</td></tr></table>				Option	Description	ipv4	IPv4 mode.	ipv6	IPv6 mode.
	Option	Description								
	ipv4	IPv4 mode.								
ipv6	IPv6 mode.									

Parameter	Description	Type	Size	Default
id	Entry ID(1-255).	integer	Minimum value: 0 Maximum value: 255	0
protocol	Integer value for the protocol type as defined by IANA (0 - 255).	integer	Minimum value: 0 Maximum value: 255	0

config port-range

Parameter	Description	Type	Size	Default
end-port	Integer value for ending TCP/UDP/SCTP destination port in range (0 to 65535).	integer	Minimum value: 0 Maximum value: 65535	65535
id	Custom entry port range ID.	integer	Minimum value: 0 Maximum value: 4294967295	0
start-port	Integer value for starting TCP/UDP/SCTP destination port in range (0 to 65535).	integer	Minimum value: 0 Maximum value: 65535	1

config firewall internet-service-append

Configure additional port mappings for Internet Services.

```
config firewall internet-service-append
  Description: Configure additional port mappings for Internet Services.
  set addr-mode [ipv4|ipv6|...]
  set append-port {integer}
  set match-port {integer}
end
```

config firewall internet-service-append

Parameter	Description	Type	Size	Default
addr-mode	Address mode (IPv4 or IPv6).	option	-	ipv4

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>ipv4</i>	IPv4 mode.		
	<i>ipv6</i>	IPv6 mode.		
	<i>both</i>	Both IPv4 and IPv6 mode.		
append-port	Appending TCP/UDP/SCTP destination port (1 to 65535).	integer	Minimum value: 0 Maximum value: 65535	0
match-port	Matching TCP/UDP/SCTP destination port (0 to 65535, 0 means any port).	integer	Minimum value: 0 Maximum value: 65535	0

config firewall internet-service-botnet

Show Internet Service botnet. Read-only.

```
config firewall internet-service-botnet
    Description: Show Internet Service botnet. Read-only.
    edit <id>
        set name {string}
    next
end
```

config firewall internet-service-botnet

Parameter	Description	Type	Size	Default
id	Internet Service Botnet ID.	integer	Minimum value: 0 Maximum value: 4294967295	0
name	Internet Service Botnet name.	string	Maximum length: 63	

config firewall internet-service-custom

Configure custom Internet Services.

```

config firewall internet-service-custom
    Description: Configure custom Internet Services.
    edit <name>
        set comment {var-string}
        config entry
            Description: Entries added to the Internet Service database and custom database.
            edit <id>
                set addr-mode [ipv4|ipv6]
                set dst <name1>, <name2>, ...
                set dst6 <name1>, <name2>, ...
                config port-range
                    Description: Port ranges in the custom entry.
                    edit <id>
                        set end-port {integer}
                        set start-port {integer}
                    next
                end
                set protocol {integer}
            next
        end
        set reputation {integer}
    next
end

```

config firewall internet-service-custom

Parameter	Description	Type	Size	Default
comment	Comment.	var-string	Maximum length: 255	
name	Internet Service name.	string	Maximum length: 63	
reputation	Reputation level of the custom Internet Service.	integer	Minimum value: 3 0 Maximum value: 4294967295	

config entry

Parameter	Description	Type	Size	Default
addr-mode	Address mode (IPv4 or IPv6).	option	-	ipv4
	Option	Description		
	ipv4	IPv4 mode.		
	ipv6	IPv6 mode.		

Parameter	Description	Type	Size	Default
dst <name>	Destination address or address group name. Select the destination address or address group object from available options.	string	Maximum length: 79	
dst6 <name>	Destination address6 or address6 group name. Select the destination address6 or address group object from available options.	string	Maximum length: 79	
id	Entry ID(1-255).	integer	Minimum value: 0 Maximum value: 255	0
protocol	Integer value for the protocol type as defined by IANA (0 - 255).	integer	Minimum value: 0 Maximum value: 255	0

config port-range

Parameter	Description	Type	Size	Default
end-port	Integer value for ending TCP/UDP/SCTP destination port in range (0 to 65535).	integer	Minimum value: 0 Maximum value: 65535	65535
id	Custom entry port range ID.	integer	Minimum value: 0 Maximum value: 4294967295	0
start-port	Integer value for starting TCP/UDP/SCTP destination port in range (0 to 65535).	integer	Minimum value: 0 Maximum value: 65535	1

config firewall internet-service-custom-group

Configure custom Internet Service group.

```

config firewall internet-service-custom-group
    Description: Configure custom Internet Service group.
    edit <name>
        set comment {var-string}
        set member <name1>, <name2>, ...
    next
end

```


config firewall internet-service-custom-group

Parameter	Description	Type	Size	Default
comment	Comment.	var-string	Maximum length: 255	
member <name>	Custom Internet Service group members. Group member name.	string	Maximum length: 79	
name	Custom Internet Service group name.	string	Maximum length: 63	

config firewall internet-service-definition

Configure Internet Service definition.

```
config firewall internet-service-definition
  Description: Configure Internet Service definition.
  edit <id>
    config entry
      Description: Protocol and port information in an Internet Service entry.
      edit <seq-num>
        set category-id {integer}
        set name {string}
        config port-range
          Description: Port ranges in the definition entry.
          edit <id>
            set end-port {integer}
            set start-port {integer}
          next
        end
        set protocol {integer}
      next
    end
  next
end
```

config firewall internet-service-definition

Parameter	Description	Type	Size	Default
id	Internet Service application list ID. Read-only.	integer	Minimum value: 0 Maximum value: 4294967295	0

config entry

Parameter	Description	Type	Size	Default
category-id	Internet Service category ID. Read-only.	integer	Minimum value: 0 0 Maximum value: 4294967295	0
name	Internet Service name. Read-only.	string	Maximum length: 63	
protocol	Integer value for the protocol type as defined by IANA (0 - 255). Read-only.	integer	Minimum value: 0 0 Maximum value: 255	0
seq-num	Entry sequence number.	integer	Minimum value: 0 0 Maximum value: 4294967295	0

config port-range

Parameter	Description	Type	Size	Default
end-port	Ending TCP/UDP/SCTP destination port (1 to 65535). Read-only.	integer	Minimum value: 1 1 Maximum value: 65535	65535
id	Custom entry port range ID.	integer	Minimum value: 0 0 Maximum value: 4294967295	0
start-port	Starting TCP/UDP/SCTP destination port (1 to 65535). Read-only.	integer	Minimum value: 1 1 Maximum value: 65535	1

config firewall internet-service-extension

Configure Internet Services Extension.

```
config firewall internet-service-extension
  Description: Configure Internet Services Extension.
  edit <id>
    set comment {var-string}
    config disable-entry
      Description: Disable entries in the Internet Service database.
      edit <id>
        set addr-mode [ipv4|ipv6]
```

```

    config ip-range
        Description: IPv4 ranges in the disable entry.
        edit <id>
            set end-ip {ipv4-address-any}
            set start-ip {ipv4-address-any}
        next
    end
    config ip6-range
        Description: IPv6 ranges in the disable entry.
        edit <id>
            set end-ip6 {ipv6-address}
            set start-ip6 {ipv6-address}
        next
    end
    config port-range
        Description: Port ranges in the disable entry.
        edit <id>
            set end-port {integer}
            set start-port {integer}
        next
    end
    set protocol {integer}
next
end
config entry
    Description: Entries added to the Internet Service extension database.
    edit <id>
        set addr-mode [ipv4|ipv6]
        set dst <name1>, <name2>, ...
        set dst6 <name1>, <name2>, ...
        config port-range
            Description: Port ranges in the custom entry.
            edit <id>
                set end-port {integer}
                set start-port {integer}
            next
        end
        set protocol {integer}
    next
end
next
end

```

config firewall internet-service-extension

Parameter	Description	Type	Size	Default
comment	Comment.	var-string	Maximum length: 255	

Parameter	Description	Type	Size	Default
id	Internet Service ID in the Internet Service database.	integer	Minimum value: 0 Maximum value: 4294967295	0

config disable-entry

Parameter	Description	Type	Size	Default
addr-mode	Address mode (IPv4 or IPv6).	option	-	ipv4
	Option	Description		
	ipv4	IPv4 mode.		
	ipv6	IPv6 mode.		
id	Disable entry ID.	integer	Minimum value: 0 Maximum value: 4294967295	0
protocol	Integer value for the protocol type as defined by IANA (0 - 255).	integer	Minimum value: 0 Maximum value: 255	0

config ip-range

Parameter	Description	Type	Size	Default
end-ip	End IPv4 address.	ipv4-address-any	Not Specified	0.0.0.0
id	Disable entry range ID.	integer	Minimum value: 0 Maximum value: 4294967295	0
start-ip	Start IPv4 address.	ipv4-address-any	Not Specified	0.0.0.0

config ip6-range

Parameter	Description	Type	Size	Default
end-ip6	End IPv6 address.	ipv6-address	Not Specified	::

Parameter	Description	Type	Size	Default
id	Disable entry range ID.	integer	Minimum value: 0 Maximum value: 4294967295	0
start-ip6	Start IPv6 address.	ipv6-address	Not Specified	::

config port-range

Parameter	Description	Type	Size	Default
end-port	Ending TCP/UDP/SCTP destination port (0 to 65535).	integer	Minimum value: 0 Maximum value: 65535	65535
id	Custom entry port range ID.	integer	Minimum value: 0 Maximum value: 4294967295	0
start-port	Starting TCP/UDP/SCTP destination port (0 to 65535).	integer	Minimum value: 0 Maximum value: 65535	1

config entry

Parameter	Description	Type	Size	Default						
addr-mode	Address mode (IPv4 or IPv6).	option	-	ipv4						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>ipv4</td><td>IPv4 mode.</td></tr><tr><td>ipv6</td><td>IPv6 mode.</td></tr></table>	Option	Description	ipv4	IPv4 mode.	ipv6	IPv6 mode.			
Option	Description									
ipv4	IPv4 mode.									
ipv6	IPv6 mode.									
dst <name>	Destination address or address group name. Select the destination address or address group object from available options.	string	Maximum length: 79							
dst6 <name>	Destination address6 or address6 group name. Select the destination address6 or address group object from available options.	string	Maximum length: 79							
id	Entry ID(1-255).	integer	Minimum value: 0 Maximum value: 255	0						

Parameter	Description	Type	Size	Default
protocol	Integer value for the protocol type as defined by IANA (0 - 255).	integer	Minimum value: 0 Maximum value: 255	0

config port-range

Parameter	Description	Type	Size	Default
end-port	Integer value for ending TCP/UDP/SCTP destination port in range (0 to 65535).	integer	Minimum value: 0 Maximum value: 65535	65535
id	Custom entry port range ID.	integer	Minimum value: 0 Maximum value: 4294967295	0
start-port	Integer value for starting TCP/UDP/SCTP destination port in range (0 to 65535).	integer	Minimum value: 0 Maximum value: 65535	1

config firewall internet-service-group

Configure group of Internet Service.

```

config firewall internet-service-group
  Description: Configure group of Internet Service.
  edit <name>
    set comment {var-string}
    set direction [source|destination|...]
    set member <name1>, <name2>, ...
  next
end

```

config firewall internet-service-group

Parameter	Description	Type	Size	Default
comment	Comment.	var-string	Maximum length: 255	
direction	How this service may be used (source, destination or both).	option	-	both

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>source</i>	As source when applied.		
	<i>destination</i>	As destination when applied.		
	<i>both</i>	Both directions when applied.		
member <name>	Internet Service group member. Internet Service name.	string	Maximum length: 79	
name	Internet Service group name.	string	Maximum length: 63	

config firewall internet-service-ipbl-reason

IP block list reason. Read-only.

```
config firewall internet-service-ipbl-reason
  Description: IP block list reason. Read-only.
  edit <id>
    set name {string}
  next
end
```

config firewall internet-service-ipbl-reason

Parameter	Description	Type	Size	Default
id	IP block list reason ID.	integer	Minimum value: 0 Maximum value: 4294967295	
name	IP block list reason name.	string	Maximum length: 63	

config firewall internet-service-ipbl-vendor

IP block list vendor. Read-only.

```
config firewall internet-service-ipbl-vendor
  Description: IP block list vendor. Read-only.
  edit <id>
    set name {string}
```

```
next
end
```

config firewall internet-service-ipbl-vendor

Parameter	Description	Type	Size	Default
id	IP block list vendor ID.	integer	Minimum value: 0 Maximum value: 4294967295	0
name	IP block list vendor name.	string	Maximum length: 63	

config firewall internet-service-list

Internet Service list. Read-only.

```
config firewall internet-service-list
  Description: Internet Service list. Read-only.
  edit <id>
    set name {string}
  next
end
```

config firewall internet-service-list

Parameter	Description	Type	Size	Default
id	Internet Service category ID.	integer	Minimum value: 0 Maximum value: 4294967295	0
name	Internet Service category name.	string	Maximum length: 63	

config firewall internet-service-name

Define internet service names.

```
config firewall internet-service-name
  Description: Define internet service names.
```



```

edit <name>
    set city-id {integer}
    set country-id {integer}
    set internet-service-id {integer}
    set region-id {integer}
    set type [default|location]
next
end

```

config firewall internet-service-name

Parameter	Description	Type	Size	Default
city-id	City ID.	integer	Minimum value: 0 0 Maximum value: 4294967295	0
country-id	Country or Area ID.	integer	Minimum value: 0 0 Maximum value: 4294967295	0
internet-service-id	Internet Service ID.	integer	Minimum value: 0 0 Maximum value: 4294967295	0
name	Internet Service name.	string	Maximum length: 63	
region-id	Region ID.	integer	Minimum value: 0 0 Maximum value: 4294967295	0
type	Internet Service name type.	option	-	default
	Option	Description		
	default	Automatically generated Internet Service.		
	location	Geography location based Internet Service.		

config firewall internet-service-owner

Internet Service owner. Read-only.

```

config firewall internet-service-owner
    Description: Internet Service owner. Read-only.

```

```
edit <id>
    set name {string}
next
end
```

config firewall internet-service-owner

Parameter	Description	Type	Size	Default
id	Internet Service owner ID.	integer	Minimum value: 0 Maximum value: 4294967295	0
name	Internet Service owner name.	string	Maximum length: 63	

config firewall internet-service-reputation

Show Internet Service reputation. Read-only.

```
config firewall internet-service-reputation
    Description: Show Internet Service reputation. Read-only.
    edit <id>
        set description {string}
    next
end
```

config firewall internet-service-reputation

Parameter	Description	Type	Size	Default
description	Description.	string	Maximum length: 127	
id	Internet Service Reputation ID.	integer	Minimum value: 0 Maximum value: 4294967295	0

config firewall internet-service-sld

Internet Service Second Level Domain. Read-only.

```

config firewall internet-service-sld
    Description: Internet Service Second Level Domain. Read-only.
    edit <id>
        set name {string}
    next
end

```

config firewall internet-service-sld

Parameter	Description	Type	Size	Default
id	Second Level Domain ID.	integer	Minimum value: 0 0 Maximum value: 4294967295	
name	Second Level Domain name.	string	Maximum length: 63	

config firewall internet-service-subapp

Show Internet Service sub app ID. Read-only.

```

config firewall internet-service-subapp
    Description: Show Internet Service sub app ID. Read-only.
    edit <id>
        set sub-app <id1>, <id2>, ...
    next
end

```

config firewall internet-service-subapp

Parameter	Description	Type	Size	Default
id	Internet Service main ID.	integer	Minimum value: 0 0 Maximum value: 4294967295	
sub-app <id>	Subapp number list. Subapp ID.	integer	Minimum value: 0 0 Maximum value: 4294967295	

config firewall ipmacbinding setting

Configure IP to MAC binding settings.

```
config firewall ipmacbinding setting
  Description: Configure IP to MAC binding settings.
  set bindthroughfw [enable|disable]
  set bindtofw [enable|disable]
  set undefinedhost [allow|block]
end
```

config firewall ipmacbinding setting

Parameter	Description	Type	Size	Default						
bindthroughfw	Enable/disable use of IP/MAC binding to filter packets that would normally go through the firewall.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable IP/MAC binding for packets that would normally go through the firewall.</td></tr><tr><td><i>disable</i></td><td>Disable IP/MAC binding for packets that would normally go through the firewall.</td></tr></table>	Option	Description	<i>enable</i>	Enable IP/MAC binding for packets that would normally go through the firewall.	<i>disable</i>	Disable IP/MAC binding for packets that would normally go through the firewall.			
Option	Description									
<i>enable</i>	Enable IP/MAC binding for packets that would normally go through the firewall.									
<i>disable</i>	Disable IP/MAC binding for packets that would normally go through the firewall.									
bindtofw	Enable/disable use of IP/MAC binding to filter packets that would normally go to the firewall.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable IP/MAC binding for packets that would normally go to the firewall.</td></tr><tr><td><i>disable</i></td><td>Disable IP/MAC binding for packets that would normally go to the firewall.</td></tr></table>	Option	Description	<i>enable</i>	Enable IP/MAC binding for packets that would normally go to the firewall.	<i>disable</i>	Disable IP/MAC binding for packets that would normally go to the firewall.			
Option	Description									
<i>enable</i>	Enable IP/MAC binding for packets that would normally go to the firewall.									
<i>disable</i>	Disable IP/MAC binding for packets that would normally go to the firewall.									
undefinedhost	Select action to take on packets with IP/MAC addresses not in the binding list (default = block).	option	-	block						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>allow</i></td><td>Allow packets from MAC addresses not in the IP/MAC list.</td></tr><tr><td><i>block</i></td><td>Block packets from MAC addresses not in the IP/MAC list.</td></tr></table>	Option	Description	<i>allow</i>	Allow packets from MAC addresses not in the IP/MAC list.	<i>block</i>	Block packets from MAC addresses not in the IP/MAC list.			
Option	Description									
<i>allow</i>	Allow packets from MAC addresses not in the IP/MAC list.									
<i>block</i>	Block packets from MAC addresses not in the IP/MAC list.									

config firewall ipmacbinding table

Configure IP to MAC address pairs in the IP/MAC binding table.

```

config firewall ipmacbinding table
    Description: Configure IP to MAC address pairs in the IP/MAC binding table.
    edit <seq-num>
        set ip {ipv4-address}
        set mac {mac-address}
        set name {string}
        set status [enable|disable]
    next
end

```

config firewall ipmacbinding table

Parameter	Description	Type	Size	Default						
ip	IPv4 address portion of the pair (format: xxx.xxx.xxx.xxx).	ipv4-address	Not Specified	0.0.0.0						
mac	MAC address portion of the pair (format = xx:xx:xx:xx:xx:xx in hexadecimal).	mac-address	Not Specified	00:00:00:00:00:00						
name	Name of the pair (optional, default = no name).	string	Maximum length: 35	noname						
seq-num	Entry number.	integer	Minimum value: 0 Maximum value: 4294967295	0						
status	Enable/disable this IP-mac binding pair.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable this IP-mac binding pair.</td></tr><tr><td><i>disable</i></td><td>Disable this IP-mac binding pair.</td></tr></table>				Option	Description	<i>enable</i>	Enable this IP-mac binding pair.	<i>disable</i>	Disable this IP-mac binding pair.
Option	Description									
<i>enable</i>	Enable this IP-mac binding pair.									
<i>disable</i>	Disable this IP-mac binding pair.									

config firewall ippool

Configure IPv4 IP pools.

```

config firewall ippool
    Description: Configure IPv4 IP pools.
    edit <name>
        set add-nat64-route [disable|enable]
        set arp-intf {string}
        set arp-reply [disable|enable]
        set associated-interface {string}
        set block-size {integer}
    end
end

```

```

set cgn-block-size {integer}
set cgn-client-endip {var-string}
set cgn-client-ipv6shift {integer}
set cgn-client-startip {var-string}
set cgn-fixedalloc [disable|enable]
set cgn-overload [disable|enable]
set cgn-port-end {integer}
set cgn-port-start {integer}
set cgn-spa [disable|enable]
set comments {var-string}
set endip {ipv4-address-any}
set endport {integer}
set exclude-ip <subnet1>, <subnet2>, ...
set nat64 [disable|enable]
set num-blocks-per-user {integer}
set pba-timeout {integer}
set permit-any-host [disable|enable]
set port-per-user {integer}
set source-endip {ipv4-address-any}
set source-startip {ipv4-address-any}
set startip {ipv4-address-any}
set startport {integer}
set subnet-broadcast-in-ippool [disable|enable]
set type [overload|one-to-one|...]
set utilization-alarm-clear {integer}
set utilization-alarm-raise {integer}
next
end

```

config firewall ippool

Parameter	Description	Type	Size	Default						
add-nat64-route	Enable/disable adding NAT64 route.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>disable</i></td><td>Disable adding NAT64 route.</td></tr><tr><td><i>enable</i></td><td>Enable adding NAT64 route.</td></tr></table>				Option	Description	<i>disable</i>	Disable adding NAT64 route.	<i>enable</i>	Enable adding NAT64 route.
Option	Description									
<i>disable</i>	Disable adding NAT64 route.									
<i>enable</i>	Enable adding NAT64 route.									
arp-intf	Select an interface from available options that will reply to ARP requests. (If blank, any is selected).	string	Maximum length: 15							
arp-reply	Enable/disable replying to ARP requests when an IP Pool is added to a policy (default = enable).	option	-	enable						

Parameter	Description	Type	Size	Default
	Option Description			
	<i>disable</i>	Disable ARP reply.		
	<i>enable</i>	Enable ARP reply.		
associated-interface	Associated interface name.	string	Maximum length: 15	
block-size	Number of addresses in a block (64 - 4096, default = 128).	integer	Minimum value: 64 Maximum value: 4096	128
cgn-block-size *	Number of ports in a block(64 to 4096 in unit of 64, default = 128).	integer	Minimum value: 64 Maximum value: 4096	128
cgn-client-endip *	Final client IPv4 address (inclusive) (format xxx.xxx.xxx.xxx, Default: 0.0.0.0).	var-string	Maximum length: 255	
cgn-client-ipv6shift *	IPv6 shift for fixed-allocation.(default 0)	integer	Minimum value: 0 Maximum value: 127	0
cgn-client-startip *	First client IPv4 address (inclusive) (format xxx.xxx.xxx.xxx, Default: 0.0.0.0).	var-string	Maximum length: 255	
cgn-fixedalloc *	Enable/disable fixed-allocation mode.	option	-	disable
	Option Description			
	<i>disable</i>	Disable fixed-allocation mode.		
	<i>enable</i>	Enable fixed-allocation mode.		
cgn-overload *	Enable/disable overload mode.	option	-	disable
	Option Description			
	<i>disable</i>	Disable overload mode.		
	<i>enable</i>	Enable overload mode.		

Parameter	Description	Type	Size	Default
cgn-port-end *	Ending public port can be allocated.	integer	Minimum value: 1024 Maximum value: 65535	65530
cgn-port-start *	Starting public port can be allocated.	integer	Minimum value: 1024 Maximum value: 65535	5117
cgn-spa *	Enable/disable single port allocation mode.	option	-	disable
	OptionDescription			
	disableDisable SPA mode.			
	enableEnable SPA mode.			
comments	Comment.	var-string	Maximum length: 255	
endip	Final IPv4 address (inclusive) in the range for the address pool (format xxx.xxx.xxx.xxx, Default: 0.0.0.0).	ipv4-address-any	Not Specified	0.0.0.0
endport	Final port number (inclusive) in the range for the address pool (Default: 65533).	integer	Minimum value: 5117 Maximum value: 65533	65533
exclude-ip <subnet> *	Exclude IPs x.x.x.x. Exclude IPs	string	Maximum length: 79	
name	IP pool name.	string	Maximum length: 79	
nat64	Enable/disable NAT64.	option	-	disable
	OptionDescription			
	disableDisable DNAT64.			
	enableEnable DNAT64.			
num-blocks-per-user	Number of addresses blocks that can be used by a user (1 to 128, default = 8).	integer	Minimum value: 1 Maximum value: 128	8

Parameter	Description	Type	Size	Default						
pba-timeout	Port block allocation timeout (seconds).	integer	Minimum value: 3 Maximum value: 86400	30						
permit-any-host	Enable/disable full cone NAT.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Disable full cone NAT.</td></tr><tr><td>enable</td><td>Enable full cone NAT.</td></tr></table>	Option	Description	disable	Disable full cone NAT.	enable	Enable full cone NAT.			
Option	Description									
disable	Disable full cone NAT.									
enable	Enable full cone NAT.									
port-per-user	Number of port for each user (32 - 60416, default = 0, which is auto).	integer	Minimum value: 32 Maximum value: 60417	0						
source-endip	Final IPv4 address (inclusive) in the range of the source addresses to be translated (format xxx.xxx.xxx.xxx, Default: 0.0.0.0).	ipv4-address-any	Not Specified	0.0.0.0						
source-startip	First IPv4 address (inclusive) in the range of the source addresses to be translated (format = xxx.xxx.xxx.xxx, default = 0.0.0.0).	ipv4-address-any	Not Specified	0.0.0.0						
startip	First IPv4 address (inclusive) in the range for the address pool (format xxx.xxx.xxx.xxx, Default: 0.0.0.0).	ipv4-address-any	Not Specified	0.0.0.0						
startport	First port number (inclusive) in the range for the address pool (Default: 5117).	integer	Minimum value: 5117 Maximum value: 65533	5117						
subnet-broadcast-in-ippool	Enable/disable inclusion of the subnetwork address and broadcast IP address in the NAT64 IP pool.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Do not include the subnetwork address and broadcast IP address in the NAT64 IP pool.</td></tr><tr><td>enable</td><td>Include the subnetwork address and broadcast IP address in the NAT64 IP pool.</td></tr></table>	Option	Description	disable	Do not include the subnetwork address and broadcast IP address in the NAT64 IP pool.	enable	Include the subnetwork address and broadcast IP address in the NAT64 IP pool.			
Option	Description									
disable	Do not include the subnetwork address and broadcast IP address in the NAT64 IP pool.									
enable	Include the subnetwork address and broadcast IP address in the NAT64 IP pool.									

Parameter	Description	Type	Size	Default
type	IP pool type (overload, one-to-one, fixed port range, or port block allocation).	option	-	overload
	Option	Description		
	<i>overload</i>	IP addresses in the IP pool can be shared by clients.		
	<i>one-to-one</i>	One to one mapping.		
	<i>fixed-port-range</i>	Fixed port range.		
	<i>port-block-allocation</i>	Port block allocation.		
utilization-alarm-clear *	Pool utilization alarm clear threshold (40-100).	integer	Minimum value: 40 Maximum value: 100	80
utilization-alarm-raise *	Pool utilization alarm raise threshold (50-100).	integer	Minimum value: 50 Maximum value: 100	100

* This parameter may not exist in some models.

config firewall ippool6

Configure IPv6 IP pools.

```

config firewall ippool6
  Description: Configure IPv6 IP pools.
  edit <name>
    set add-nat46-route [disable|enable]
    set comments {var-string}
    set endip {ipv6-address}
    set nat46 [disable|enable]
    set startip {ipv6-address}
  next
end

```

config firewall ippool6

Parameter	Description	Type	Size	Default
add-nat46-route	Enable/disable adding NAT46 route.	option	-	enable
	Option Description			
	<i>disable</i>	Disable adding NAT46 route.		
	<i>enable</i>	Enable adding NAT46 route.		
comments	Comment.	var-string	Maximum length: 255	
endip	Final IPv6 address (inclusive) in the range for the address pool (format = xxxx:xxxx:xxxx:xxxx:xxxx:xxxx:xxxx:xxxx, default = ::).	ipv6-address	Not Specified	::
name	IPv6 IP pool name.	string	Maximum length: 79	
nat46	Enable/disable NAT46.	option	-	disable
	Option Description			
	<i>disable</i>	Disable NAT46.		
	<i>enable</i>	Enable NAT46.		
startip	First IPv6 address (inclusive) in the range for the address pool (format = xxxx:xxxx:xxxx:xxxx:xxxx:xxxx:xxxx:xxxx, default = ::).	ipv6-address	Not Specified	::

config firewall ipv6-eh-filter

Configure IPv6 extension header filter.

```
config firewall ipv6-eh-filter
  Description: Configure IPv6 extension header filter.
  set auth [enable|disable]
  set dest-opt [enable|disable]
  set fragment [enable|disable]
  set hdopt-type {integer}
  set hop-opt [enable|disable]
  set no-next [enable|disable]
  set routing [enable|disable]
```

```

set routing-type {integer}
end

```

config firewall ipv6-eh-filter

Parameter	Description	Type	Size	Default
auth	Enable/disable blocking packets with the Authentication header (default = disable).	option	-	disable
	Option	Description		
	<i>enable</i>	Block packets with the Authentication header.		
	<i>disable</i>	Allow packets with the Authentication header.		
dest-opt	Enable/disable blocking packets with Destination Options headers (default = disable).	option	-	disable
	Option	Description		
	<i>enable</i>	Enable blocking packets with Destination Options headers.		
	<i>disable</i>	Disable blocking packets with Destination Options headers.		
fragment	Enable/disable blocking packets with the Fragment header (default = disable).	option	-	disable
	Option	Description		
	<i>enable</i>	Block packets with the Fragment header.		
	<i>disable</i>	Allow packets with the Fragment header.		
hdopt-type	Block specific Hop-by-Hop and/or Destination Option types (max. 7 types, each between 0 and 255).	integer	Minimum value: 0 Maximum value: 255	
hop-opt	Enable/disable blocking packets with the Hop-by-Hop Options header (default = disable).	option	-	disable
	Option	Description		
	<i>enable</i>	Enable blocking packets with the Hop-by-Hop Options header.		
	<i>disable</i>	Disable blocking packets with the Hop-by-Hop Options header.		
no-next	Enable/disable blocking packets with the No Next header (default = disable).	option	-	disable

Parameter	Description	Type	Size	Default						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Block packets with the No Next header.</td></tr><tr><td><i>disable</i></td><td>Allow packets with the No Next header.</td></tr></table>	Option	Description	<i>enable</i>	Block packets with the No Next header.	<i>disable</i>	Allow packets with the No Next header.			
	Option	Description								
	<i>enable</i>	Block packets with the No Next header.								
<i>disable</i>	Allow packets with the No Next header.									
routing	Enable/disable blocking packets with Routing headers (default = enable).	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Block packets with Routing headers.</td></tr><tr><td><i>disable</i></td><td>Allow packets with Routing headers.</td></tr></table>	Option	Description	<i>enable</i>	Block packets with Routing headers.	<i>disable</i>	Allow packets with Routing headers.			
	Option	Description								
	<i>enable</i>	Block packets with Routing headers.								
<i>disable</i>	Allow packets with Routing headers.									
routing-type	Block specific Routing header types (max. 7 types, each between 0 and 255, default = 0).	integer	Minimum value: 0 Maximum value: 255	0						

config firewall ip-translation

Configure firewall IP-translation.

```

config firewall ip-translation
    Description: Configure firewall IP-translation.
    edit <transid>
        set endip {ipv4-address-any}
        set map-startip {ipv4-address-any}
        set startip {ipv4-address-any}
        set type {option}
    next
end

```

config firewall ip-translation

Parameter	Description	Type	Size	Default
endip	Final IPv4 address (inclusive) in the range of the addresses to be translated (format xxx.xxx.xxx.xxx, default: 0.0.0.0).	ipv4-address-any	Not Specified	0.0.0.0
map-startip	Address to be used as the starting point for translation in the range (format xxx.xxx.xxx.xxx, default: 0.0.0.0).	ipv4-address-any	Not Specified	0.0.0.0

Parameter	Description	Type	Size	Default
startip	First IPv4 address (inclusive) in the range of the addresses to be translated (format xxx.xxx.xxx.xxx, default: 0.0.0.0).	ipv4-address-any	Not Specified	0.0.0.0
transid	IP translation ID.	integer	Minimum value: 0 Maximum value: 4294967295	0
type	IP translation type (option: SCTP).	option	-	SCTP
		Option	Description	
		SCTP	SCTP	

config firewall ldb-monitor

Configure server load balancing health monitors.

```
config firewall ldb-monitor
  Description: Configure server load balancing health monitors.
  edit <name>
    set dns-match-ip {ipv4-address}
    set dns-protocol [udp|tcp]
    set dns-request-domain {string}
    set http-get {string}
    set http-match {string}
    set http-max-redirects {integer}
    set interval {integer}
    set port {integer}
    set retry {integer}
    set src-ip {ipv4-address}
    set timeout {integer}
    set type [ping|tcp|...]
  next
end
```

config firewall ldb-monitor

Parameter	Description	Type	Size	Default
dns-match-ip	Response IP expected from DNS server.	ipv4-address	Not Specified	0.0.0.0

Parameter	Description	Type	Size	Default
dns-protocol	Select the protocol used by the DNS health check monitor to check the health of the server (UDP TCP).	option	-	udp
	Option	Description		
	udp	UDP.		
	tcp	TCP.		
dns-request-domain	Fully qualified domain name to resolve for the DNS probe.	string	Maximum length: 255	
http-get	URL used to send a GET request to check the health of an HTTP server.	string	Maximum length: 255	
http-match	String to match the value expected in response to an HTTP-GET request.	string	Maximum length: 255	
http-max-redirects	The maximum number of HTTP redirects to be allowed (0 - 5, default = 0).	integer	Minimum value: 0 Maximum value: 5	0
interval	Time between health checks (5 - 65535 sec, default = 10).	integer	Minimum value: 5 Maximum value: 65535	10
name	Monitor name.	string	Maximum length: 35	
port	Service port used to perform the health check. If 0, health check monitor inherits port configured for the server (0 - 65535, default = 0).	integer	Minimum value: 0 Maximum value: 65535	0
retry	Number health check attempts before the server is considered down (1 - 255, default = 3).	integer	Minimum value: 1 Maximum value: 255	3
src-ip	Source IP for ldb-monitor.	ipv4-address	Not Specified	0.0.0.0
timeout	Time to wait to receive response to a health check from a server. Reaching the timeout means the health check failed (1 - 255 sec, default = 2).	integer	Minimum value: 1 Maximum value: 255	2

Parameter	Description	Type	Size	Default												
type	Select the Monitor type used by the health check monitor to check the health of the server (PING TCP HTTP HTTPS DNS).	option	-													
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>ping</i></td><td>PING health monitor.</td></tr><tr><td><i>tcp</i></td><td>TCP-connect health monitor.</td></tr><tr><td><i>http</i></td><td>HTTP-GET health monitor.</td></tr><tr><td><i>https</i></td><td>HTTP-GET health monitor with SSL.</td></tr><tr><td><i>dns</i></td><td>DNS health monitor.</td></tr></table>	Option	Description	<i>ping</i>	PING health monitor.	<i>tcp</i>	TCP-connect health monitor.	<i>http</i>	HTTP-GET health monitor.	<i>https</i>	HTTP-GET health monitor with SSL.	<i>dns</i>	DNS health monitor.			
Option	Description															
<i>ping</i>	PING health monitor.															
<i>tcp</i>	TCP-connect health monitor.															
<i>http</i>	HTTP-GET health monitor.															
<i>https</i>	HTTP-GET health monitor with SSL.															
<i>dns</i>	DNS health monitor.															

config firewall local-in-policy

Configure user defined IPv4 local-in policies.

```

config firewall local-in-policy
    Description: Configure user defined IPv4 local-in policies.
    edit <policyid>
        set action [accept|deny]
        set comments {var-string}
        set dstaddr <name1>, <name2>, ...
        set dstaddr-negate [enable|disable]
        set ha-mgmt-intf-only [enable|disable]
        set intf {string}
        set schedule {string}
        set service <name1>, <name2>, ...
        set service-negate [enable|disable]
        set srcaddr <name1>, <name2>, ...
        set srcaddr-negate [enable|disable]
        set status [enable|disable]
        set uuid {uuid}
        set virtual-patch [enable|disable]
    next
end

```

config firewall local-in-policy

Parameter	Description	Type	Size	Default
action	Action performed on traffic matching the policy (default = deny).	option	-	deny

Parameter	Description	Type	Size	Default						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>accept</i></td><td>Allow traffic matching this policy.</td></tr><tr><td><i>deny</i></td><td>Deny or block traffic matching this policy.</td></tr></table>				Option	Description	<i>accept</i>	Allow traffic matching this policy.	<i>deny</i>	Deny or block traffic matching this policy.
	Option	Description								
	<i>accept</i>	Allow traffic matching this policy.								
<i>deny</i>	Deny or block traffic matching this policy.									
comments	Comment.	var-string	Maximum length: 1023							
dstaddr <name>	Destination address object from available options. Address name.	string	Maximum length: 79							
dstaddr-negate	When enabled dstaddr specifies what the destination address must NOT be.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable destination address negate.</td></tr><tr><td><i>disable</i></td><td>Disable destination address negate.</td></tr></table>				Option	Description	<i>enable</i>	Enable destination address negate.	<i>disable</i>	Disable destination address negate.
	Option	Description								
	<i>enable</i>	Enable destination address negate.								
<i>disable</i>	Disable destination address negate.									
ha-mgmt-intf-only	Enable/disable dedicating the HA management interface only for local-in policy.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable dedicating HA management interface only for local-in policy.</td></tr><tr><td><i>disable</i></td><td>Disable dedicating HA management interface only for local-in policy.</td></tr></table>				Option	Description	<i>enable</i>	Enable dedicating HA management interface only for local-in policy.	<i>disable</i>	Disable dedicating HA management interface only for local-in policy.
	Option	Description								
	<i>enable</i>	Enable dedicating HA management interface only for local-in policy.								
<i>disable</i>	Disable dedicating HA management interface only for local-in policy.									
intf	Incoming interface name from available options.	string	Maximum length: 35							
policyid	User defined local in policy ID.	integer	Minimum value: 0 Maximum value: 4294967295							
schedule	Schedule object from available options.	string	Maximum length: 35							
service <name>	Service object from available options. Service name.	string	Maximum length: 79							
service-negate	When enabled service specifies what the service must NOT be.	option	-	disable						

Parameter	Description	Type	Size	Default
	Option Description			
	<i>enable</i>	Enable negated service match.		
	<i>disable</i>	Disable negated service match.		
srcaddr <name>	Source address object from available options. Address name.	string	Maximum length: 79	
srcaddr-negate	When enabled srcaddr specifies what the source address must NOT be.	option	-	disable
	Option Description			
	<i>enable</i>	Enable source address negate.		
	<i>disable</i>	Disable source address negate.		
status	Enable/disable this local-in policy.	option	-	enable
	Option Description			
	<i>enable</i>	Enable this local-in policy.		
	<i>disable</i>	Disable this local-in policy.		
uuid	Universally Unique Identifier (UUID; automatically assigned but can be manually reset).	uuid	Not Specified	00000000-0000-0000-0000-000000000000
virtual-patch	Enable/disable virtual patching.	option	-	disable
	Option Description			
	<i>enable</i>	Enable virtual patching.		
	<i>disable</i>	Disable virtual patching.		

config firewall local-in-policy6

Configure user defined IPv6 local-in policies.

```
config firewall local-in-policy6
  Description: Configure user defined IPv6 local-in policies.
  edit <policyid>
    set action [accept|deny]
    set comments {var-string}
    set dstaddr <name1>, <name2>, ...
    set dstaddr-negate [enable|disable]
    set intf {string}
```

```

    set schedule {string}
    set service <name1>, <name2>, ...
    set service-negate [enable|disable]
    set srcaddr <name1>, <name2>, ...
    set srcaddr-negate [enable|disable]
    set status [enable|disable]
    set uuid {uuid}
    set virtual-patch [enable|disable]
next
end

```

config firewall local-in-policy6

Parameter	Description	Type	Size	Default						
action	Action performed on traffic matching the policy (default = deny).	option	-	deny						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>accept</td><td>Allow local-in traffic matching this policy.</td></tr><tr><td>deny</td><td>Deny or block local-in traffic matching this policy.</td></tr></table>	Option	Description	accept	Allow local-in traffic matching this policy.	deny	Deny or block local-in traffic matching this policy.			
Option	Description									
accept	Allow local-in traffic matching this policy.									
deny	Deny or block local-in traffic matching this policy.									
comments	Comment.	var-string	Maximum length: 1023							
dstaddr <name>	Destination address object from available options. Address name.	string	Maximum length: 79							
dstaddr-negate	When enabled dstaddr specifies what the destination address must NOT be.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable destination address negate.</td></tr><tr><td>disable</td><td>Disable destination address negate.</td></tr></table>	Option	Description	enable	Enable destination address negate.	disable	Disable destination address negate.			
Option	Description									
enable	Enable destination address negate.									
disable	Disable destination address negate.									
intf	Incoming interface name from available options.	string	Maximum length: 35							
policyid	User defined local in policy ID.	integer	Minimum value: 0 Maximum value: 4294967295							
schedule	Schedule object from available options.	string	Maximum length: 35							
service <name>	Service object from available options. Separate names with a space.	string	Maximum length: 79							

Parameter	Description	Type	Size	Default						
	Service name.									
service-negate	When enabled service specifies what the service must NOT be.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable negated service match.</td></tr><tr><td>disable</td><td>Disable negated service match.</td></tr></table>	Option	Description	enable	Enable negated service match.	disable	Disable negated service match.			
Option	Description									
enable	Enable negated service match.									
disable	Disable negated service match.									
srcaddr <name>	Source address object from available options. Address name.	string	Maximum length: 79							
srcaddr-negate	When enabled srcaddr specifies what the source address must NOT be.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable source address negate.</td></tr><tr><td>disable</td><td>Disable source address negate.</td></tr></table>	Option	Description	enable	Enable source address negate.	disable	Disable source address negate.			
Option	Description									
enable	Enable source address negate.									
disable	Disable source address negate.									
status	Enable/disable this local-in policy.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable this local-in policy.</td></tr><tr><td>disable</td><td>Disable this local-in policy.</td></tr></table>	Option	Description	enable	Enable this local-in policy.	disable	Disable this local-in policy.			
Option	Description									
enable	Enable this local-in policy.									
disable	Disable this local-in policy.									
uuid	Universally Unique Identifier (UUID; automatically assigned but can be manually reset).	uuid	Not Specified	00000000-0000-0000-0000-000000000000						
virtual-patch	Enable/disable the virtual patching feature.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable setting.</td></tr><tr><td>disable</td><td>Disable setting.</td></tr></table>	Option	Description	enable	Enable setting.	disable	Disable setting.			
Option	Description									
enable	Enable setting.									
disable	Disable setting.									

config firewall multicast-address

Configure multicast addresses.

```
config firewall multicast-address
Description: Configure multicast addresses.
```

```

edit <name>
  set associated-interface {string}
  set color {integer}
  set comment {var-string}
  set end-ip {ipv4-address-any}
  set start-ip {ipv4-address-any}
  set subnet {ipv4-classnet-any}
  config tagging
    Description: Config object tagging.
    edit <name>
      set category {string}
      set tags <name1>, <name2>, ...
    next
  end
  set type [multicastrange|broadcastmask]
next
end

```

config firewall multicast-address

Parameter	Description	Type	Size	Default
associated-interface	Interface associated with the address object. When setting up a policy, only addresses associated with this interface are available.	string	Maximum length: 35	
color	Integer value to determine the color of the icon in the GUI (1 - 32, default = 0, which sets value to 1).	integer	Minimum value: 0 Maximum value: 32	0
comment	Comment.	var-string	Maximum length: 255	
end-ip	Final IPv4 address (inclusive) in the range for the address.	ipv4-address-any	Not Specified	0.0.0.0
name	Multicast address name.	string	Maximum length: 79	
start-ip	First IPv4 address (inclusive) in the range for the address.	ipv4-address-any	Not Specified	0.0.0.0
subnet	Broadcast address and subnet.	ipv4-classnet-any	Not Specified	0.0.0.0 0.0.0.0

Parameter	Description	Type	Size	Default						
type	Type of address object: multicast IP address range or broadcast IP/mask to be treated as a multicast address.	option	-	multicastrange						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>multicastrange</i></td><td>Multicast range.</td></tr><tr><td><i>broadcastmask</i></td><td>Broadcast IP/mask.</td></tr></table>	Option	Description	<i>multicastrange</i>	Multicast range.	<i>broadcastmask</i>	Broadcast IP/mask.			
Option	Description									
<i>multicastrange</i>	Multicast range.									
<i>broadcastmask</i>	Broadcast IP/mask.									

config tagging

Parameter	Description	Type	Size	Default
category	Tag category.	string	Maximum length: 63	
name	Tagging entry name.	string	Maximum length: 63	
tags <name>	Tags. Tag name.	string	Maximum length: 79	

config firewall multicast-address6

Configure IPv6 multicast address.

```

config firewall multicast-address6
  Description: Configure IPv6 multicast address.
  edit <name>
    set color {integer}
    set comment {var-string}
    set ip6 {ipv6-network}
    config tagging
      Description: Config object tagging.
      edit <name>
        set category {string}
        set tags <name1>, <name2>, ...
      next
    end
  next
end

```

config firewall multicast-address6

Parameter	Description	Type	Size	Default
color	Color of icon on the GUI.	integer	Minimum value: 0 Maximum value: 32	0
comment	Comment.	var-string	Maximum length: 255	
ip6	IPv6 address prefix (format: xxxx:xxxx:xxxx:xxxx:xxxx:xxxx:xxxx/xxx).	ipv6-network	Not Specified	::/0
name	IPv6 multicast address name.	string	Maximum length: 79	

config tagging

Parameter	Description	Type	Size	Default
category	Tag category.	string	Maximum length: 63	
name	Tagging entry name.	string	Maximum length: 63	
tags <name>	Tags. Tag name.	string	Maximum length: 79	

config firewall multicast-policy

Configure multicast NAT policies.

```
config firewall multicast-policy
  Description: Configure multicast NAT policies.
  edit <id>
    set action [accept|deny]
    set auto-asic-offload [enable|disable]
    set comments {var-string}
    set dnat {ipv4-address-any}
    set dstaddr <name1>, <name2>, ...
    set dstintf {string}
    set end-port {integer}
    set logtraffic [enable|disable]
    set name {string}
    set protocol {integer}
    set snat [enable|disable]
    set snat-ip {ipv4-address}
```

```

    set srcaddr <name1>, <name2>, ...
    set srcintf {string}
    set start-port {integer}
    set status [enable|disable]
    set traffic-shaper {string}
    set uuid {uuid}
next
end

```

config firewall multicast-policy

Parameter	Description	Type	Size	Default						
action	Accept or deny traffic matching the policy.	option	-	accept						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>accept</i></td><td>Accept traffic matching the policy.</td></tr><tr><td><i>deny</i></td><td>Deny or block traffic matching the policy.</td></tr></table>	Option	Description	<i>accept</i>	Accept traffic matching the policy.	<i>deny</i>	Deny or block traffic matching the policy.			
Option	Description									
<i>accept</i>	Accept traffic matching the policy.									
<i>deny</i>	Deny or block traffic matching the policy.									
auto-asic-offload *	Enable/disable offloading policy traffic for hardware acceleration.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable hardware acceleration offloading.</td></tr><tr><td><i>disable</i></td><td>Disable offloading for hardware acceleration.</td></tr></table>	Option	Description	<i>enable</i>	Enable hardware acceleration offloading.	<i>disable</i>	Disable offloading for hardware acceleration.			
Option	Description									
<i>enable</i>	Enable hardware acceleration offloading.									
<i>disable</i>	Disable offloading for hardware acceleration.									
comments	Comment.	var-string	Maximum length: 1023							
dnat	IPv4 DNAT address used for multicast destination addresses.	ipv4-address-any	Not Specified	0.0.0.0						
dstaddr <name>	Destination address objects. Destination address objects.	string	Maximum length: 79							
dstintf	Destination interface name.	string	Maximum length: 35							
end-port	Integer value for ending TCP/UDP/SCTP destination port in range (1 - 65535, default = 1).	integer	Minimum value: 0 Maximum value: 65535	65535						
id	Policy ID ((0 - 4294967294).	integer	Minimum value: 0 Maximum value: 4294967294	0						

Parameter	Description	Type	Size	Default						
logtraffic	Enable/disable logging traffic accepted by this policy.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable logging traffic accepted by this policy.</td></tr><tr><td><i>disable</i></td><td>Disable logging traffic accepted by this policy.</td></tr></table>	Option	Description	<i>enable</i>	Enable logging traffic accepted by this policy.	<i>disable</i>	Disable logging traffic accepted by this policy.			
Option	Description									
<i>enable</i>	Enable logging traffic accepted by this policy.									
<i>disable</i>	Disable logging traffic accepted by this policy.									
name	Policy name.	string	Maximum length: 35							
protocol	Integer value for the protocol type as defined by IANA (0 - 255, default = 0).	integer	Minimum value: 0 Maximum value: 255	0						
snat	Enable/disable substitution of the outgoing interface IP address for the original source IP address (called source NAT or SNAT).	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable source NAT.</td></tr><tr><td><i>disable</i></td><td>Disable source NAT.</td></tr></table>	Option	Description	<i>enable</i>	Enable source NAT.	<i>disable</i>	Disable source NAT.			
Option	Description									
<i>enable</i>	Enable source NAT.									
<i>disable</i>	Disable source NAT.									
snat-ip	IPv4 address to be used as the source address for NATed traffic.	ipv4-address	Not Specified	0.0.0.0						
srcaddr <name>	Source address objects. Source address objects.	string	Maximum length: 79							
srcintf	Source interface name.	string	Maximum length: 35							
start-port	Integer value for starting TCP/UDP/SCTP destination port in range (1 - 65535, default = 1).	integer	Minimum value: 0 Maximum value: 65535	1						
status	Enable/disable this policy.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable this policy.</td></tr><tr><td><i>disable</i></td><td>Disable this policy.</td></tr></table>	Option	Description	<i>enable</i>	Enable this policy.	<i>disable</i>	Disable this policy.			
Option	Description									
<i>enable</i>	Enable this policy.									
<i>disable</i>	Disable this policy.									
traffic-shaper	Traffic shaper to apply to traffic forwarded by the multicast policy.	string	Maximum length: 35							
uuid	Universally Unique Identifier (UUID; automatically assigned but can be manually reset).	uuid	Not Specified	00000000-0000-0000-0000-000000000000						

* This parameter may not exist in some models.

config firewall multicast-policy6

Configure IPv6 multicast NAT policies.

```
config firewall multicast-policy6
  Description: Configure IPv6 multicast NAT policies.
  edit <id>
    set action [accept|deny]
    set auto-asic-offload [enable|disable]
    set comments {var-string}
    set dstaddr <name1>, <name2>, ...
    set dstintf {string}
    set end-port {integer}
    set logtraffic [enable|disable]
    set name {string}
    set protocol {integer}
    set srcaddr <name1>, <name2>, ...
    set srcintf {string}
    set start-port {integer}
    set status [enable|disable]
    set uuid {uuid}
  next
end
```

config firewall multicast-policy6

Parameter	Description	Type	Size	Default						
action	Accept or deny traffic matching the policy.	option	-	accept						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>accept</i></td><td>Accept.</td></tr><tr><td><i>deny</i></td><td>Deny.</td></tr></table>	Option	Description	<i>accept</i>	Accept.	<i>deny</i>	Deny.			
Option	Description									
<i>accept</i>	Accept.									
<i>deny</i>	Deny.									
auto-asic-offload *	Enable/disable offloading policy traffic for hardware acceleration.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable offloading policy traffic for hardware acceleration.</td></tr><tr><td><i>disable</i></td><td>Disable offloading policy traffic for hardware acceleration.</td></tr></table>	Option	Description	<i>enable</i>	Enable offloading policy traffic for hardware acceleration.	<i>disable</i>	Disable offloading policy traffic for hardware acceleration.			
Option	Description									
<i>enable</i>	Enable offloading policy traffic for hardware acceleration.									
<i>disable</i>	Disable offloading policy traffic for hardware acceleration.									

Parameter	Description	Type	Size	Default						
comments	Comment.	var-string	Maximum length: 1023							
dstaddr <name>	IPv6 destination address name. Address name.	string	Maximum length: 79							
dstintf	IPv6 destination interface name.	string	Maximum length: 35							
end-port	Integer value for ending TCP/UDP/SCTP destination port in range (1 - 65535, default = 65535).	integer	Minimum value: 0 Maximum value: 65535	65535						
id	Policy ID (0 - 4294967294).	integer	Minimum value: 0 Maximum value: 4294967294	0						
logtraffic	Enable/disable logging traffic accepted by this policy.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable logging traffic accepted by this policy.</td></tr><tr><td>disable</td><td>Disable logging traffic accepted by this policy.</td></tr></table>				Option	Description	enable	Enable logging traffic accepted by this policy.	disable	Disable logging traffic accepted by this policy.
Option	Description									
enable	Enable logging traffic accepted by this policy.									
disable	Disable logging traffic accepted by this policy.									
name	Policy name.	string	Maximum length: 35							
protocol	Integer value for the protocol type as defined by IANA (0 - 255, default = 0).	integer	Minimum value: 0 Maximum value: 255	0						
srcaddr <name>	IPv6 source address name. Address name.	string	Maximum length: 79							
srcintf	IPv6 source interface name.	string	Maximum length: 35							
start-port	Integer value for starting TCP/UDP/SCTP destination port in range (1 - 65535, default = 1).	integer	Minimum value: 0 Maximum value: 65535	1						
status	Enable/disable this policy.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable this policy.</td></tr><tr><td>disable</td><td>Disable this policy.</td></tr></table>				Option	Description	enable	Enable this policy.	disable	Disable this policy.
Option	Description									
enable	Enable this policy.									
disable	Disable this policy.									

Parameter	Description	Type	Size	Default
uuid	Universally Unique Identifier (UUID; automatically assigned but can be manually reset).	uuid	Not Specified	00000000-0000-0000-0000-000000000000

* This parameter may not exist in some models.

config firewall network-service-dynamic

Configure Dynamic Network Services.

```
config firewall network-service-dynamic
  Description: Configure Dynamic Network Services.
  edit <name>
    set comment {var-string}
    set filter {var-string}
    set sdn {string}
  next
end
```

config firewall network-service-dynamic

Parameter	Description	Type	Size	Default
comment	Comment.	var-string	Maximum length: 255	
filter	Match criteria filter.	var-string	Maximum length: 2047	
name	Dynamic Network Service name.	string	Maximum length: 63	
sdn	SDN connector name.	string	Maximum length: 35	

config firewall policy

Configure IPv4/IPv6 policies.

```
config firewall policy
  Description: Configure IPv4/IPv6 policies.
  edit <policyid>
    set action [accept|deny|...]
    set anti-replay [enable|disable]
```

```
set application-list {string}
set auth-cert {string}
set auth-path [enable|disable]
set auth-redirect-addr {string}
set auto-asic-offload [enable|disable]
set av-profile {string}
set block-notification [enable|disable]
set captive-portal-exempt [enable|disable]
set capture-packet [enable|disable]
set cifs-profile {string}
set comments {var-string}
set custom-log-fields <field-id1>, <field-id2>, ...
set decrypted-traffic-mirror {string}
set delay-tcp-npu-session [enable|disable]
set diffserv-copy [enable|disable]
set diffserv-forward [enable|disable]
set diffserv-reverse [enable|disable]
set diffservcode-forward {user}
set diffservcode-rev {user}
set disclaimer [enable|disable]
set dlp-profile {string}
set dnsfilter-profile {string}
set dsri [enable|disable]
set dstaddr <name1>, <name2>, ...
set dstaddr-negate [enable|disable]
set dstaddr6 <name1>, <name2>, ...
set dstaddr6-negate [enable|disable]
set dstintf <name1>, <name2>, ...
set dynamic-shaping [enable|disable]
set email-collect [enable|disable]
set emailfilter-profile {string}
set fec [enable|disable]
set file-filter-profile {string}
set firewall-session-dirty [check-all|check-new]
set fixedport [enable|disable]
set fsso-agent-for-ntlm {string}
set fsso-groups <name1>, <name2>, ...
set geoip-anycast [enable|disable]
set geoip-match [physical-location|registered-location]
set groups <name1>, <name2>, ...
set http-policy-redirect [enable|disable]
set icap-profile {string}
set identity-based-route {string}
set inbound [enable|disable]
set inspection-mode [proxy|flow]
set internet-service [enable|disable]
set internet-service-custom <name1>, <name2>, ...
set internet-service-custom-group <name1>, <name2>, ...
set internet-service-group <name1>, <name2>, ...
set internet-service-name <name1>, <name2>, ...
set internet-service-negate [enable|disable]
set internet-service-src [enable|disable]
```

```

set internet-service-src-custom <name1>, <name2>, ...
set internet-service-src-custom-group <name1>, <name2>, ...
set internet-service-src-group <name1>, <name2>, ...
set internet-service-src-name <name1>, <name2>, ...
set internet-service-src-negate [enable|disable]
set internet-service6 [enable|disable]
set internet-service6-custom <name1>, <name2>, ...
set internet-service6-custom-group <name1>, <name2>, ...
set internet-service6-group <name1>, <name2>, ...
set internet-service6-name <name1>, <name2>, ...
set internet-service6-negate [enable|disable]
set internet-service6-src [enable|disable]
set internet-service6-src-custom <name1>, <name2>, ...
set internet-service6-src-custom-group <name1>, <name2>, ...
set internet-service6-src-group <name1>, <name2>, ...
set internet-service6-src-name <name1>, <name2>, ...
set internet-service6-src-negate [enable|disable]
set ippool [enable|disable]
set ips-sensor {string}
set ips-voip-filter {string}
set logtraffic [all|utm|...]
set logtraffic-start [enable|disable]
set match-vip [enable|disable]
set match-vip-only [enable|disable]
set name {string}
set nat [enable|disable]
set nat46 [enable|disable]
set nat64 [enable|disable]
set natinbound [enable|disable]
set natip {ipv4-classnet}
set natoutbound [enable|disable]
set network-service-dynamic <name1>, <name2>, ...
set network-service-src-dynamic <name1>, <name2>, ...
set np-acceleration [enable|disable]
set ntlm [enable|disable]
set ntlm-enabled-browsers <user-agent-string1>, <user-agent-string2>, ...
set ntlm-guest [enable|disable]
set outbound [enable|disable]
set passive-wan-health-measurement [enable|disable]
set per-ip-shaper {string}
set permit-any-host [enable|disable]
set permit-stun-host [enable|disable]
set policy-expiry [enable|disable]
set policy-expiry-date {datetime}
set policy-expiry-date-utc {user}
set poolname <name1>, <name2>, ...
set poolname6 <name1>, <name2>, ...
set profile-group {string}
set profile-protocol-options {string}
set profile-type [single|group]
set radius-mac-auth-bypass [enable|disable]
set redirect-url {var-string}

```

```

set replacemsg-override-group {string}
set reputation-direction [source|destination]
set reputation-direction6 [source|destination]
set reputation-minimum {integer}
set reputation-minimum6 {integer}
set rtp-addr <name1>, <name2>, ...
set rtp-nat [disable|enable]
set schedule {string}
set schedule-timeout [enable|disable]
set sctp-filter-profile {string}
set send-deny-packet [disable|enable]
set service <name1>, <name2>, ...
set service-negate [enable|disable]
set session-ttl {user}
set sgt <id1>, <id2>, ...
set sgt-check [enable|disable]
set src-vendor-mac <id1>, <id2>, ...
set srcaddr <name1>, <name2>, ...
set srcaddr-negate [enable|disable]
set srcaddr6 <name1>, <name2>, ...
set srcaddr6-negate [enable|disable]
set srcintf <name1>, <name2>, ...
set ssh-filter-profile {string}
set ssh-policy-redirect [enable|disable]
set ssl-ssh-profile {string}
set status [enable|disable]
set tcp-mss-receiver {integer}
set tcp-mss-sender {integer}
set tcp-session-without-syn [all|data-only|...]
set timeout-send-rst [enable|disable]
set tos {user}
set tos-mask {user}
set tos-negate [enable|disable]
set traffic-shaper {string}
set traffic-shaper-reverse {string}
set users <name1>, <name2>, ...
set utm-status [enable|disable]
set uuid {uuid}
set videofilter-profile {string}
set vlan-cos-fwd {integer}
set vlan-cos-rev {integer}
set vlan-filter {user}
set voip-profile {string}
set vpntunnel {string}
set waf-profile {string}
set wanopt [enable|disable]
set wanopt-detection [active|passive|...]
set wanopt-passive-opt [default|transparent|...]
set wanopt-peer {string}
set wanopt-profile {string}
set wccp [enable|disable]
set webcache [enable|disable]

```

```

set webcache-https [disable|enable]
set webfilter-profile {string}
set webproxy-forward-server {string}
set webproxy-profile {string}
set ztna-device-ownership [enable|disable]
set ztna-ems-tag <name1>, <name2>, ...
set ztna-geo-tag <name1>, <name2>, ...
set ztna-policy-redirect [enable|disable]
set ztna-status [enable|disable]
set ztna-tags-match-logic [or|and]
next
end

```

config firewall policy

Parameter	Description	Type	Size	Default								
action	Policy action (accept/deny/ipsec).	option	-	deny								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>accept</td><td>Allows session that match the firewall policy.</td></tr><tr><td>deny</td><td>Blocks sessions that match the firewall policy.</td></tr><tr><td>ipsec</td><td>Firewall policy becomes a policy-based IPsec VPN policy.</td></tr></table>	Option	Description	accept	Allows session that match the firewall policy.	deny	Blocks sessions that match the firewall policy.	ipsec	Firewall policy becomes a policy-based IPsec VPN policy.			
	Option	Description										
	accept	Allows session that match the firewall policy.										
	deny	Blocks sessions that match the firewall policy.										
ipsec	Firewall policy becomes a policy-based IPsec VPN policy.											
anti-replay	Enable/disable anti-replay check.	option	-	enable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable anti-replay check.</td></tr><tr><td>disable</td><td>Disable anti-replay check.</td></tr></table>	Option	Description	enable	Enable anti-replay check.	disable	Disable anti-replay check.					
	Option	Description										
	enable	Enable anti-replay check.										
disable	Disable anti-replay check.											
application-list	Name of an existing Application list.	string	Maximum length: 35									
auth-cert	HTTPS server certificate for policy authentication.	string	Maximum length: 35									
auth-path	Enable/disable authentication-based routing.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable authentication-based routing.</td></tr><tr><td>disable</td><td>Disable authentication-based routing.</td></tr></table>	Option	Description	enable	Enable authentication-based routing.	disable	Disable authentication-based routing.					
	Option	Description										
	enable	Enable authentication-based routing.										
disable	Disable authentication-based routing.											
auth-redirect-addr	HTTP-to-HTTPS redirect address for firewall authentication.	string	Maximum length: 63									

Parameter	Description	Type	Size	Default						
auto-asic-offload *	Enable/disable policy traffic ASIC offloading.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable auto ASIC offloading.</td></tr><tr><td><i>disable</i></td><td>Disable ASIC offloading.</td></tr></table>	Option	Description	<i>enable</i>	Enable auto ASIC offloading.	<i>disable</i>	Disable ASIC offloading.			
	Option	Description								
	<i>enable</i>	Enable auto ASIC offloading.								
<i>disable</i>	Disable ASIC offloading.									
av-profile	Name of an existing Antivirus profile.	string	Maximum length: 35							
block-notification	Enable/disable block notification.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable setting.</td></tr><tr><td><i>disable</i></td><td>Disable setting.</td></tr></table>	Option	Description	<i>enable</i>	Enable setting.	<i>disable</i>	Disable setting.			
	Option	Description								
	<i>enable</i>	Enable setting.								
<i>disable</i>	Disable setting.									
captive-portal-exempt	Enable to exempt some users from the captive portal.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable exemption of captive portal.</td></tr><tr><td><i>disable</i></td><td>Disable exemption of captive portal.</td></tr></table>	Option	Description	<i>enable</i>	Enable exemption of captive portal.	<i>disable</i>	Disable exemption of captive portal.			
	Option	Description								
	<i>enable</i>	Enable exemption of captive portal.								
<i>disable</i>	Disable exemption of captive portal.									
capture-packet *	Enable/disable capture packets.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable capture packets.</td></tr><tr><td><i>disable</i></td><td>Disable capture packets.</td></tr></table>	Option	Description	<i>enable</i>	Enable capture packets.	<i>disable</i>	Disable capture packets.			
	Option	Description								
	<i>enable</i>	Enable capture packets.								
<i>disable</i>	Disable capture packets.									
cifs-profile	Name of an existing CIFS profile.	string	Maximum length: 35							
comments	Comment.	var-string	Maximum length: 1023							
custom-log-fields <field-id>	Custom fields to append to log messages for this policy. Custom log field.	string	Maximum length: 35							
decrypted-traffic-mirror	Decrypted traffic mirror.	string	Maximum length: 35							

Parameter	Description	Type	Size	Default						
delay-tcp-npu-session	Enable TCP NPU session delay to guarantee packet order of 3-way handshake.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable TCP NPU session delay in order to guarantee packet order of 3-way handshake.</td></tr><tr><td><i>disable</i></td><td>Disable TCP NPU session delay in order to guarantee packet order of 3-way handshake.</td></tr></table>	Option	Description	<i>enable</i>	Enable TCP NPU session delay in order to guarantee packet order of 3-way handshake.	<i>disable</i>	Disable TCP NPU session delay in order to guarantee packet order of 3-way handshake.			
Option	Description									
<i>enable</i>	Enable TCP NPU session delay in order to guarantee packet order of 3-way handshake.									
<i>disable</i>	Disable TCP NPU session delay in order to guarantee packet order of 3-way handshake.									
diffserv-copy	Enable to copy packet's DiffServ values from session's original direction to its reply direction.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable DSCP copy.</td></tr><tr><td><i>disable</i></td><td>Disable DSCP copy.</td></tr></table>	Option	Description	<i>enable</i>	Enable DSCP copy.	<i>disable</i>	Disable DSCP copy.			
Option	Description									
<i>enable</i>	Enable DSCP copy.									
<i>disable</i>	Disable DSCP copy.									
diffserv-forward	Enable to change packet's DiffServ values to the specified diffservcode-forward value.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable setting forward (original) traffic Diffserv.</td></tr><tr><td><i>disable</i></td><td>Disable setting forward (original) traffic Diffserv.</td></tr></table>	Option	Description	<i>enable</i>	Enable setting forward (original) traffic Diffserv.	<i>disable</i>	Disable setting forward (original) traffic Diffserv.			
Option	Description									
<i>enable</i>	Enable setting forward (original) traffic Diffserv.									
<i>disable</i>	Disable setting forward (original) traffic Diffserv.									
diffserv-reverse	Enable to change packet's reverse (reply) DiffServ values to the specified diffservcode-rev value.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable setting reverse (reply) traffic DiffServ.</td></tr><tr><td><i>disable</i></td><td>Disable setting reverse (reply) traffic DiffServ.</td></tr></table>	Option	Description	<i>enable</i>	Enable setting reverse (reply) traffic DiffServ.	<i>disable</i>	Disable setting reverse (reply) traffic DiffServ.			
Option	Description									
<i>enable</i>	Enable setting reverse (reply) traffic DiffServ.									
<i>disable</i>	Disable setting reverse (reply) traffic DiffServ.									
diffservcode-forward	Change packet's DiffServ to this value.	user	Not Specified							
diffservcode-rev	Change packet's reverse (reply) DiffServ to this value.	user	Not Specified							
disclaimer	Enable/disable user authentication disclaimer.	option	-	disable						

Parameter	Description	Type	Size	Default
	Option Description			
	<i>enable</i>	Enable user authentication disclaimer.		
	<i>disable</i>	Disable user authentication disclaimer.		
dlp-profile	Name of an existing DLP profile.	string	Maximum length: 35	
dnsfilter-profile	Name of an existing DNS filter profile.	string	Maximum length: 35	
dsri	Enable DSRI to ignore HTTP server responses.	option	-	disable
	Option Description			
	<i>enable</i>	Enable DSRI.		
	<i>disable</i>	Disable DSRI.		
dstaddr <name>	Destination IPv4 address and address group names. Address name.	string	Maximum length: 79	
dstaddr-negate	When enabled dstaddr specifies what the destination address must NOT be.	option	-	disable
	Option Description			
	<i>enable</i>	Enable destination address negate.		
	<i>disable</i>	Disable destination address negate.		
dstaddr6 <name>	Destination IPv6 address name and address group names. Address name.	string	Maximum length: 79	
dstaddr6-negate	When enabled dstaddr6 specifies what the destination address must NOT be.	option	-	disable
	Option Description			
	<i>enable</i>	Enable IPv6 destination address negate.		
	<i>disable</i>	Disable IPv6 destination address negate.		
dstintf <name>	Outgoing (egress) interface. Interface name.	string	Maximum length: 79	

Parameter	Description	Type	Size	Default						
dynamic-shaping	Enable/disable dynamic RADIUS defined traffic shaping.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable dynamic RADIUS defined traffic shaping.</td></tr><tr><td><i>disable</i></td><td>Disable dynamic RADIUS defined traffic shaping.</td></tr></table>	Option	Description	<i>enable</i>	Enable dynamic RADIUS defined traffic shaping.	<i>disable</i>	Disable dynamic RADIUS defined traffic shaping.			
Option	Description									
<i>enable</i>	Enable dynamic RADIUS defined traffic shaping.									
<i>disable</i>	Disable dynamic RADIUS defined traffic shaping.									
email-collect	Enable/disable email collection.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable email collection.</td></tr><tr><td><i>disable</i></td><td>Disable email collection.</td></tr></table>	Option	Description	<i>enable</i>	Enable email collection.	<i>disable</i>	Disable email collection.			
Option	Description									
<i>enable</i>	Enable email collection.									
<i>disable</i>	Disable email collection.									
emailfilter-profile	Name of an existing email filter profile.	string	Maximum length: 35							
fec	Enable/disable Forward Error Correction on traffic matching this policy on a FEC device.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable Forward Error Correction.</td></tr><tr><td><i>disable</i></td><td>Disable Forward Error Correction.</td></tr></table>	Option	Description	<i>enable</i>	Enable Forward Error Correction.	<i>disable</i>	Disable Forward Error Correction.			
Option	Description									
<i>enable</i>	Enable Forward Error Correction.									
<i>disable</i>	Disable Forward Error Correction.									
file-filter-profile	Name of an existing file-filter profile.	string	Maximum length: 35							
firewall-session-dirty	How to handle sessions if the configuration of this firewall policy changes.	option	-	check-all						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>check-all</i></td><td>Flush all current sessions accepted by this policy. These sessions must be started and re-matched with policies.</td></tr><tr><td><i>check-new</i></td><td>Continue to allow sessions already accepted by this policy.</td></tr></table>	Option	Description	<i>check-all</i>	Flush all current sessions accepted by this policy. These sessions must be started and re-matched with policies.	<i>check-new</i>	Continue to allow sessions already accepted by this policy.			
Option	Description									
<i>check-all</i>	Flush all current sessions accepted by this policy. These sessions must be started and re-matched with policies.									
<i>check-new</i>	Continue to allow sessions already accepted by this policy.									
fixedport	Enable to prevent source NAT from changing a session's source port.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable setting.</td></tr><tr><td><i>disable</i></td><td>Disable setting.</td></tr></table>	Option	Description	<i>enable</i>	Enable setting.	<i>disable</i>	Disable setting.			
Option	Description									
<i>enable</i>	Enable setting.									
<i>disable</i>	Disable setting.									

Parameter	Description	Type	Size	Default						
fsso-agent-for-ntlm	FSSO agent to use for NTLM authentication.	string	Maximum length: 35							
fsso-groups <name>	Names of FSSO groups. Names of FSSO groups.	string	Maximum length: 511							
geoip-anycast	Enable/disable recognition of anycast IP addresses using the geography IP database.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable recognition of anycast IP addresses using the geography IP database.</td></tr><tr><td><i>disable</i></td><td>Disable recognition of anycast IP addresses using the geography IP database.</td></tr></table>	Option	Description	<i>enable</i>	Enable recognition of anycast IP addresses using the geography IP database.	<i>disable</i>	Disable recognition of anycast IP addresses using the geography IP database.			
Option	Description									
<i>enable</i>	Enable recognition of anycast IP addresses using the geography IP database.									
<i>disable</i>	Disable recognition of anycast IP addresses using the geography IP database.									
geoip-match	Match geography address based either on its physical location or registered location.	option	-	physical-location						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>physical-location</i></td><td>Match geography address to its physical location using the geography IP database.</td></tr><tr><td><i>registered-location</i></td><td>Match geography address to its registered location using the geography IP database.</td></tr></table>	Option	Description	<i>physical-location</i>	Match geography address to its physical location using the geography IP database.	<i>registered-location</i>	Match geography address to its registered location using the geography IP database.			
Option	Description									
<i>physical-location</i>	Match geography address to its physical location using the geography IP database.									
<i>registered-location</i>	Match geography address to its registered location using the geography IP database.									
groups <name>	Names of user groups that can authenticate with this policy. Group name.	string	Maximum length: 79							
http-policy-redirect	Redirect HTTP(S) traffic to matching transparent web proxy policy.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable HTTP(S) policy redirect.</td></tr><tr><td><i>disable</i></td><td>Disable HTTP(S) policy redirect.</td></tr></table>	Option	Description	<i>enable</i>	Enable HTTP(S) policy redirect.	<i>disable</i>	Disable HTTP(S) policy redirect.			
Option	Description									
<i>enable</i>	Enable HTTP(S) policy redirect.									
<i>disable</i>	Disable HTTP(S) policy redirect.									
icap-profile	Name of an existing ICAP profile.	string	Maximum length: 35							
identity-based-route	Name of identity-based routing rule.	string	Maximum length: 35							
inbound	Policy-based IPsec VPN: only traffic from the remote network can initiate a VPN.	option	-	disable						

Parameter	Description	Type	Size	Default						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable setting.</td></tr><tr><td><i>disable</i></td><td>Disable setting.</td></tr></table>	Option	Description	<i>enable</i>	Enable setting.	<i>disable</i>	Disable setting.			
	Option	Description								
	<i>enable</i>	Enable setting.								
<i>disable</i>	Disable setting.									
inspection-mode	Policy inspection mode (Flow/proxy). Default is Flow mode.	option	-	flow						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>proxy</i></td><td>Proxy based inspection.</td></tr><tr><td><i>flow</i></td><td>Flow based inspection.</td></tr></table>	Option	Description	<i>proxy</i>	Proxy based inspection.	<i>flow</i>	Flow based inspection.			
	Option	Description								
	<i>proxy</i>	Proxy based inspection.								
<i>flow</i>	Flow based inspection.									
internet-service	Enable/disable use of Internet Services for this policy. If enabled, destination address and service are not used.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable use of Internet Services in policy.</td></tr><tr><td><i>disable</i></td><td>Disable use of Internet Services in policy.</td></tr></table>	Option	Description	<i>enable</i>	Enable use of Internet Services in policy.	<i>disable</i>	Disable use of Internet Services in policy.			
	Option	Description								
	<i>enable</i>	Enable use of Internet Services in policy.								
<i>disable</i>	Disable use of Internet Services in policy.									
internet-service-custom <name>	Custom Internet Service name. Custom Internet Service name.	string	Maximum length: 79							
internet-service-custom-group <name>	Custom Internet Service group name. Custom Internet Service group name.	string	Maximum length: 79							
internet-service-group <name>	Internet Service group name. Internet Service group name.	string	Maximum length: 79							
internet-service-name <name>	Internet Service name. Internet Service name.	string	Maximum length: 79							
internet-service-negate	When enabled internet-service specifies what the service must NOT be.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable negated Internet Service match.</td></tr><tr><td><i>disable</i></td><td>Disable negated Internet Service match.</td></tr></table>	Option	Description	<i>enable</i>	Enable negated Internet Service match.	<i>disable</i>	Disable negated Internet Service match.			
	Option	Description								
	<i>enable</i>	Enable negated Internet Service match.								
<i>disable</i>	Disable negated Internet Service match.									

Parameter	Description	Type	Size	Default						
internet-service-src	Enable/disable use of Internet Services in source for this policy. If enabled, source address is not used.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable use of Internet Services source in policy.</td></tr><tr><td><i>disable</i></td><td>Disable use of Internet Services source in policy.</td></tr></table>	Option	Description	<i>enable</i>	Enable use of Internet Services source in policy.	<i>disable</i>	Disable use of Internet Services source in policy.			
Option	Description									
<i>enable</i>	Enable use of Internet Services source in policy.									
<i>disable</i>	Disable use of Internet Services source in policy.									
internet-service-src-custom <name>	Custom Internet Service source name. Custom Internet Service name.	string	Maximum length: 79							
internet-service-src-custom-group <name>	Custom Internet Service source group name. Custom Internet Service group name.	string	Maximum length: 79							
internet-service-src-group <name>	Internet Service source group name. Internet Service group name.	string	Maximum length: 79							
internet-service-src-name <name>	Internet Service source name. Internet Service name.	string	Maximum length: 79							
internet-service-src-negate	When enabled internet-service-src specifies what the service must NOT be.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable negated Internet Service source match.</td></tr><tr><td><i>disable</i></td><td>Disable negated Internet Service source match.</td></tr></table>	Option	Description	<i>enable</i>	Enable negated Internet Service source match.	<i>disable</i>	Disable negated Internet Service source match.			
Option	Description									
<i>enable</i>	Enable negated Internet Service source match.									
<i>disable</i>	Disable negated Internet Service source match.									
internet-service6	Enable/disable use of IPv6 Internet Services for this policy. If enabled, destination address and service are not used.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable use of IPv6 Internet Services in policy.</td></tr><tr><td><i>disable</i></td><td>Disable use of IPv6 Internet Services in policy.</td></tr></table>	Option	Description	<i>enable</i>	Enable use of IPv6 Internet Services in policy.	<i>disable</i>	Disable use of IPv6 Internet Services in policy.			
Option	Description									
<i>enable</i>	Enable use of IPv6 Internet Services in policy.									
<i>disable</i>	Disable use of IPv6 Internet Services in policy.									
internet-service6-custom <name>	Custom IPv6 Internet Service name. Custom Internet Service name.	string	Maximum length: 79							

Parameter	Description	Type	Size	Default						
internet-service6-custom-group <name>	Custom Internet Service6 group name. Custom Internet Service6 group name.	string	Maximum length: 79							
internet-service6-group <name>	Internet Service group name. Internet Service group name.	string	Maximum length: 79							
internet-service6-name <name>	IPv6 Internet Service name. IPv6 Internet Service name.	string	Maximum length: 79							
internet-service6-negate	When enabled internet-service6 specifies what the service must NOT be.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable negated IPv6 Internet Service match.</td></tr><tr><td><i>disable</i></td><td>Disable negated IPv6 Internet Service match.</td></tr></table>	Option	Description	<i>enable</i>	Enable negated IPv6 Internet Service match.	<i>disable</i>	Disable negated IPv6 Internet Service match.			
Option	Description									
<i>enable</i>	Enable negated IPv6 Internet Service match.									
<i>disable</i>	Disable negated IPv6 Internet Service match.									
internet-service6-src	Enable/disable use of IPv6 Internet Services in source for this policy. If enabled, source address is not used.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable use of IPv6 Internet Services source in policy.</td></tr><tr><td><i>disable</i></td><td>Disable use of IPv6 Internet Services source in policy.</td></tr></table>	Option	Description	<i>enable</i>	Enable use of IPv6 Internet Services source in policy.	<i>disable</i>	Disable use of IPv6 Internet Services source in policy.			
Option	Description									
<i>enable</i>	Enable use of IPv6 Internet Services source in policy.									
<i>disable</i>	Disable use of IPv6 Internet Services source in policy.									
internet-service6-src-custom <name>	Custom IPv6 Internet Service source name. Custom Internet Service name.	string	Maximum length: 79							
internet-service6-src-custom-group <name>	Custom Internet Service6 source group name. Custom Internet Service6 group name.	string	Maximum length: 79							
internet-service6-src-group <name>	Internet Service6 source group name. Internet Service group name.	string	Maximum length: 79							
internet-service6-src-name <name>	IPv6 Internet Service source name. Internet Service name.	string	Maximum length: 79							

Parameter	Description	Type	Size	Default								
internet-service6-src-negate	When enabled internet-service6-src specifies what the service must NOT be.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable negated IPv6 Internet Service source match.</td></tr><tr><td>disable</td><td>Disable negated IPv6 Internet Service source match.</td></tr></table>	Option	Description	enable	Enable negated IPv6 Internet Service source match.	disable	Disable negated IPv6 Internet Service source match.					
Option	Description											
enable	Enable negated IPv6 Internet Service source match.											
disable	Disable negated IPv6 Internet Service source match.											
ippool	Enable to use IP Pools for source NAT.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable setting.</td></tr><tr><td>disable</td><td>Disable setting.</td></tr></table>	Option	Description	enable	Enable setting.	disable	Disable setting.					
Option	Description											
enable	Enable setting.											
disable	Disable setting.											
ips-sensor	Name of an existing IPS sensor.	string	Maximum length: 35									
ips-voip-filter	Name of an existing VoIP (ips) profile.	string	Maximum length: 35									
logtraffic	Enable or disable logging. Log all sessions or security profile sessions.	option	-	utm								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>all</td><td>Log all sessions accepted or denied by this policy.</td></tr><tr><td>utm</td><td>Log traffic that has a security profile applied to it.</td></tr><tr><td>disable</td><td>Disable all logging for this policy.</td></tr></table>	Option	Description	all	Log all sessions accepted or denied by this policy.	utm	Log traffic that has a security profile applied to it.	disable	Disable all logging for this policy.			
Option	Description											
all	Log all sessions accepted or denied by this policy.											
utm	Log traffic that has a security profile applied to it.											
disable	Disable all logging for this policy.											
logtraffic-start	Record logs when a session starts.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable setting.</td></tr><tr><td>disable</td><td>Disable setting.</td></tr></table>	Option	Description	enable	Enable setting.	disable	Disable setting.					
Option	Description											
enable	Enable setting.											
disable	Disable setting.											
match-vip	Enable to match packets that have had their destination addresses changed by a VIP.	option	-	enable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Match DNATed packet.</td></tr><tr><td>disable</td><td>Do not match DNATed packet.</td></tr></table>	Option	Description	enable	Match DNATed packet.	disable	Do not match DNATed packet.					
Option	Description											
enable	Match DNATed packet.											
disable	Do not match DNATed packet.											

Parameter	Description	Type	Size	Default						
match-vip-only	Enable/disable matching of only those packets that have had their destination addresses changed by a VIP.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable matching of only those packets that have had their destination addresses changed by a VIP.</td></tr><tr><td><i>disable</i></td><td>Disable matching of only those packets that have had their destination addresses changed by a VIP.</td></tr></table>	Option	Description	<i>enable</i>	Enable matching of only those packets that have had their destination addresses changed by a VIP.	<i>disable</i>	Disable matching of only those packets that have had their destination addresses changed by a VIP.			
Option	Description									
<i>enable</i>	Enable matching of only those packets that have had their destination addresses changed by a VIP.									
<i>disable</i>	Disable matching of only those packets that have had their destination addresses changed by a VIP.									
name	Policy name.	string	Maximum length: 35							
nat	Enable/disable source NAT.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable setting.</td></tr><tr><td><i>disable</i></td><td>Disable setting.</td></tr></table>	Option	Description	<i>enable</i>	Enable setting.	<i>disable</i>	Disable setting.			
Option	Description									
<i>enable</i>	Enable setting.									
<i>disable</i>	Disable setting.									
nat46	Enable/disable NAT46.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable NAT46.</td></tr><tr><td><i>disable</i></td><td>Disable NAT46.</td></tr></table>	Option	Description	<i>enable</i>	Enable NAT46.	<i>disable</i>	Disable NAT46.			
Option	Description									
<i>enable</i>	Enable NAT46.									
<i>disable</i>	Disable NAT46.									
nat64	Enable/disable NAT64.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable NAT64.</td></tr><tr><td><i>disable</i></td><td>Disable NAT64.</td></tr></table>	Option	Description	<i>enable</i>	Enable NAT64.	<i>disable</i>	Disable NAT64.			
Option	Description									
<i>enable</i>	Enable NAT64.									
<i>disable</i>	Disable NAT64.									
natinbound	Policy-based IPsec VPN: apply destination NAT to inbound traffic.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable setting.</td></tr><tr><td><i>disable</i></td><td>Disable setting.</td></tr></table>	Option	Description	<i>enable</i>	Enable setting.	<i>disable</i>	Disable setting.			
Option	Description									
<i>enable</i>	Enable setting.									
<i>disable</i>	Disable setting.									
natip	Policy-based IPsec VPN: source NAT IP address for outgoing traffic.	ipv4-classnet	Not Specified	0.0.0.0 0.0.0.0						

Parameter	Description	Type	Size	Default						
natoutbound	Policy-based IPsec VPN: apply source NAT to outbound traffic.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable setting.</td></tr><tr><td><i>disable</i></td><td>Disable setting.</td></tr></table>	Option	Description	<i>enable</i>	Enable setting.	<i>disable</i>	Disable setting.			
Option	Description									
<i>enable</i>	Enable setting.									
<i>disable</i>	Disable setting.									
network-service-dynamic <name>	Dynamic Network Service name. Dynamic Network Service name.	string	Maximum length: 79							
network-service-src-dynamic <name>	Dynamic Network Service source name. Dynamic Network Service name.	string	Maximum length: 79							
np-acceleration *	Enable/disable UTM Network Processor acceleration.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable UTM Network Processor acceleration.</td></tr><tr><td><i>disable</i></td><td>Disable UTM Network Processor acceleration.</td></tr></table>	Option	Description	<i>enable</i>	Enable UTM Network Processor acceleration.	<i>disable</i>	Disable UTM Network Processor acceleration.			
Option	Description									
<i>enable</i>	Enable UTM Network Processor acceleration.									
<i>disable</i>	Disable UTM Network Processor acceleration.									
ntlm	Enable/disable NTLM authentication.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable setting.</td></tr><tr><td><i>disable</i></td><td>Disable setting.</td></tr></table>	Option	Description	<i>enable</i>	Enable setting.	<i>disable</i>	Disable setting.			
Option	Description									
<i>enable</i>	Enable setting.									
<i>disable</i>	Disable setting.									
ntlm-enabled-browsers <user-agent-string>	HTTP-User-Agent value of supported browsers. User agent string.	string	Maximum length: 79							
ntlm-guest	Enable/disable NTLM guest user access.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable setting.</td></tr><tr><td><i>disable</i></td><td>Disable setting.</td></tr></table>	Option	Description	<i>enable</i>	Enable setting.	<i>disable</i>	Disable setting.			
Option	Description									
<i>enable</i>	Enable setting.									
<i>disable</i>	Disable setting.									
outbound	Policy-based IPsec VPN: only traffic from the internal network can initiate a VPN.	option	-	enable						

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		
passive-wan-health-measurement	Enable/disable passive WAN health measurement. When enabled, auto-asic-offload is disabled.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable Passive WAN health measurement.		
	<i>disable</i>	Disable Passive WAN health measurement.		
per-ip-shaper	Per-IP traffic shaper.	string	Maximum length: 35	
permit-any-host	Accept UDP packets from any host.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		
permit-stun-host	Accept UDP packets from any Session Traversal Utilities for NAT (STUN) host.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		
policy-expiry	Enable/disable policy expiry.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable policy expiry.		
	<i>disable</i>	Disable policy expiry.		
policy-expiry-date	Policy expiry date (YYYY-MM-DD HH:MM:SS).	datetime	Not Specified	0000-00-00 00:00:00
policy-expiry-date-utc	Policy expiry date and time, in epoch format.	user	Not Specified	

Parameter	Description	Type	Size	Default						
policyid	Policy ID (0 - 4294967294).	integer	Minimum value: 0 0 Maximum value: 4294967294							
poolname <name>	IP Pool names. IP pool name.	string	Maximum length: 79							
poolname6 <name>	IPv6 pool names. IPv6 pool name.	string	Maximum length: 79							
profile-group	Name of profile group.	string	Maximum length: 35							
profile-protocol-options	Name of an existing Protocol options profile.	string	Maximum length: 35	default						
profile-type	Determine whether the firewall policy allows security profile groups or single profiles only.	option	-	single						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>single</td><td>Do not allow security profile groups.</td></tr><tr><td>group</td><td>Allow security profile groups.</td></tr></table>				Option	Description	single	Do not allow security profile groups.	group	Allow security profile groups.
Option	Description									
single	Do not allow security profile groups.									
group	Allow security profile groups.									
radius-mac-auth-bypass	Enable MAC authentication bypass. The bypassed MAC address must be received from RADIUS server.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable MAC authentication bypass.</td></tr><tr><td>disable</td><td>Disable MAC authentication bypass.</td></tr></table>				Option	Description	enable	Enable MAC authentication bypass.	disable	Disable MAC authentication bypass.
Option	Description									
enable	Enable MAC authentication bypass.									
disable	Disable MAC authentication bypass.									
redirect-url	URL users are directed to after seeing and accepting the disclaimer or authenticating.	var-string	Maximum length: 1023							
replacemsg-override-group	Override the default replacement message group for this policy.	string	Maximum length: 35							
reputation-direction	Direction of the initial traffic for reputation to take effect.	option	-	destination						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>source</td><td>Check reputation for source address.</td></tr><tr><td>destination</td><td>Check reputation for destination address.</td></tr></table>				Option	Description	source	Check reputation for source address.	destination	Check reputation for destination address.
Option	Description									
source	Check reputation for source address.									
destination	Check reputation for destination address.									

Parameter	Description	Type	Size	Default
reputation-direction6	Direction of the initial traffic for IPv6 reputation to take effect.	option	-	destination
	Option Description			
	source	Check reputation for IPv6 source address.		
	destination	Check reputation for IPv6 destination address.		
reputation-minimum	Minimum Reputation to take action.	integer	Minimum value: 0 0 Maximum value: 4294967295	
reputation-minimum6	IPv6 Minimum Reputation to take action.	integer	Minimum value: 0 0 Maximum value: 4294967295	
rtp-addr <name>	Address names if this is an RTP NAT policy. Address name.	string	Maximum length: 79	
rtp-nat	Enable Real Time Protocol (RTP) NAT.	option	-	disable
	Option Description			
	disable	Disable setting.		
	enable	Enable setting.		
schedule	Schedule name.	string	Maximum length: 35	
schedule-timeout	Enable to force current sessions to end when the schedule object times out. Disable allows them to end from inactivity.	option	-	disable
	Option Description			
	enable	Enable schedule timeout.		
	disable	Disable schedule timeout.		
sctp-filter-profile	Name of an existing SCTP filter profile.	string	Maximum length: 35	
send-deny-packet	Enable to send a reply when a session is denied or blocked by a firewall policy.	option	-	disable

Parameter	Description	Type	Size	Default
	Option Description			
	<i>disable</i>	Disable deny-packet sending.		
	<i>enable</i>	Enable deny-packet sending.		
service <name>	Service and service group names. Service and service group names.	string	Maximum length: 79	
service-negate	When enabled service specifies what the service must NOT be.	option	-	disable
	Option Description			
	<i>enable</i>	Enable negated service match.		
	<i>disable</i>	Disable negated service match.		
session-ttl	TTL in seconds for sessions accepted by this policy (0 means use the system default session TTL).	user	Not Specified	
sgt <id>	Security group tags. Security group tag (1 - 65535).	integer	Minimum value: 1 Maximum value: 65535	
sgt-check	Enable/disable security group tags (SGT) check.	option	-	disable
	Option Description			
	<i>enable</i>	Enable SGT check.		
	<i>disable</i>	Disable SGT check.		
src-vendor-mac <id>	Vendor MAC source ID. Vendor MAC ID.	integer	Minimum value: 0 Maximum value: 4294967295	
srcaddr <name>	Source IPv4 address and address group names. Address name.	string	Maximum length: 79	
srcaddr-negate	When enabled srcaddr specifies what the source address must NOT be.	option	-	disable
	Option Description			
	<i>enable</i>	Enable source address negate.		
	<i>disable</i>	Disable source address negate.		

Parameter	Description	Type	Size	Default						
srcaddr6 <name>	Source IPv6 address name and address group names. Address name.	string	Maximum length: 79							
srcaddr6-negate	When enabled srcaddr6 specifies what the source address must NOT be.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable IPv6 source address negate.</td></tr><tr><td>disable</td><td>Disable IPv6 source address negate.</td></tr></table>				Option	Description	enable	Enable IPv6 source address negate.	disable	Disable IPv6 source address negate.
Option	Description									
enable	Enable IPv6 source address negate.									
disable	Disable IPv6 source address negate.									
srcintf <name>	Incoming (ingress) interface. Interface name.	string	Maximum length: 79							
ssh-filter-profile	Name of an existing SSH filter profile.	string	Maximum length: 35							
ssh-policy-redirect	Redirect SSH traffic to matching transparent proxy policy.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable SSH policy redirect.</td></tr><tr><td>disable</td><td>Disable SSH policy redirect.</td></tr></table>				Option	Description	enable	Enable SSH policy redirect.	disable	Disable SSH policy redirect.
Option	Description									
enable	Enable SSH policy redirect.									
disable	Disable SSH policy redirect.									
ssl-ssh-profile	Name of an existing SSL SSH profile.	string	Maximum length: 35	no-inspection						
status	Enable or disable this policy.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable setting.</td></tr><tr><td>disable</td><td>Disable setting.</td></tr></table>				Option	Description	enable	Enable setting.	disable	Disable setting.
Option	Description									
enable	Enable setting.									
disable	Disable setting.									
tcp-mss-receiver	Receiver TCP maximum segment size (MSS).	integer	Minimum value: 0 Maximum value: 65535							
tcp-mss-sender	Sender TCP maximum segment size (MSS).	integer	Minimum value: 0 Maximum value: 65535							
tcp-session-without-syn	Enable/disable creation of TCP session without SYN flag.	option	-	disable						

Parameter	Description	Type	Size	Default								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>all</i></td><td>Enable TCP session without SYN.</td></tr><tr><td><i>data-only</i></td><td>Enable TCP session data only.</td></tr><tr><td><i>disable</i></td><td>Disable TCP session without SYN.</td></tr></table>	Option	Description	<i>all</i>	Enable TCP session without SYN.	<i>data-only</i>	Enable TCP session data only.	<i>disable</i>	Disable TCP session without SYN.			
	Option	Description										
	<i>all</i>	Enable TCP session without SYN.										
	<i>data-only</i>	Enable TCP session data only.										
<i>disable</i>	Disable TCP session without SYN.											
timeout-send-rst	Enable/disable sending RST packets when TCP sessions expire.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable sending of RST packet upon TCP session expiration.</td></tr><tr><td><i>disable</i></td><td>Disable sending of RST packet upon TCP session expiration.</td></tr></table>	Option	Description	<i>enable</i>	Enable sending of RST packet upon TCP session expiration.	<i>disable</i>	Disable sending of RST packet upon TCP session expiration.					
	Option	Description										
	<i>enable</i>	Enable sending of RST packet upon TCP session expiration.										
<i>disable</i>	Disable sending of RST packet upon TCP session expiration.											
tos	ToS (Type of Service) value used for comparison.	user	Not Specified									
tos-mask	Non-zero bit positions are used for comparison while zero bit positions are ignored.	user	Not Specified									
tos-negate	Enable negated TOS match.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable TOS match negate.</td></tr><tr><td><i>disable</i></td><td>Disable TOS match negate.</td></tr></table>	Option	Description	<i>enable</i>	Enable TOS match negate.	<i>disable</i>	Disable TOS match negate.					
	Option	Description										
	<i>enable</i>	Enable TOS match negate.										
<i>disable</i>	Disable TOS match negate.											
traffic-shaper	Traffic shaper.	string	Maximum length: 35									
traffic-shaper-reverse	Reverse traffic shaper.	string	Maximum length: 35									
users <name>	Names of individual users that can authenticate with this policy. Names of individual users that can authenticate with this policy.	string	Maximum length: 79									
utm-status	Enable to add one or more security profiles (AV, IPS, etc.) to the firewall policy.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable setting.</td></tr><tr><td><i>disable</i></td><td>Disable setting.</td></tr></table>	Option	Description	<i>enable</i>	Enable setting.	<i>disable</i>	Disable setting.					
	Option	Description										
	<i>enable</i>	Enable setting.										
<i>disable</i>	Disable setting.											

Parameter	Description	Type	Size	Default								
uuid	Universally Unique Identifier (UUID; automatically assigned but can be manually reset).	uuid	Not Specified	00000000-0000-0000-0000-000000000000								
videofilter-profile	Name of an existing VideoFilter profile.	string	Maximum length: 35									
vlan-cos-fwd	VLAN forward direction user priority: 255 passthrough, 0 lowest, 7 highest.	integer	Minimum value: 0 Maximum value: 7	255								
vlan-cos-rev	VLAN reverse direction user priority: 255 passthrough, 0 lowest, 7 highest.	integer	Minimum value: 0 Maximum value: 7	255								
vlan-filter	VLAN ranges to allow	user	Not Specified									
voip-profile	Name of an existing VoIP (voipd) profile.	string	Maximum length: 35									
vpntunnel	Policy-based IPsec VPN: name of the IPsec VPN Phase 1.	string	Maximum length: 35									
waf-profile	Name of an existing Web application firewall profile.	string	Maximum length: 35									
wanopt *	Enable/disable WAN optimization.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable setting.</td></tr><tr><td><i>disable</i></td><td>Disable setting.</td></tr></table>				Option	Description	<i>enable</i>	Enable setting.	<i>disable</i>	Disable setting.		
Option	Description											
<i>enable</i>	Enable setting.											
<i>disable</i>	Disable setting.											
wanopt-detection *	WAN optimization auto-detection mode.	option	-	active								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>active</i></td><td>Active WAN optimization peer auto-detection.</td></tr><tr><td><i>passive</i></td><td>Passive WAN optimization peer auto-detection.</td></tr><tr><td><i>off</i></td><td>Turn off WAN optimization peer auto-detection.</td></tr></table>				Option	Description	<i>active</i>	Active WAN optimization peer auto-detection.	<i>passive</i>	Passive WAN optimization peer auto-detection.	<i>off</i>	Turn off WAN optimization peer auto-detection.
Option	Description											
<i>active</i>	Active WAN optimization peer auto-detection.											
<i>passive</i>	Passive WAN optimization peer auto-detection.											
<i>off</i>	Turn off WAN optimization peer auto-detection.											
wanopt-passive-opt *	WAN optimization passive mode options. This option decides what IP address will be used to connect server.	option	-	default								

Parameter	Description	Type	Size	Default
	Option	Description		
	default	Allow client side WAN opt peer to decide.		
	transparent	Use address of client to connect to server.		
	non-transparent	Use local FortiGate address to connect to server.		
wanopt-peer *	WAN optimization peer.	string	Maximum length: 35	
wanopt-profile *	WAN optimization profile.	string	Maximum length: 35	
wccp	Enable/disable forwarding traffic matching this policy to a configured WCCP server.	option	-	disable
	Option	Description		
	enable	Enable WCCP setting.		
	disable	Disable WCCP setting.		
webcache *	Enable/disable web cache.	option	-	disable
	Option	Description		
	enable	Enable setting.		
	disable	Disable setting.		
webcache-https *	Enable/disable web cache for HTTPS.	option	-	disable
	Option	Description		
	disable	Disable web cache for HTTPS.		
	enable	Enable web cache for HTTPS.		
webfilter-profile	Name of an existing Web filter profile.	string	Maximum length: 35	
webproxy-forward-server	Webproxy forward server name.	string	Maximum length: 63	
webproxy-profile	Webproxy profile name.	string	Maximum length: 63	
ztna-device-ownership	Enable/disable zero trust device ownership.	option	-	disable

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>enable</i>	Enable ZTNA device ownership check.		
	<i>disable</i>	Disable ZTNA device ownership check.		
ztna-ems-tag <name>	Source ztna-ems-tag names. Address name.	string	Maximum length: 79	
ztna-geo-tag <name>	Source ztna-geo-tag names. Address name.	string	Maximum length: 79	
ztna-policy- redirect	Redirect ZTNA traffic to matching Access-Proxy proxy-policy.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable ZTNA proxy-policy redirect.		
	<i>disable</i>	Disable ZTNA proxy-policy redirect.		
ztna-status	Enable/disable zero trust access.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable zero trust network access.		
	<i>disable</i>	Disable zero trust network access.		
ztna-tags- match-logic	ZTNA tag matching logic.	option	-	or
	Option	Description		
	<i>or</i>	Match ZTNA tags using a logical OR operator.		
	<i>and</i>	Match ZTNA tags using a logical AND operator.		

* This parameter may not exist in some models.

config firewall profile-group

Configure profile groups.

```
config firewall profile-group
  Description: Configure profile groups.
  edit <name>
    set application-list {string}
    set av-profile {string}
    set cifs-profile {string}
    set dlp-profile {string}
```

```

    set dnsfilter-profile {string}
    set emailfilter-profile {string}
    set file-filter-profile {string}
    set icap-profile {string}
    set ips-sensor {string}
    set ips-voip-filter {string}
    set profile-protocol-options {string}
    set sctp-filter-profile {string}
    set ssh-filter-profile {string}
    set ssl-ssh-profile {string}
    set videofilter-profile {string}
    set voip-profile {string}
    set waf-profile {string}
    set webfilter-profile {string}
next
end

```

config firewall profile-group

Parameter	Description	Type	Size	Default
application-list	Name of an existing Application list.	string	Maximum length: 35	
av-profile	Name of an existing Antivirus profile.	string	Maximum length: 35	
cifs-profile	Name of an existing CIFS profile.	string	Maximum length: 35	
dlp-profile	Name of an existing DLP profile.	string	Maximum length: 35	
dnsfilter-profile	Name of an existing DNS filter profile.	string	Maximum length: 35	
emailfilter-profile	Name of an existing email filter profile.	string	Maximum length: 35	
file-filter-profile	Name of an existing file-filter profile.	string	Maximum length: 35	
icap-profile	Name of an existing ICAP profile.	string	Maximum length: 35	
ips-sensor	Name of an existing IPS sensor.	string	Maximum length: 35	
ips-voip-filter	Name of an existing VoIP (ips) profile.	string	Maximum length: 35	
name	Profile group name.	string	Maximum length: 35	

Parameter	Description	Type	Size	Default
profile-protocol-options	Name of an existing Protocol options profile.	string	Maximum length: 35	default
sctp-filter-profile	Name of an existing SCTP filter profile.	string	Maximum length: 35	
ssh-filter-profile	Name of an existing SSH filter profile.	string	Maximum length: 35	
ssl-ssh-profile	Name of an existing SSL SSH profile.	string	Maximum length: 35	certificate-inspection
videofilter-profile	Name of an existing VideoFilter profile.	string	Maximum length: 35	
voip-profile	Name of an existing VoIP (voipd) profile.	string	Maximum length: 35	
waf-profile	Name of an existing Web application firewall profile.	string	Maximum length: 35	
webfilter-profile	Name of an existing Web filter profile.	string	Maximum length: 35	

config firewall profile-protocol-options

Configure protocol options.

```

config firewall profile-protocol-options
    Description: Configure protocol options.
    edit <name>
        config cifs
            Description: Configure CIFS protocol options.
            set domain-controller {string}
            set options {option1}, {option2}, ...
            set oversize-limit {integer}
            set ports {integer}
            set scan-bzip2 [enable|disable]
            set server-credential-type [none|credential-replication|...]
            config server-keytab
                Description: Server keytab.
                edit <principal>
                    set keytab {string}
                next
            end
            set status [enable|disable]
            set tcp-window-maximum {integer}
            set tcp-window-minimum {integer}
            set tcp-window-size {integer}
        end
    end

```

```

        set tcp-window-type [auto-tuning|system|...]
        set uncompressed-nest-limit {integer}
        set uncompressed-oversize-limit {integer}
    end
    set comment {var-string}
    config dns
        Description: Configure DNS protocol options.
        set ports {integer}
        set status [enable|disable]
    end
    config ftp
        Description: Configure FTP protocol options.
        set comfort-amount {integer}
        set comfort-interval {integer}
        set explicit-ftp-tls [enable|disable]
        set inspect-all [enable|disable]
        set options {option1}, {option2}, ...
        set oversize-limit {integer}
        set ports {integer}
        set scan-bzip2 [enable|disable]
        set ssl-offloaded [no|yes]
        set status [enable|disable]
        set stream-based-uncompressed-limit {integer}
        set tcp-window-maximum {integer}
        set tcp-window-minimum {integer}
        set tcp-window-size {integer}
        set tcp-window-type [auto-tuning|system|...]
        set uncompressed-nest-limit {integer}
        set uncompressed-oversize-limit {integer}
    end
    config http
        Description: Configure HTTP protocol options.
        set address-ip-rating [enable|disable]
        set block-page-status-code {integer}
        set comfort-amount {integer}
        set comfort-interval {integer}
        set h2c [enable|disable]
        set inspect-all [enable|disable]
        set options {option1}, {option2}, ...
        set oversize-limit {integer}
        set ports {integer}
        set post-lang {option1}, {option2}, ...
        set proxy-after-tcp-handshake [enable|disable]
        set range-block [disable|enable]
        set retry-count {integer}
        set scan-bzip2 [enable|disable]
        set ssl-offloaded [no|yes]
        set status [enable|disable]
        set stream-based-uncompressed-limit {integer}
        set streaming-content-bypass [enable|disable]
        set strip-x-forwarded-for [disable|enable]
        set switching-protocols [bypass|block]

```

```

    set tcp-window-maximum {integer}
    set tcp-window-minimum {integer}
    set tcp-window-size {integer}
    set tcp-window-type [auto-tuning|system|...]
    set tunnel-non-http [enable|disable]
    set uncompressed-nest-limit {integer}
    set uncompressed-oversize-limit {integer}
    set unknown-content-encoding [block|inspect|...]
    set unknown-http-version [reject|tunnel|...]
    set verify-dns-for-policy-matching [enable|disable]
end
config imap
    Description: Configure IMAP protocol options.
    set inspect-all [enable|disable]
    set options {option1}, {option2}, ...
    set oversize-limit {integer}
    set ports {integer}
    set proxy-after-tcp-handshake [enable|disable]
    set scan-bzip2 [enable|disable]
    set ssl-offloaded [no|yes]
    set status [enable|disable]
    set uncompressed-nest-limit {integer}
    set uncompressed-oversize-limit {integer}
end
config mail-signature
    Description: Configure Mail signature.
    set signature {string}
    set status [disable|enable]
end
config mapi
    Description: Configure MAPI protocol options.
    set options {option1}, {option2}, ...
    set oversize-limit {integer}
    set ports {integer}
    set scan-bzip2 [enable|disable]
    set status [enable|disable]
    set uncompressed-nest-limit {integer}
    set uncompressed-oversize-limit {integer}
end
config nntp
    Description: Configure NNTP protocol options.
    set inspect-all [enable|disable]
    set options {option1}, {option2}, ...
    set oversize-limit {integer}
    set ports {integer}
    set proxy-after-tcp-handshake [enable|disable]
    set scan-bzip2 [enable|disable]
    set status [enable|disable]
    set uncompressed-nest-limit {integer}
    set uncompressed-oversize-limit {integer}
end
set oversize-log [disable|enable]

```



```

config pop3
    Description: Configure POP3 protocol options.
    set inspect-all [enable|disable]
    set options {option1}, {option2}, ...
    set oversize-limit {integer}
    set ports {integer}
    set proxy-after-tcp-handshake [enable|disable]
    set scan-bzip2 [enable|disable]
    set ssl-offloaded [no|yes]
    set status [enable|disable]
    set uncompressed-nest-limit {integer}
    set uncompressed-oversize-limit {integer}
end
set replacemsg-group {string}
set rpc-over-http [enable|disable]
config smtp
    Description: Configure SMTP protocol options.
    set inspect-all [enable|disable]
    set options {option1}, {option2}, ...
    set oversize-limit {integer}
    set ports {integer}
    set proxy-after-tcp-handshake [enable|disable]
    set scan-bzip2 [enable|disable]
    set server-busy [enable|disable]
    set ssl-offloaded [no|yes]
    set status [enable|disable]
    set uncompressed-nest-limit {integer}
    set uncompressed-oversize-limit {integer}
end
config ssh
    Description: Configure SFTP and SCP protocol options.
    set comfort-amount {integer}
    set comfort-interval {integer}
    set options {option1}, {option2}, ...
    set oversize-limit {integer}
    set scan-bzip2 [enable|disable]
    set ssl-offloaded [no|yes]
    set stream-based-uncompressed-limit {integer}
    set tcp-window-maximum {integer}
    set tcp-window-minimum {integer}
    set tcp-window-size {integer}
    set tcp-window-type [auto-tuning|system|...]
    set uncompressed-nest-limit {integer}
    set uncompressed-oversize-limit {integer}
end
set switching-protocols-log [disable|enable]
next
end

```

config firewall profile-protocol-options

Parameter	Description	Type	Size	Default						
comment	Optional comments.	var-string	Maximum length: 255							
name	Name.	string	Maximum length: 35							
oversize-log	Enable/disable logging for antivirus oversize file blocking.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Disable logging for antivirus oversize file blocking.</td></tr><tr><td>enable</td><td>Enable logging for antivirus oversize file blocking.</td></tr></table>				Option	Description	disable	Disable logging for antivirus oversize file blocking.	enable	Enable logging for antivirus oversize file blocking.
Option	Description									
disable	Disable logging for antivirus oversize file blocking.									
enable	Enable logging for antivirus oversize file blocking.									
replacemsg-group	Name of the replacement message group to be used.	string	Maximum length: 35							
rpc-over-http	Enable/disable inspection of RPC over HTTP.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable inspection of RPC over HTTP.</td></tr><tr><td>disable</td><td>Disable inspection of RPC over HTTP.</td></tr></table>				Option	Description	enable	Enable inspection of RPC over HTTP.	disable	Disable inspection of RPC over HTTP.
Option	Description									
enable	Enable inspection of RPC over HTTP.									
disable	Disable inspection of RPC over HTTP.									
switching-protocols-log	Enable/disable logging for HTTP/HTTPS switching protocols.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Disable logging for HTTP/HTTPS switching protocols.</td></tr><tr><td>enable</td><td>Enable logging for HTTP/HTTPS switching protocols.</td></tr></table>				Option	Description	disable	Disable logging for HTTP/HTTPS switching protocols.	enable	Enable logging for HTTP/HTTPS switching protocols.
Option	Description									
disable	Disable logging for HTTP/HTTPS switching protocols.									
enable	Enable logging for HTTP/HTTPS switching protocols.									

config cifs

Parameter	Description	Type	Size	Default				
domain-controller	Domain for which to decrypt CIFS traffic.	string	Maximum length: 63					
options	One or more options that can be applied to the session.	option	-					
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>oversize</i></td><td>Block oversized file.</td></tr></table>				Option	Description	<i>oversize</i>	Block oversized file.
Option	Description							
<i>oversize</i>	Block oversized file.							

Parameter	Description	Type	Size	Default
oversize-limit	Maximum in-memory file size that can be scanned (MB).	integer	Minimum value: 1 Maximum value: 1606 **	10
ports	Ports to scan for content (1 - 65535, default = 445).	integer	Minimum value: 1 Maximum value: 65535	
scan-bzip2	Enable/disable scanning of BZip2 compressed files.	option	-	enable
	Option		Description	
	enable		Enable setting.	
	disable		Disable setting.	
server-credential-type	CIFS server credential type.	option	-	none
	Option		Description	
	none		Credential derivation not set.	
	credential-replication		Credential derived using Replication account on Domain Controller.	
	credential-keytab		Credential derived using server keytab.	
status	Enable/disable the active status of scanning for this protocol.	option	-	enable
	Option		Description	
	enable		Enable setting.	
	disable		Disable setting.	
tcp-window-maximum	Maximum dynamic TCP window size.	integer	Minimum value: 1048576 Maximum value: 33554432	8388608

Parameter	Description	Type	Size	Default										
tcp-window-minimum	Minimum dynamic TCP window size.	integer	Minimum value: 65536 Maximum value: 1048576	131072										
tcp-window-size	Set TCP static window size.	integer	Minimum value: 65536 Maximum value: 33554432	262144										
tcp-window-type	TCP window type to use for this protocol.	option	-	auto-tuning										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>auto-tuning</td><td>Allow system to auto-tune TCP window size (default).</td></tr><tr><td>system</td><td>Use system default TCP window size for this protocol.</td></tr><tr><td>static</td><td>Manually specify TCP window size.</td></tr><tr><td>dynamic</td><td>Vary TCP window size based on available memory and within limits of tcp-window-minimum and tcp-window-maximum.</td></tr></table>				Option	Description	auto-tuning	Allow system to auto-tune TCP window size (default).	system	Use system default TCP window size for this protocol.	static	Manually specify TCP window size.	dynamic	Vary TCP window size based on available memory and within limits of tcp-window-minimum and tcp-window-maximum.
	Option	Description												
	auto-tuning	Allow system to auto-tune TCP window size (default).												
	system	Use system default TCP window size for this protocol.												
	static	Manually specify TCP window size.												
dynamic	Vary TCP window size based on available memory and within limits of tcp-window-minimum and tcp-window-maximum.													
uncompressed-nest-limit	Maximum nested levels of compression that can be uncompressed and scanned (2 - 100, default = 12).	integer	Minimum value: 2 Maximum value: 100	12										
uncompressed-oversize-limit	Maximum in-memory uncompressed file size that can be scanned.	integer	Minimum value: 1 Maximum value: 1606 **	10										

** Values may differ between models.

config server-keytab

Parameter	Description	Type	Size	Default
keytab	Base64 encoded keytab file containing credential of the server.	string	Maximum length: 8191	
principal	Service principal. For example, host/cifsserver.example.com@example.com.	string	Maximum length: 511	

config dns

Parameter	Description	Type	Size	Default
ports	Ports to scan for content (1 - 65535, default = 53).	integer	Minimum value: 1 Maximum value: 65535	
status	Enable/disable the active status of scanning for this protocol.	option	-	enable
	Option	Description		
	enable	Enable setting.		
	disable	Disable setting.		

config ftp

Parameter	Description	Type	Size	Default						
comfort-amount	Number of bytes to send in each transmission for client comforting (bytes).	integer	Minimum value: 1 Maximum value: 65535	1						
comfort-interval	Interval between successive transmissions of data for client comforting (seconds).	integer	Minimum value: 1 Maximum value: 900	10						
explicit-ftp-tls	Enable/disable FTP redirection for explicit FTPS.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable setting.</td></tr><tr><td><i>disable</i></td><td>Disable setting.</td></tr></table>	Option	Description	<i>enable</i>	Enable setting.	<i>disable</i>	Disable setting.			
Option	Description									
<i>enable</i>	Enable setting.									
<i>disable</i>	Disable setting.									
inspect-all	Enable/disable the inspection of all ports for the protocol.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable setting.</td></tr><tr><td><i>disable</i></td><td>Disable setting.</td></tr></table>	Option	Description	<i>enable</i>	Enable setting.	<i>disable</i>	Disable setting.			
Option	Description									
<i>enable</i>	Enable setting.									
<i>disable</i>	Disable setting.									
options	One or more options that can be applied to the session.	option	-							

Parameter	Description	Type	Size	Default												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>clientcomfort</i></td><td>Prevent client timeout.</td></tr><tr><td><i>oversize</i></td><td>Block oversized file.</td></tr><tr><td><i>splice</i></td><td>Enable splice mode.</td></tr><tr><td><i>bypass-rest-command</i></td><td>Bypass REST command.</td></tr><tr><td><i>bypass-mode-command</i></td><td>Bypass MODE command.</td></tr></table>	Option	Description	<i>clientcomfort</i>	Prevent client timeout.	<i>oversize</i>	Block oversized file.	<i>splice</i>	Enable splice mode.	<i>bypass-rest-command</i>	Bypass REST command.	<i>bypass-mode-command</i>	Bypass MODE command.			
	Option	Description														
	<i>clientcomfort</i>	Prevent client timeout.														
	<i>oversize</i>	Block oversized file.														
	<i>splice</i>	Enable splice mode.														
	<i>bypass-rest-command</i>	Bypass REST command.														
<i>bypass-mode-command</i>	Bypass MODE command.															
oversize-limit	Maximum in-memory file size that can be scanned (MB).	integer	Minimum value: 10 1 Maximum value: 1606 **													
ports	Ports to scan for content (1 - 65535, default = 21).	integer	Minimum value: 1 Maximum value: 65535													
scan-bzip2	Enable/disable scanning of BZip2 compressed files.	option	-	enable												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable setting.</td></tr><tr><td><i>disable</i></td><td>Disable setting.</td></tr></table>	Option	Description	<i>enable</i>	Enable setting.	<i>disable</i>	Disable setting.									
	Option	Description														
	<i>enable</i>	Enable setting.														
<i>disable</i>	Disable setting.															
ssl-offloaded	SSL decryption and encryption performed by an external device.	option	-	no												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>no</i></td><td>SSL decryption and encryption performed by FortiGate when deep-inspection is enabled.</td></tr><tr><td><i>yes</i></td><td>SSL decryption and encryption performed by an external device.</td></tr></table>	Option	Description	<i>no</i>	SSL decryption and encryption performed by FortiGate when deep-inspection is enabled.	<i>yes</i>	SSL decryption and encryption performed by an external device.									
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	<i>no</i>	SSL decryption and encryption performed by FortiGate when deep-inspection is enabled.														
<i>yes</i>	SSL decryption and encryption performed by an external device.															
status	Enable/disable the active status of scanning for this protocol.	option	-	enable												
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	Option	Description														
	<i>enable</i>	Enable setting.														
<i>disable</i>	Disable setting.															
stream-based-uncompressed-limit	Maximum stream-based uncompressed data size that will be scanned in megabytes. Stream-based uncompression used only under certain conditions (unlimited = 0, default = 0).	integer	Minimum value: 0 Maximum value: 4294967295													

Parameter	Description	Type	Size	Default
tcp-window-maximum	Maximum dynamic TCP window size.	integer	Minimum value: 1048576 Maximum value: 33554432	8388608
tcp-window-minimum	Minimum dynamic TCP window size.	integer	Minimum value: 65536 Maximum value: 1048576	131072
tcp-window-size	Set TCP static window size.	integer	Minimum value: 65536 Maximum value: 33554432	262144
tcp-window-type	TCP window type to use for this protocol.	option	-	auto-tuning
	Option		Description	
	<i>auto-tuning</i>		Allow system to auto-tune TCP window size (default).	
	<i>system</i>		Use system default TCP window size for this protocol.	
	<i>static</i>		Manually specify TCP window size.	
	<i>dynamic</i>		Vary TCP window size based on available memory and within limits of tcp-window-minimum and tcp-window-maximum.	
uncompressed-nest-limit	Maximum nested levels of compression that can be uncompressed and scanned (2 - 100, default = 12).	integer	Minimum value: 2 Maximum value: 100	12
uncompressed-oversize-limit	Maximum in-memory uncompressed file size that can be scanned.	integer	Minimum value: 1 Maximum value: 1606 **	10

** Values may differ between models.

config http

Parameter	Description	Type	Size	Default						
address-ip-rating	Enable/disable IP based URL rating.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable setting.</td></tr><tr><td><i>disable</i></td><td>Disable setting.</td></tr></table>				Option	Description	<i>enable</i>	Enable setting.	<i>disable</i>	Disable setting.
	Option	Description								
	<i>enable</i>	Enable setting.								
<i>disable</i>	Disable setting.									

Parameter	Description	Type	Size	Default										
block-page-status-code	Code number returned for blocked HTTP pages (non-FortiGuard only) (100 - 599, default = 403).	integer	Minimum value: 100 Maximum value: 599	403										
comfort-amount	Number of bytes to send in each transmission for client comforting (bytes).	integer	Minimum value: 1 Maximum value: 65535	1										
comfort-interval	Interval between successive transmissions of data for client comforting (seconds).	integer	Minimum value: 1 Maximum value: 900	10										
h2c	Enable/disable h2c HTTP connection upgrade.	option	-	disable										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Allow h2c HTTP connection upgrades. h2c tunnels do not support content scan.</td></tr><tr><td><i>disable</i></td><td>Do not allow h2c HTTP connection upgrades.</td></tr></table>	Option	Description	<i>enable</i>	Allow h2c HTTP connection upgrades. h2c tunnels do not support content scan.	<i>disable</i>	Do not allow h2c HTTP connection upgrades.							
Option	Description													
<i>enable</i>	Allow h2c HTTP connection upgrades. h2c tunnels do not support content scan.													
<i>disable</i>	Do not allow h2c HTTP connection upgrades.													
inspect-all	Enable/disable the inspection of all ports for the protocol.	option	-	disable										
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<i>enable</i>	Enable setting.													
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Option	Description													
<i>clientcomfort</i>	Prevent client timeout.													
<i>servercomfort</i>	Prevent server timeout.													
<i>oversize</i>	Block oversized file.													
<i>chunkedbypass</i>	Bypass chunked transfer encoded sites.													
oversize-limit	Maximum in-memory file size that can be scanned (MB).	integer	Minimum value: 1 Maximum value: 1606 **	10										
ports	Ports to scan for content (1 - 65535, default = 80).	integer	Minimum value: 1 Maximum value: 65535											

Parameter	Description	Type	Size	Default																																												
post-lang	ID codes for character sets to be used to convert to UTF-8 for banned words and DLP on HTTP posts (maximum of 5 character sets).	option	-																																													
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>jisx0201</i></td><td>Japanese Industrial Standard 0201.</td></tr><tr><td><i>jisx0208</i></td><td>Japanese Industrial Standard 0208.</td></tr><tr><td><i>jisx0212</i></td><td>Japanese Industrial Standard 0212.</td></tr><tr><td><i>gb2312</i></td><td>Guojia Biaozhun 2312 (simplified Chinese).</td></tr><tr><td><i>ksc5601-ex</i></td><td>Wansung Korean standard 5601.</td></tr><tr><td><i>euc-jp</i></td><td>Extended Unicode Japanese.</td></tr><tr><td><i>sjis</i></td><td>Shift Japanese Industrial Standard.</td></tr><tr><td><i>iso2022-jp</i></td><td>ISO 2022 Japanese.</td></tr><tr><td><i>iso2022-jp-1</i></td><td>ISO 2022-1 Japanese.</td></tr><tr><td><i>iso2022-jp-2</i></td><td>ISO 2022-2 Japanese.</td></tr><tr><td><i>euc-cn</i></td><td>Extended Unicode Chinese.</td></tr><tr><td><i>ces-gbk</i></td><td>Extended GB2312 (simplified Chinese).</td></tr><tr><td><i>hz</i></td><td>Hanzi simplified Chinese.</td></tr><tr><td><i>ces-big5</i></td><td>Big-5 traditional Chinese.</td></tr><tr><td><i>euc-kr</i></td><td>Extended Unicode Korean.</td></tr><tr><td><i>iso2022-jp-3</i></td><td>ISO 2022-3 Japanese.</td></tr><tr><td><i>iso8859-1</i></td><td>ISO 8859 Part 1 (Western European).</td></tr><tr><td><i>tis620</i></td><td>Thai Industrial Standard 620.</td></tr><tr><td><i>cp874</i></td><td>Code Page 874 (Thai).</td></tr><tr><td><i>cp1252</i></td><td>Code Page 1252 (Western European Latin).</td></tr><tr><td><i>cp1251</i></td><td>Code Page 1251 (Cyrillic).</td></tr></table>	Option	Description	<i>jisx0201</i>	Japanese Industrial Standard 0201.	<i>jisx0208</i>	Japanese Industrial Standard 0208.	<i>jisx0212</i>	Japanese Industrial Standard 0212.	<i>gb2312</i>	Guojia Biaozhun 2312 (simplified Chinese).	<i>ksc5601-ex</i>	Wansung Korean standard 5601.	<i>euc-jp</i>	Extended Unicode Japanese.	<i>sjis</i>	Shift Japanese Industrial Standard.	<i>iso2022-jp</i>	ISO 2022 Japanese.	<i>iso2022-jp-1</i>	ISO 2022-1 Japanese.	<i>iso2022-jp-2</i>	ISO 2022-2 Japanese.	<i>euc-cn</i>	Extended Unicode Chinese.	<i>ces-gbk</i>	Extended GB2312 (simplified Chinese).	<i>hz</i>	Hanzi simplified Chinese.	<i>ces-big5</i>	Big-5 traditional Chinese.	<i>euc-kr</i>	Extended Unicode Korean.	<i>iso2022-jp-3</i>	ISO 2022-3 Japanese.	<i>iso8859-1</i>	ISO 8859 Part 1 (Western European).	<i>tis620</i>	Thai Industrial Standard 620.	<i>cp874</i>	Code Page 874 (Thai).	<i>cp1252</i>	Code Page 1252 (Western European Latin).	<i>cp1251</i>	Code Page 1251 (Cyrillic).			
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<i>cp1251</i>	Code Page 1251 (Cyrillic).																																															
proxy-after-tcp-handshake	Proxy traffic after the TCP 3-way handshake has been established (not before).	option	-	disable																																												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable setting.</td></tr><tr><td><i>disable</i></td><td>Disable setting.</td></tr></table>	Option	Description	<i>enable</i>	Enable setting.	<i>disable</i>	Disable setting.																																									
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<i>enable</i>	Enable setting.																																															
<i>disable</i>	Disable setting.																																															

Parameter	Description	Type	Size	Default
range-block	Enable/disable blocking of partial downloads.	option	-	disable
	Option	Description		
	<i>disable</i>	Disable range header blocking (allow partial file downloads)		
	<i>enable</i>	Enable range header blocking (treat all partial file downloads as full file download)		
retry-count	Number of attempts to retry HTTP connection (0 - 100, default = 0).	integer	Minimum value: 0 0 Maximum value: 100	
scan-bzip2	Enable/disable scanning of BZip2 compressed files.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		
ssl-offloaded	SSL decryption and encryption performed by an external device.	option	-	no
	Option	Description		
	<i>no</i>	SSL decryption and encryption performed by FortiGate when deep-inspection is enabled.		
	<i>yes</i>	SSL decryption and encryption performed by an external device.		
status	Enable/disable the active status of scanning for this protocol.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		
stream-based-uncompressed-limit	Maximum stream-based uncompressed data size that will be scanned in megabytes. Stream-based uncompression used only under certain conditions (unlimited = 0, default = 0).	integer	Minimum value: 0 0 Maximum value: 4294967295	
streaming-content-bypass	Enable/disable bypassing of streaming content from buffering.	option	-	enable

Parameter	Description	Type	Size	Default						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable bypassing of streaming content from buffering</td></tr><tr><td><i>disable</i></td><td>Disable bypassing of streaming content from buffering</td></tr></table>	Option	Description	<i>enable</i>	Enable bypassing of streaming content from buffering	<i>disable</i>	Disable bypassing of streaming content from buffering			
	Option	Description								
	<i>enable</i>	Enable bypassing of streaming content from buffering								
<i>disable</i>	Disable bypassing of streaming content from buffering									
strip-x-forwarded-for	Enable/disable stripping of HTTP X-Forwarded-For header.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>disable</i></td><td>Disable changing of HTTP X-Forwarded-For header.</td></tr><tr><td><i>enable</i></td><td>Enable replacement of X-Forwarded-For value with 1.1.1.1.</td></tr></table>	Option	Description	<i>disable</i>	Disable changing of HTTP X-Forwarded-For header.	<i>enable</i>	Enable replacement of X-Forwarded-For value with 1.1.1.1.			
	Option	Description								
	<i>disable</i>	Disable changing of HTTP X-Forwarded-For header.								
<i>enable</i>	Enable replacement of X-Forwarded-For value with 1.1.1.1.									
switching-protocols	Bypass from scanning, or block a connection that attempts to switch protocol.	option	-	bypass						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>bypass</i></td><td>Bypass connections when switching protocols.</td></tr><tr><td><i>block</i></td><td>Block connections when switching protocols.</td></tr></table>	Option	Description	<i>bypass</i>	Bypass connections when switching protocols.	<i>block</i>	Block connections when switching protocols.			
	Option	Description								
	<i>bypass</i>	Bypass connections when switching protocols.								
<i>block</i>	Block connections when switching protocols.									
tcp-window-maximum	Maximum dynamic TCP window size.	integer	Minimum value: 1048576 Maximum value: 33554432	8388608						
tcp-window-minimum	Minimum dynamic TCP window size.	integer	Minimum value: 65536 Maximum value: 1048576	131072						
tcp-window-size	Set TCP static window size.	integer	Minimum value: 65536 Maximum value: 33554432	262144						
tcp-window-type	TCP window type to use for this protocol.	option	-	auto-tuning						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>auto-tuning</i></td><td>Allow system to auto-tune TCP window size (default).</td></tr><tr><td><i>system</i></td><td>Use system default TCP window size for this protocol.</td></tr></table>	Option	Description	<i>auto-tuning</i>	Allow system to auto-tune TCP window size (default).	<i>system</i>	Use system default TCP window size for this protocol.			
	Option	Description								
	<i>auto-tuning</i>	Allow system to auto-tune TCP window size (default).								
<i>system</i>	Use system default TCP window size for this protocol.									

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>static</i>	Manually specify TCP window size.		
	<i>dynamic</i>	Vary TCP window size based on available memory and within limits of tcp-window-minimum and tcp-window-maximum.		
tunnel-non-http	Configure how to process non-HTTP traffic when a profile configured for HTTP traffic accepts a non-HTTP session. Can occur if an application sends non-HTTP traffic using an HTTP destination port.	option	-	enable
	Option	Description		
	<i>enable</i>	Pass non-HTTP sessions through the tunnel without applying protocol optimization, byte-caching, or web caching. TCP protocol optimization is applied.		
	<i>disable</i>	Drop or tear down non-HTTP sessions accepted by the profile.		
uncompressed-nest-limit	Maximum nested levels of compression that can be uncompressed and scanned (2 - 100, default = 12).	integer	Minimum value: 2 Maximum value: 100	12
uncompressed-oversize-limit	Maximum in-memory uncompressed file size that can be scanned.	integer	Minimum value: 1 Maximum value: 1606 **	10
unknown-content-encoding	Configure the action the FortiGate unit will take on unknown content-encoding.	option	-	block
	Option	Description		
	<i>block</i>	Block HTTP session when unknown content-encoding is detected.		
	<i>inspect</i>	Scan HTTP traffic as plain-text when unknown content-encoding is detected.		
	<i>bypass</i>	Bypass scan when unknown content-encoding is detected.		
unknown-http-version	How to handle HTTP sessions that do not comply with HTTP 0.9, 1.0, or 1.1.	option	-	reject
	Option	Description		
	<i>reject</i>	Reject or tear down HTTP sessions that do not use HTTP 0.9, 1.0, or 1.1.		

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>tunnel</i>	Pass HTTP traffic that does not use HTTP 0.9, 1.0, or 1.1 without applying HTTP protocol optimization, byte-caching, or web caching. TCP protocol optimization is applied.		
	<i>best-effort</i>	Assume all HTTP sessions comply with HTTP 0.9, 1.0, or 1.1. If a session uses a different HTTP version, it may not parse correctly and the connection may be lost.		
verify-dns-for-policy-matching	Enable/disable verification of DNS for policy matching.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		

** Values may differ between models.

config imap

Parameter	Description	Type	Size	Default						
inspect-all	Enable/disable the inspection of all ports for the protocol.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable setting.</td></tr><tr><td><i>disable</i></td><td>Disable setting.</td></tr></table>	Option	Description	<i>enable</i>	Enable setting.	<i>disable</i>	Disable setting.			
Option	Description									
<i>enable</i>	Enable setting.									
<i>disable</i>	Disable setting.									
options	One or more options that can be applied to the session.	option	-							
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>fragmail</i></td><td>Pass fragmented email.</td></tr><tr><td><i>oversize</i></td><td>Block oversized email.</td></tr></table>	Option	Description	<i>fragmail</i>	Pass fragmented email.	<i>oversize</i>	Block oversized email.			
Option	Description									
<i>fragmail</i>	Pass fragmented email.									
<i>oversize</i>	Block oversized email.									
oversize-limit	Maximum in-memory file size that can be scanned (MB).	integer	Minimum value: 1 Maximum value: 1606 **	10						

Parameter	Description	Type	Size	Default						
ports	Ports to scan for content (1 - 65535, default = 143).	integer	Minimum value: 1 Maximum value: 65535							
proxy-after-tcp-handshake	Proxy traffic after the TCP 3-way handshake has been established (not before).	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable setting.</td></tr><tr><td>disable</td><td>Disable setting.</td></tr></table>	Option	Description	enable	Enable setting.	disable	Disable setting.			
Option	Description									
enable	Enable setting.									
disable	Disable setting.									
scan-bzip2	Enable/disable scanning of BZip2 compressed files.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable setting.</td></tr><tr><td>disable</td><td>Disable setting.</td></tr></table>	Option	Description	enable	Enable setting.	disable	Disable setting.			
Option	Description									
enable	Enable setting.									
disable	Disable setting.									
ssl-offloaded	SSL decryption and encryption performed by an external device.	option	-	no						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>no</td><td>SSL decryption and encryption performed by FortiGate when deep-inspection is enabled.</td></tr><tr><td>yes</td><td>SSL decryption and encryption performed by an external device.</td></tr></table>	Option	Description	no	SSL decryption and encryption performed by FortiGate when deep-inspection is enabled.	yes	SSL decryption and encryption performed by an external device.			
Option	Description									
no	SSL decryption and encryption performed by FortiGate when deep-inspection is enabled.									
yes	SSL decryption and encryption performed by an external device.									
status	Enable/disable the active status of scanning for this protocol.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable setting.</td></tr><tr><td>disable</td><td>Disable setting.</td></tr></table>	Option	Description	enable	Enable setting.	disable	Disable setting.			
Option	Description									
enable	Enable setting.									
disable	Disable setting.									
uncompressed-nest-limit	Maximum nested levels of compression that can be uncompressed and scanned (2 - 100, default = 12).	integer	Minimum value: 2 Maximum value: 100	12						
uncompressed-oversize-limit	Maximum in-memory uncompressed file size that can be scanned.	integer	Minimum value: 1 Maximum value: 1606 **	10						

** Values may differ between models.

config mail-signature

Parameter	Description	Type	Size	Default
signature	Email signature to be added to outgoing email (if the signature contains spaces, enclose with quotation marks).	string	Maximum length: 1023	
status	Enable/disable adding an email signature to SMTP email messages as they pass through the FortiGate.	option	-	disable
		Option	Description	
		<i>disable</i>	Disable mail signature.	
		<i>enable</i>	Enable mail signature.	

config mapi

Parameter	Description	Type	Size	Default
options	One or more options that can be applied to the session.	option	-	
		Option	Description	
		<i>fragmail</i>	Pass fragmented email.	
		<i>oversize</i>	Block oversized email.	
oversize-limit	Maximum in-memory file size that can be scanned (MB).	integer	Minimum value: 1 Maximum value: 1606 **	10
ports	Ports to scan for content (1 - 65535, default = 135).	integer	Minimum value: 1 Maximum value: 65535	
scan-bzip2	Enable/disable scanning of BZip2 compressed files.	option	-	enable
		Option	Description	
		<i>enable</i>	Enable setting.	
		<i>disable</i>	Disable setting.	

Parameter	Description	Type	Size	Default						
status	Enable/disable the active status of scanning for this protocol.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable setting.</td></tr><tr><td><i>disable</i></td><td>Disable setting.</td></tr></table>				Option	Description	<i>enable</i>	Enable setting.	<i>disable</i>	Disable setting.
	Option	Description								
	<i>enable</i>	Enable setting.								
<i>disable</i>	Disable setting.									
uncompressed-nest-limit	Maximum nested levels of compression that can be uncompressed and scanned (2 - 100, default = 12).	integer	Minimum value: 2 Maximum value: 100	12						
uncompressed-oversize-limit	Maximum in-memory uncompressed file size that can be scanned.	integer	Minimum value: 1 Maximum value: 1606 **	10						

** Values may differ between models.

config nntp

Parameter	Description	Type	Size	Default						
inspect-all	Enable/disable the inspection of all ports for the protocol.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable setting.</td></tr><tr><td><i>disable</i></td><td>Disable setting.</td></tr></table>	Option	Description	<i>enable</i>	Enable setting.	<i>disable</i>	Disable setting.			
Option	Description									
<i>enable</i>	Enable setting.									
<i>disable</i>	Disable setting.									
options	One or more options that can be applied to the session.	option	-							
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>oversize</i></td><td>Block oversized file.</td></tr><tr><td><i>splice</i></td><td>Enable splice mode.</td></tr></table>	Option	Description	<i>oversize</i>	Block oversized file.	<i>splice</i>	Enable splice mode.			
Option	Description									
<i>oversize</i>	Block oversized file.									
<i>splice</i>	Enable splice mode.									
oversize-limit	Maximum in-memory file size that can be scanned (MB).	integer	Minimum value: 1 Maximum value: 1606 **	10						

Parameter	Description	Type	Size	Default						
ports	Ports to scan for content (1 - 65535, default = 119).	integer	Minimum value: 1 Maximum value: 65535							
proxy-after-tcp-handshake	Proxy traffic after the TCP 3-way handshake has been established (not before).	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable setting.</td></tr><tr><td>disable</td><td>Disable setting.</td></tr></table>	Option	Description	enable	Enable setting.	disable	Disable setting.			
Option	Description									
enable	Enable setting.									
disable	Disable setting.									
scan-bzip2	Enable/disable scanning of BZip2 compressed files.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable setting.</td></tr><tr><td>disable</td><td>Disable setting.</td></tr></table>	Option	Description	enable	Enable setting.	disable	Disable setting.			
Option	Description									
enable	Enable setting.									
disable	Disable setting.									
status	Enable/disable the active status of scanning for this protocol.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable setting.</td></tr><tr><td>disable</td><td>Disable setting.</td></tr></table>	Option	Description	enable	Enable setting.	disable	Disable setting.			
Option	Description									
enable	Enable setting.									
disable	Disable setting.									
uncompressed-nest-limit	Maximum nested levels of compression that can be uncompressed and scanned (2 - 100, default = 12).	integer	Minimum value: 2 Maximum value: 100	12						
uncompressed-oversize-limit	Maximum in-memory uncompressed file size that can be scanned.	integer	Minimum value: 1 Maximum value: 1606 **	10						

** Values may differ between models.

config pop3

Parameter	Description	Type	Size	Default						
inspect-all	Enable/disable the inspection of all ports for the protocol.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable setting.</td></tr><tr><td><i>disable</i></td><td>Disable setting.</td></tr></table>	Option	Description	<i>enable</i>	Enable setting.	<i>disable</i>	Disable setting.			
Option	Description									
<i>enable</i>	Enable setting.									
<i>disable</i>	Disable setting.									
options	One or more options that can be applied to the session.	option	-							
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>fragmail</i></td><td>Pass fragmented email.</td></tr><tr><td><i>oversize</i></td><td>Block oversized email.</td></tr></table>	Option	Description	<i>fragmail</i>	Pass fragmented email.	<i>oversize</i>	Block oversized email.			
Option	Description									
<i>fragmail</i>	Pass fragmented email.									
<i>oversize</i>	Block oversized email.									
oversize-limit	Maximum in-memory file size that can be scanned (MB).	integer	Minimum value: 1 Maximum value: 1606 **	10						
ports	Ports to scan for content (1 - 65535, default = 110).	integer	Minimum value: 1 Maximum value: 65535							
proxy-after-tcp-handshake	Proxy traffic after the TCP 3-way handshake has been established (not before).	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable setting.</td></tr><tr><td><i>disable</i></td><td>Disable setting.</td></tr></table>	Option	Description	<i>enable</i>	Enable setting.	<i>disable</i>	Disable setting.			
Option	Description									
<i>enable</i>	Enable setting.									
<i>disable</i>	Disable setting.									
scan-bzip2	Enable/disable scanning of BZip2 compressed files.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable setting.</td></tr><tr><td><i>disable</i></td><td>Disable setting.</td></tr></table>	Option	Description	<i>enable</i>	Enable setting.	<i>disable</i>	Disable setting.			
Option	Description									
<i>enable</i>	Enable setting.									
<i>disable</i>	Disable setting.									
ssl-offloaded	SSL decryption and encryption performed by an external device.	option	-	no						

Parameter	Description	Type	Size	Default						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>no</td><td>SSL decryption and encryption performed by FortiGate when deep-inspection is enabled.</td></tr><tr><td>yes</td><td>SSL decryption and encryption performed by an external device.</td></tr></table>	Option	Description	no	SSL decryption and encryption performed by FortiGate when deep-inspection is enabled.	yes	SSL decryption and encryption performed by an external device.			
	Option	Description								
	no	SSL decryption and encryption performed by FortiGate when deep-inspection is enabled.								
yes	SSL decryption and encryption performed by an external device.									
status	Enable/disable the active status of scanning for this protocol.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable setting.</td></tr><tr><td>disable</td><td>Disable setting.</td></tr></table>	Option	Description	enable	Enable setting.	disable	Disable setting.			
	Option	Description								
	enable	Enable setting.								
disable	Disable setting.									
uncompressed-nest-limit	Maximum nested levels of compression that can be uncompressed and scanned (2 - 100, default = 12).	integer	Minimum value: 2 Maximum value: 100	12						
uncompressed-oversize-limit	Maximum in-memory uncompressed file size that can be scanned.	integer	Minimum value: 1 Maximum value: 1606 **	10						

** Values may differ between models.

config smtp

Parameter	Description	Type	Size	Default								
inspect-all	Enable/disable the inspection of all ports for the protocol.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable setting.</td></tr><tr><td><i>disable</i></td><td>Disable setting.</td></tr></table>	Option	Description	<i>enable</i>	Enable setting.	<i>disable</i>	Disable setting.					
Option	Description											
<i>enable</i>	Enable setting.											
<i>disable</i>	Disable setting.											
options	One or more options that can be applied to the session.	option	-									
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>fragmail</i></td><td>Pass fragmented email.</td></tr><tr><td><i>oversize</i></td><td>Block oversized email.</td></tr><tr><td><i>splice</i></td><td>Enable splice mode.</td></tr></table>	Option	Description	<i>fragmail</i>	Pass fragmented email.	<i>oversize</i>	Block oversized email.	<i>splice</i>	Enable splice mode.			
Option	Description											
<i>fragmail</i>	Pass fragmented email.											
<i>oversize</i>	Block oversized email.											
<i>splice</i>	Enable splice mode.											

Parameter	Description	Type	Size	Default						
oversize-limit	Maximum in-memory file size that can be scanned (MB).	integer	Minimum value: 1 Maximum value: 1606 **	10						
ports	Ports to scan for content (1 - 65535, default = 25).	integer	Minimum value: 1 Maximum value: 65535							
proxy-after-tcp-handshake	Proxy traffic after the TCP 3-way handshake has been established (not before).	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable setting.</td></tr><tr><td><i>disable</i></td><td>Disable setting.</td></tr></table>	Option	Description	<i>enable</i>	Enable setting.	<i>disable</i>	Disable setting.			
Option	Description									
<i>enable</i>	Enable setting.									
<i>disable</i>	Disable setting.									
scan-bzip2	Enable/disable scanning of BZip2 compressed files.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable setting.</td></tr><tr><td><i>disable</i></td><td>Disable setting.</td></tr></table>	Option	Description	<i>enable</i>	Enable setting.	<i>disable</i>	Disable setting.			
Option	Description									
<i>enable</i>	Enable setting.									
<i>disable</i>	Disable setting.									
server-busy	Enable/disable SMTP server busy when server not available.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable setting.</td></tr><tr><td><i>disable</i></td><td>Disable setting.</td></tr></table>	Option	Description	<i>enable</i>	Enable setting.	<i>disable</i>	Disable setting.			
Option	Description									
<i>enable</i>	Enable setting.									
<i>disable</i>	Disable setting.									
ssl-offloaded	SSL decryption and encryption performed by an external device.	option	-	no						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>no</i></td><td>SSL decryption and encryption performed by FortiGate when deep-inspection is enabled.</td></tr><tr><td><i>yes</i></td><td>SSL decryption and encryption performed by an external device.</td></tr></table>	Option	Description	<i>no</i>	SSL decryption and encryption performed by FortiGate when deep-inspection is enabled.	<i>yes</i>	SSL decryption and encryption performed by an external device.			
Option	Description									
<i>no</i>	SSL decryption and encryption performed by FortiGate when deep-inspection is enabled.									
<i>yes</i>	SSL decryption and encryption performed by an external device.									
status	Enable/disable the active status of scanning for this protocol.	option	-	enable						

Parameter	Description	Type	Size	Default
	Option	Description		
	enable	Enable setting.		
	disable	Disable setting.		
uncompressed-nest-limit	Maximum nested levels of compression that can be uncompressed and scanned (2 - 100, default = 12).	integer	Minimum value: 2 Maximum value: 100	12
uncompressed-oversize-limit	Maximum in-memory uncompressed file size that can be scanned.	integer	Minimum value: 1 Maximum value: 1606 **	10

** Values may differ between models.

config ssh

Parameter	Description	Type	Size	Default								
comfort-amount	Number of bytes to send in each transmission for client comforting (bytes).	integer	Minimum value: 1 1 Maximum value: 65535	1								
comfort-interval	Interval between successive transmissions of data for client comforting (seconds).	integer	Minimum value: 1 1 Maximum value: 900	10								
options	One or more options that can be applied to the session.	option	-									
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>oversize</td><td>Block oversized file.</td></tr><tr><td>clientcomfort</td><td>Prevent client timeout.</td></tr><tr><td>servercomfort</td><td>Prevent server timeout.</td></tr></table>				Option	Description	oversize	Block oversized file.	clientcomfort	Prevent client timeout.	servercomfort	Prevent server timeout.
Option	Description											
oversize	Block oversized file.											
clientcomfort	Prevent client timeout.											
servercomfort	Prevent server timeout.											
oversize-limit	Maximum in-memory file size that can be scanned (MB).	integer	Minimum value: 1 1 Maximum value: 1606 **	10								
scan-bzip2	Enable/disable scanning of BZip2 compressed files.	option	-	enable								

Parameter	Description	Type	Size	Default										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable setting.</td></tr><tr><td><i>disable</i></td><td>Disable setting.</td></tr></table>	Option	Description	<i>enable</i>	Enable setting.	<i>disable</i>	Disable setting.							
	Option	Description												
	<i>enable</i>	Enable setting.												
<i>disable</i>	Disable setting.													
ssl-offloaded	SSL decryption and encryption performed by an external device.	option	-	no										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>no</i></td><td>SSL decryption and encryption performed by FortiGate when deep-inspection is enabled.</td></tr><tr><td><i>yes</i></td><td>SSL decryption and encryption performed by an external device.</td></tr></table>	Option	Description	<i>no</i>	SSL decryption and encryption performed by FortiGate when deep-inspection is enabled.	<i>yes</i>	SSL decryption and encryption performed by an external device.							
	Option	Description												
	<i>no</i>	SSL decryption and encryption performed by FortiGate when deep-inspection is enabled.												
<i>yes</i>	SSL decryption and encryption performed by an external device.													
stream-based-uncompressed-limit	Maximum stream-based uncompressed data size that will be scanned in megabytes. Stream-based uncompression used only under certain conditions (unlimited = 0, default = 0).	integer	Minimum value: 0 0 Maximum value: 4294967295											
tcp-window-maximum	Maximum dynamic TCP window size.	integer	Minimum value: 1048576 Maximum value: 33554432	8388608										
tcp-window-minimum	Minimum dynamic TCP window size.	integer	Minimum value: 65536 Maximum value: 1048576	131072										
tcp-window-size	Set TCP static window size.	integer	Minimum value: 65536 Maximum value: 33554432	262144										
tcp-window-type	TCP window type to use for this protocol.	option	-	auto-tuning										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>auto-tuning</i></td><td>Allow system to auto-tune TCP window size (default).</td></tr><tr><td><i>system</i></td><td>Use system default TCP window size for this protocol.</td></tr><tr><td><i>static</i></td><td>Manually specify TCP window size.</td></tr><tr><td><i>dynamic</i></td><td>Vary TCP window size based on available memory and within limits of tcp-window-minimum and tcp-window-maximum.</td></tr></table>	Option	Description	<i>auto-tuning</i>	Allow system to auto-tune TCP window size (default).	<i>system</i>	Use system default TCP window size for this protocol.	<i>static</i>	Manually specify TCP window size.	<i>dynamic</i>	Vary TCP window size based on available memory and within limits of tcp-window-minimum and tcp-window-maximum.			
	Option	Description												
	<i>auto-tuning</i>	Allow system to auto-tune TCP window size (default).												
	<i>system</i>	Use system default TCP window size for this protocol.												
<i>static</i>	Manually specify TCP window size.													
<i>dynamic</i>	Vary TCP window size based on available memory and within limits of tcp-window-minimum and tcp-window-maximum.													

Parameter	Description	Type	Size	Default
uncompressed-nest-limit	Maximum nested levels of compression that can be uncompressed and scanned (2 - 100, default = 12).	integer	Minimum value: 2 Maximum value: 100	12
uncompressed-oversize-limit	Maximum in-memory uncompressed file size that can be scanned.	integer	Minimum value: 1 Maximum value: 1606 **	10

** Values may differ between models.

config firewall proxy-address

Configure web proxy address.

```

config firewall proxy-address
  Description: Configure web proxy address.
  edit <name>
    set application <name1>, <name2>, ...
    set case-sensitivity [disable|enable]
    set category <id1>, <id2>, ...
    set color {integer}
    set comment {var-string}
    set header {string}
    config header-group
      Description: HTTP header group.
      edit <id>
        set case-sensitivity [disable|enable]
        set header {string}
        set header-name {string}
      next
    next
  end
  set header-name {string}
  set host {string}
  set host-regex {string}
  set method {option1}, {option2}, ...
  set path {string}
  set query {string}
  set referrer [enable|disable]
  config tagging
    Description: Config object tagging.
    edit <name>
      set category {string}
      set tags <name1>, <name2>, ...
    next
  end
  set type [host-regex|url|...]
  set ua {option1}, {option2}, ...
  set ua-max-ver {string}
  set ua-min-ver {string}

```

```

        set uuid {uuid}
    next
end

```

config firewall proxy-address

Parameter	Description	Type	Size	Default								
application <name>	SaaS application. SaaS application name.	string	Maximum length: 79									
case- sensitivity	Enable to make the pattern case sensitive.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>disable</i></td><td>Case insensitive in pattern.</td></tr><tr><td><i>enable</i></td><td>Case sensitive in pattern.</td></tr></table>				Option	Description	<i>disable</i>	Case insensitive in pattern.	<i>enable</i>	Case sensitive in pattern.		
	Option	Description										
	<i>disable</i>	Case insensitive in pattern.										
<i>enable</i>	Case sensitive in pattern.											
category <id>	FortiGuard category ID. FortiGuard category ID.	integer	Minimum value: 0 Maximum value: 4294967295									
color	Integer value to determine the color of the icon in the GUI (1 - 32, default = 0, which sets value to 1).	integer	Minimum value: 0 Maximum value: 32									
comment	Optional comments.	var-string	Maximum length: 255									
header	HTTP header name as a regular expression.	string	Maximum length: 255									
header-name	Name of HTTP header.	string	Maximum length: 79									
host	Address object for the host.	string	Maximum length: 79									
host-regex	Host name as a regular expression.	string	Maximum length: 255									
method	HTTP request methods to be used.	option	-									
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>get</i></td><td>GET method.</td></tr><tr><td><i>post</i></td><td>POST method.</td></tr><tr><td><i>put</i></td><td>PUT method.</td></tr></table>				Option	Description	<i>get</i>	GET method.	<i>post</i>	POST method.	<i>put</i>	PUT method.
	Option	Description										
	<i>get</i>	GET method.										
	<i>post</i>	POST method.										
<i>put</i>	PUT method.											

Parameter	Description	Type	Size	Default																				
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>head</i></td><td>HEAD method.</td></tr><tr><td><i>connect</i></td><td>CONNECT method.</td></tr><tr><td><i>trace</i></td><td>TRACE method.</td></tr><tr><td><i>options</i></td><td>OPTIONS method.</td></tr><tr><td><i>delete</i></td><td>DELETE method.</td></tr></table>	Option	Description	<i>head</i>	HEAD method.	<i>connect</i>	CONNECT method.	<i>trace</i>	TRACE method.	<i>options</i>	OPTIONS method.	<i>delete</i>	DELETE method.											
	Option	Description																						
	<i>head</i>	HEAD method.																						
	<i>connect</i>	CONNECT method.																						
	<i>trace</i>	TRACE method.																						
	<i>options</i>	OPTIONS method.																						
<i>delete</i>	DELETE method.																							
name	Address name.	string	Maximum length: 79																					
path	URL path as a regular expression.	string	Maximum length: 255																					
query	Match the query part of the URL as a regular expression.	string	Maximum length: 255																					
referrer	Enable/disable use of referrer field in the HTTP header to match the address.	option	-	disable																				
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable setting.</td></tr><tr><td><i>disable</i></td><td>Disable setting.</td></tr></table>	Option	Description	<i>enable</i>	Enable setting.	<i>disable</i>	Disable setting.																	
	Option	Description																						
	<i>enable</i>	Enable setting.																						
<i>disable</i>	Disable setting.																							
type	Proxy address type.	option	-	url																				
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>host-regex</i></td><td>Host regular expression.</td></tr><tr><td><i>url</i></td><td>HTTP URL.</td></tr><tr><td><i>category</i></td><td>FortiGuard URL category.</td></tr><tr><td><i>method</i></td><td>HTTP request method.</td></tr><tr><td><i>ua</i></td><td>HTTP request user agent.</td></tr><tr><td><i>header</i></td><td>HTTP request header.</td></tr><tr><td><i>src-advanced</i></td><td>HTTP advanced source criteria.</td></tr><tr><td><i>dst-advanced</i></td><td>HTTP advanced destination criteria.</td></tr><tr><td><i>saas</i></td><td>SaaS application.</td></tr></table>	Option	Description	<i>host-regex</i>	Host regular expression.	<i>url</i>	HTTP URL.	<i>category</i>	FortiGuard URL category.	<i>method</i>	HTTP request method.	<i>ua</i>	HTTP request user agent.	<i>header</i>	HTTP request header.	<i>src-advanced</i>	HTTP advanced source criteria.	<i>dst-advanced</i>	HTTP advanced destination criteria.	<i>saas</i>	SaaS application.			
	Option	Description																						
	<i>host-regex</i>	Host regular expression.																						
	<i>url</i>	HTTP URL.																						
	<i>category</i>	FortiGuard URL category.																						
	<i>method</i>	HTTP request method.																						
	<i>ua</i>	HTTP request user agent.																						
	<i>header</i>	HTTP request header.																						
	<i>src-advanced</i>	HTTP advanced source criteria.																						
	<i>dst-advanced</i>	HTTP advanced destination criteria.																						
<i>saas</i>	SaaS application.																							
ua	Names of browsers to be used as user agent.	option	-																					

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>chrome</i>	Google Chrome.		
	<i>ms</i>	Microsoft Internet Explorer or EDGE.		
	<i>firefox</i>	Mozilla Firefox.		
	<i>safari</i>	Apple Safari.		
	<i>ie</i>	Microsoft Internet Explorer.		
	<i>edge</i>	Microsoft Edge.		
	<i>other</i>	Other browsers.		
ua-max-ver	Maximum version of the user agent specified in dotted notation. For example, use 120 with the ua field set to "chrome" to require Google Chrome's maximum version must be 120.	string	Maximum length: 63	
ua-min-ver	Minimum version of the user agent specified in dotted notation. For example, use 90.0.1 with the ua field set to "chrome" to require Google Chrome's minimum version must be 90.0.1.	string	Maximum length: 63	
uuid	Universally Unique Identifier (UUID; automatically assigned but can be manually reset).	uuid	Not Specified	00000000-0000-0000-0000-000000000000

config header-group

Parameter	Description	Type	Size	Default						
case-sensitivity	Case sensitivity in pattern.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>disable</i></td><td>Case insensitive in pattern.</td></tr><tr><td><i>enable</i></td><td>Case sensitive in pattern.</td></tr></table>				Option	Description	<i>disable</i>	Case insensitive in pattern.	<i>enable</i>	Case sensitive in pattern.
	Option	Description								
	<i>disable</i>	Case insensitive in pattern.								
<i>enable</i>	Case sensitive in pattern.									
header	HTTP header regular expression.	string	Maximum length: 255							
header-name	HTTP header.	string	Maximum length: 79							

Parameter	Description	Type	Size	Default
id	ID.	integer	Minimum value: 0 Maximum value: 4294967295	0

config tagging

Parameter	Description	Type	Size	Default
category	Tag category.	string	Maximum length: 63	
name	Tagging entry name.	string	Maximum length: 63	
tags <name>	Tags. Tag name.	string	Maximum length: 79	

config firewall proxy-addrgrp

Configure web proxy address group.

```

config firewall proxy-addrgrp
  Description: Configure web proxy address group.
  edit <name>
    set color {integer}
    set comment {var-string}
    set member <name1>, <name2>, ...
    config tagging
      Description: Config object tagging.
      edit <name>
        set category {string}
        set tags <name1>, <name2>, ...
      next
    end
    set type [src|dst]
    set uuid {uuid}
  next
end

```

config firewall proxy-addrgrp

Parameter	Description	Type	Size	Default						
color	Integer value to determine the color of the icon in the GUI (1 - 32, default = 0, which sets value to 1).	integer	Minimum value: 0 Maximum value: 32	0						
comment	Optional comments.	var-string	Maximum length: 255							
member <name>	Members of address group. Address name.	string	Maximum length: 79							
name	Address group name.	string	Maximum length: 79							
type	Source or destination address group type.	option	-	src						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>src</td><td>Source group.</td></tr><tr><td>dst</td><td>Destination group.</td></tr></table>				Option	Description	src	Source group.	dst	Destination group.
Option	Description									
src	Source group.									
dst	Destination group.									
uuid	Universally Unique Identifier (UUID; automatically assigned but can be manually reset).	uuid	Not Specified	00000000-0000-0000-0000-000000000000						

config tagging

Parameter	Description	Type	Size	Default
category	Tag category.	string	Maximum length: 63	
name	Tagging entry name.	string	Maximum length: 63	
tags <name>	Tags. Tag name.	string	Maximum length: 79	

config firewall proxy-policy

Configure proxy policies.

```
config firewall proxy-policy
  Description: Configure proxy policies.
  edit <policyid>
    set access-proxy <name1>, <name2>, ...
```

```
set access-proxy6 <name1>, <name2>, ...
set action [accept|deny|...]
set application-list {string}
set av-profile {string}
set block-notification [enable|disable]
set comments {var-string}
set decrypted-traffic-mirror {string}
set device-ownership [enable|disable]
set disclaimer [disable|domain|...]
set dlp-profile {string}
set dstaddr <name1>, <name2>, ...
set dstaddr-negate [enable|disable]
set dstaddr6 <name1>, <name2>, ...
set dstintf <name1>, <name2>, ...
set emailfilter-profile {string}
set file-filter-profile {string}
set groups <name1>, <name2>, ...
set http-tunnel-auth [enable|disable]
set icap-profile {string}
set internet-service [enable|disable]
set internet-service-custom <name1>, <name2>, ...
set internet-service-custom-group <name1>, <name2>, ...
set internet-service-group <name1>, <name2>, ...
set internet-service-name <name1>, <name2>, ...
set internet-service-negate [enable|disable]
set internet-service6 [enable|disable]
set internet-service6-custom <name1>, <name2>, ...
set internet-service6-custom-group <name1>, <name2>, ...
set internet-service6-group <name1>, <name2>, ...
set internet-service6-name <name1>, <name2>, ...
set internet-service6-negate [enable|disable]
set ips-sensor {string}
set ips-voip-filter {string}
set logtraffic [all|utm|...]
set logtraffic-start [enable|disable]
set name {string}
set poolname <name1>, <name2>, ...
set profile-group {string}
set profile-protocol-options {string}
set profile-type [single|group]
set proxy [explicit-web|transparent-web|...]
set redirect-url {var-string}
set replacemsg-override-group {string}
set schedule {string}
set service <name1>, <name2>, ...
set service-negate [enable|disable]
set session-ttl {integer}
set srcaddr <name1>, <name2>, ...
set srcaddr-negate [enable|disable]
set srcaddr6 <name1>, <name2>, ...
set srcintf <name1>, <name2>, ...
set ssh-filter-profile {string}
```

```

set ssh-policy-redirect [enable|disable]
set ssl-ssh-profile {string}
set status [enable|disable]
set transparent [enable|disable]
set users <name1>, <name2>, ...
set utm-status [enable|disable]
set uuid {uuid}
set videofilter-profile {string}
set waf-profile {string}
set webcache [enable|disable]
set webcache-https [disable|enable]
set webfilter-profile {string}
set webproxy-forward-server {string}
set webproxy-profile {string}
set ztna-ems-tag <name1>, <name2>, ...
set ztna-tags-match-logic [or|and]
next
end

```

config firewall proxy-policy

Parameter	Description	Type	Size	Default								
access-proxy <name>	IPv4 access proxy. Access Proxy name.	string	Maximum length: 79									
access-proxy6 <name>	IPv6 access proxy. Access proxy name.	string	Maximum length: 79									
action	Accept or deny traffic matching the policy parameters.	option	-	deny								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>accept</i></td><td>Action accept.</td></tr><tr><td><i>deny</i></td><td>Action deny.</td></tr><tr><td><i>redirect</i></td><td>Action redirect.</td></tr></table>	Option	Description	<i>accept</i>	Action accept.	<i>deny</i>	Action deny.	<i>redirect</i>	Action redirect.			
Option	Description											
<i>accept</i>	Action accept.											
<i>deny</i>	Action deny.											
<i>redirect</i>	Action redirect.											
application-list	Name of an existing Application list.	string	Maximum length: 35									
av-profile	Name of an existing Antivirus profile.	string	Maximum length: 35									
block- notification	Enable/disable block notification.	option	-	disable								

Parameter	Description	Type	Size	Default
	Option Description			
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		
comments	Optional comments.	var-string	Maximum length: 1023	
decrypted-traffic-mirror	Decrypted traffic mirror.	string	Maximum length: 35	
device-ownership	When enabled, the ownership enforcement will be done at policy level.	option	-	disable
	Option Description			
	<i>enable</i>	Enable device ownership.		
	<i>disable</i>	Disable device ownership.		
disclaimer	Web proxy disclaimer setting: by domain, policy, or user.	option	-	disable
	Option Description			
	<i>disable</i>	Disable disclaimer.		
	<i>domain</i>	Display disclaimer for domain		
	<i>policy</i>	Display disclaimer for policy		
	<i>user</i>	Display disclaimer for current user		
dlp-profile	Name of an existing DLP profile.	string	Maximum length: 35	
dstaddr <name>	Destination address objects. Address name.	string	Maximum length: 79	
dstaddr-negate	When enabled, destination addresses match against any address EXCEPT the specified destination addresses.	option	-	disable
	Option Description			
	<i>enable</i>	Enable source address negate.		
	<i>disable</i>	Disable destination address negate.		
dstaddr6 <name>	IPv6 destination address objects. Address name.	string	Maximum length: 79	

Parameter	Description	Type	Size	Default						
dstintf <name>	Destination interface names. Interface name.	string	Maximum length: 79							
emailfilter-profile	Name of an existing email filter profile.	string	Maximum length: 35							
file-filter-profile	Name of an existing file-filter profile.	string	Maximum length: 35							
groups <name>	Names of group objects. Group name.	string	Maximum length: 79							
http-tunnel-auth	Enable/disable HTTP tunnel authentication.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable setting.</td></tr><tr><td><i>disable</i></td><td>Disable setting.</td></tr></table>				Option	Description	<i>enable</i>	Enable setting.	<i>disable</i>	Disable setting.
Option	Description									
<i>enable</i>	Enable setting.									
<i>disable</i>	Disable setting.									
icap-profile	Name of an existing ICAP profile.	string	Maximum length: 35							
internet-service	Enable/disable use of Internet Services for this policy. If enabled, destination address and service are not used.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable use of Internet Services in policy.</td></tr><tr><td><i>disable</i></td><td>Disable use of Internet Services in policy.</td></tr></table>				Option	Description	<i>enable</i>	Enable use of Internet Services in policy.	<i>disable</i>	Disable use of Internet Services in policy.
Option	Description									
<i>enable</i>	Enable use of Internet Services in policy.									
<i>disable</i>	Disable use of Internet Services in policy.									
internet-service-custom <name>	Custom Internet Service name. Custom Internet Service name.	string	Maximum length: 79							
internet-service-custom-group <name>	Custom Internet Service group name. Custom Internet Service group name.	string	Maximum length: 79							
internet-service-group <name>	Internet Service group name. Internet Service group name.	string	Maximum length: 79							
internet-service-name <name>	Internet Service name. Internet Service name.	string	Maximum length: 79							

Parameter	Description	Type	Size	Default						
internet-service-negate	When enabled, Internet Services match against any internet service EXCEPT the selected Internet Service.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable negated Internet Service match.</td></tr><tr><td>disable</td><td>Disable negated Internet Service match.</td></tr></table>	Option	Description	enable	Enable negated Internet Service match.	disable	Disable negated Internet Service match.			
Option	Description									
enable	Enable negated Internet Service match.									
disable	Disable negated Internet Service match.									
internet-service6	Enable/disable use of Internet Services IPv6 for this policy. If enabled, destination IPv6 address and service are not used.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable use of IPv6 Internet Services in policy.</td></tr><tr><td>disable</td><td>Disable use of IPv6 Internet Services in policy.</td></tr></table>	Option	Description	enable	Enable use of IPv6 Internet Services in policy.	disable	Disable use of IPv6 Internet Services in policy.			
Option	Description									
enable	Enable use of IPv6 Internet Services in policy.									
disable	Disable use of IPv6 Internet Services in policy.									
internet-service6-custom <name>	Custom Internet Service IPv6 name. Custom Internet Service IPv6 name.	string	Maximum length: 79							
internet-service6-custom-group <name>	Custom Internet Service IPv6 group name. Custom Internet Service IPv6 group name.	string	Maximum length: 79							
internet-service6-group <name>	Internet Service IPv6 group name. Internet Service IPv6 group name.	string	Maximum length: 79							
internet-service6-name <name>	Internet Service IPv6 name. Internet Service IPv6 name.	string	Maximum length: 79							
internet-service6-negate	When enabled, Internet Services match against any internet service IPv6 EXCEPT the selected Internet Service IPv6.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable negated IPv6 Internet Service match.</td></tr><tr><td>disable</td><td>Disable negated IPv6 Internet Service match.</td></tr></table>	Option	Description	enable	Enable negated IPv6 Internet Service match.	disable	Disable negated IPv6 Internet Service match.			
Option	Description									
enable	Enable negated IPv6 Internet Service match.									
disable	Disable negated IPv6 Internet Service match.									
ips-sensor	Name of an existing IPS sensor.	string	Maximum length: 35							

Parameter	Description	Type	Size	Default
ips-voip-filter	Name of an existing VoIP (ips) profile.	string	Maximum length: 35	
logtraffic	Enable/disable logging traffic through the policy.	option	-	utm
	Option	Description		
	all	Log all sessions.		
	utm	UTM event and matched application traffic log.		
	disable	Disable traffic and application log.		
logtraffic-start	Enable/disable policy log traffic start.	option	-	disable
	Option	Description		
	enable	Enable setting.		
	disable	Disable setting.		
name	Policy name.	string	Maximum length: 35	
policyid	Policy ID.	integer	Minimum value: 0 Maximum value: 4294967295	
poolname <name>	Name of IP pool object. IP pool name.	string	Maximum length: 79	
profile-group	Name of profile group.	string	Maximum length: 35	
profile-protocol-options	Name of an existing Protocol options profile.	string	Maximum length: 35	default
profile-type	Determine whether the firewall policy allows security profile groups or single profiles only.	option	-	single
	Option	Description		
	single	Do not allow security profile groups.		
	group	Allow security profile groups.		
proxy	Type of explicit proxy.	option	-	

Parameter	Description	Type	Size	Default																
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>explicit-web</i></td><td>Explicit Web Proxy</td></tr><tr><td><i>transparent-web</i></td><td>Transparent Web Proxy</td></tr><tr><td><i>ftp</i></td><td>Explicit FTP Proxy</td></tr><tr><td><i>ssh</i></td><td>SSH Proxy</td></tr><tr><td><i>ssh-tunnel</i></td><td>SSH Tunnel</td></tr><tr><td><i>access-proxy</i></td><td>Access Proxy</td></tr><tr><td><i>wanopt</i></td><td>WANOpt Tunnel</td></tr></table>	Option	Description	<i>explicit-web</i>	Explicit Web Proxy	<i>transparent-web</i>	Transparent Web Proxy	<i>ftp</i>	Explicit FTP Proxy	<i>ssh</i>	SSH Proxy	<i>ssh-tunnel</i>	SSH Tunnel	<i>access-proxy</i>	Access Proxy	<i>wanopt</i>	WANOpt Tunnel			
	Option	Description																		
	<i>explicit-web</i>	Explicit Web Proxy																		
	<i>transparent-web</i>	Transparent Web Proxy																		
	<i>ftp</i>	Explicit FTP Proxy																		
	<i>ssh</i>	SSH Proxy																		
	<i>ssh-tunnel</i>	SSH Tunnel																		
	<i>access-proxy</i>	Access Proxy																		
<i>wanopt</i>	WANOpt Tunnel																			
redirect-url	Redirect URL for further explicit web proxy processing.	var-string	Maximum length: 1023																	
replacemsg-override-group	Authentication replacement message override group.	string	Maximum length: 35																	
schedule	Name of schedule object.	string	Maximum length: 35																	
service <name>	Name of service objects. Service name.	string	Maximum length: 79																	
service-negate	When enabled, services match against any service EXCEPT the specified destination services.	option	-	disable																
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable negated service match.</td></tr><tr><td><i>disable</i></td><td>Disable negated service match.</td></tr></table>	Option	Description	<i>enable</i>	Enable negated service match.	<i>disable</i>	Disable negated service match.													
	Option	Description																		
	<i>enable</i>	Enable negated service match.																		
<i>disable</i>	Disable negated service match.																			
session-ttl	TTL in seconds for sessions accepted by this policy (0 means use the system default session TTL).	integer	Minimum value: 0 300 Maximum value: 2764800																	
srcaddr <name>	Source address objects. Address name.	string	Maximum length: 79																	
srcaddr-negate	When enabled, source addresses match against any address EXCEPT the specified source addresses.	option	-	disable																

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>enable</i>	Enable source address negate.		
	<i>disable</i>	Disable destination address negate.		
srcaddr6 <name>	IPv6 source address objects. Address name.	string	Maximum length: 79	
srcintf <name>	Source interface names. Interface name.	string	Maximum length: 79	
ssh-filter- profile	Name of an existing SSH filter profile.	string	Maximum length: 35	
ssh-policy- redirect	Redirect SSH traffic to matching transparent proxy policy.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable SSH policy redirect.		
	<i>disable</i>	Disable SSH policy redirect.		
ssl-ssh-profile	Name of an existing SSL SSH profile.	string	Maximum length: 35	no-inspection
status	Enable/disable the active status of the policy.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		
transparent	Enable to use the IP address of the client to connect to the server.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable use of IP address of client to connect to server.		
	<i>disable</i>	Disable use of IP address of client to connect to server.		
users <name>	Names of user objects. Group name.	string	Maximum length: 79	
utm-status	Enable the use of UTM profiles/sensors/lists.	option	-	disable

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		
uuid	Universally Unique Identifier (UUID; automatically assigned but can be manually reset).	uuid	Not Specified	00000000-0000-0000-0000-000000000000
videofilter-profile	Name of an existing VideoFilter profile.	string	Maximum length: 35	
waf-profile	Name of an existing Web application firewall profile.	string	Maximum length: 35	
webcache *	Enable/disable web caching.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		
webcache-https *	Enable/disable web caching for HTTPS (Requires deep-inspection enabled in ssl-ssh-profile).	option	-	disable
	Option	Description		
	<i>disable</i>	Disable web cache for HTTPS.		
	<i>enable</i>	Enable web cache for HTTPS.		
webfilter-profile	Name of an existing Web filter profile.	string	Maximum length: 35	
webproxy-forward-server	Web proxy forward server name.	string	Maximum length: 63	
webproxy-profile	Name of web proxy profile.	string	Maximum length: 63	
ztna-ems-tag <name>	ZTNA EMS Tag names. EMS Tag name.	string	Maximum length: 79	
ztna-tags-match-logic	ZTNA tag matching logic.	option	-	or

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>or</i>	Match ZTNA tags using a logical OR operator.		
	<i>and</i>	Match ZTNA tags using a logical AND operator.		

* This parameter may not exist in some models.

config firewall region

Define region table. Read-only.

```
config firewall region
    Description: Define region table. Read-only.
    edit <id>
        set city <id1>, <id2>, ...
        set name {string}
    next
end
```

config firewall region

Parameter	Description	Type	Size	Default
city <id>	City ID list. City ID.	integer	Minimum value: 0 Maximum value: 65535	
id	Region ID.	integer	Minimum value: 0 Maximum value: 65535	0
name	Region name.	string	Maximum length: 63	

config firewall schedule group

Schedule group configuration.

```
config firewall schedule group
    Description: Schedule group configuration.
```

```

edit <name>
    set color {integer}
    set fabric-object [enable|disable]
    set member <name1>, <name2>, ...
next
end

```

config firewall schedule group

Parameter	Description	Type	Size	Default						
color	Color of icon on the GUI.	integer	Minimum value: 0 Maximum value: 32	0						
fabric-object	Security Fabric global object setting.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Object is set as a security fabric-wide global object.</td></tr><tr><td><i>disable</i></td><td>Object is local to this security fabric member.</td></tr></table>				Option	Description	<i>enable</i>	Object is set as a security fabric-wide global object.	<i>disable</i>	Object is local to this security fabric member.
Option	Description									
<i>enable</i>	Object is set as a security fabric-wide global object.									
<i>disable</i>	Object is local to this security fabric member.									
member <name>	Schedules added to the schedule group. Schedule name.	string	Maximum length: 79							
name	Schedule group name.	string	Maximum length: 31							

config firewall schedule onetime

Onetime schedule configuration.

```

config firewall schedule onetime
    Description: Onetime schedule configuration.
    edit <name>
        set color {integer}
        set end {user}
        set end-utc {user}
        set expiration-days {integer}
        set fabric-object [enable|disable]
        set start {user}
        set start-utc {user}
    next
end

```

config firewall schedule onetime

Parameter	Description	Type	Size	Default
color	Color of icon on the GUI.	integer	Minimum value: 0 Maximum value: 32	0
end	Schedule end date and time, format hh:mm yyyy/mm/dd.	user	Not Specified	
end-utc	Schedule end date and time, in epoch format.	user	Not Specified	
expiration-days	Write an event log message this many days before the schedule expires.	integer	Minimum value: 0 Maximum value: 100	3
fabric-object	Security Fabric global object setting.	option	-	disable
	Option	Description		
	<i>enable</i>	Object is set as a security fabric-wide global object.		
	<i>disable</i>	Object is local to this security fabric member.		
name	Onetime schedule name.	string	Maximum length: 31	
start	Schedule start date and time, format hh:mm yyyy/mm/dd.	user	Not Specified	
start-utc	Schedule start date and time, in epoch format.	user	Not Specified	

config firewall schedule recurring

Recurring schedule configuration.

```
config firewall schedule recurring
  Description: Recurring schedule configuration.
  edit <name>
    set color {integer}
    set day {option1}, {option2}, ...
    set end {user}
    set fabric-object [enable|disable]
    set start {user}
  next
end
```


config firewall schedule recurring

Parameter	Description	Type	Size	Default																		
color	Color of icon on the GUI.	integer	Minimum value: 0 Maximum value: 32	0																		
day	One or more days of the week on which the schedule is valid. Separate the names of the days with a space.	option	-	none																		
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>sunday</i></td><td>Sunday.</td></tr><tr><td><i>monday</i></td><td>Monday.</td></tr><tr><td><i>tuesday</i></td><td>Tuesday.</td></tr><tr><td><i>wednesday</i></td><td>Wednesday.</td></tr><tr><td><i>thursday</i></td><td>Thursday.</td></tr><tr><td><i>friday</i></td><td>Friday.</td></tr><tr><td><i>saturday</i></td><td>Saturday.</td></tr><tr><td><i>none</i></td><td>None.</td></tr></table>				Option	Description	<i>sunday</i>	Sunday.	<i>monday</i>	Monday.	<i>tuesday</i>	Tuesday.	<i>wednesday</i>	Wednesday.	<i>thursday</i>	Thursday.	<i>friday</i>	Friday.	<i>saturday</i>	Saturday.	<i>none</i>	None.
	Option	Description																				
	<i>sunday</i>	Sunday.																				
	<i>monday</i>	Monday.																				
	<i>tuesday</i>	Tuesday.																				
	<i>wednesday</i>	Wednesday.																				
	<i>thursday</i>	Thursday.																				
	<i>friday</i>	Friday.																				
	<i>saturday</i>	Saturday.																				
<i>none</i>	None.																					
end	Time of day to end the schedule, format hh:mm.	user	Not Specified																			
fabric-object	Security Fabric global object setting.	option	-	disable																		
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Object is set as a security fabric-wide global object.</td></tr><tr><td><i>disable</i></td><td>Object is local to this security fabric member.</td></tr></table>				Option	Description	<i>enable</i>	Object is set as a security fabric-wide global object.	<i>disable</i>	Object is local to this security fabric member.												
	Option	Description																				
	<i>enable</i>	Object is set as a security fabric-wide global object.																				
<i>disable</i>	Object is local to this security fabric member.																					
name	Recurring schedule name.	string	Maximum length: 31																			
start	Time of day to start the schedule, format hh:mm.	user	Not Specified																			

config firewall security-policy

Configure NGFW IPv4/IPv6 application policies.

```
config firewall security-policy
  Description: Configure NGFW IPv4/IPv6 application policies.
```

```

edit <policyid>
    set action [accept|deny]
    set app-category <id1>, <id2>, ...
    set app-group <name1>, <name2>, ...
    set application <id1>, <id2>, ...
    set application-list {string}
    set av-profile {string}
    set cifs-profile {string}
    set comments {var-string}
    set dlp-profile {string}
    set dnsfilter-profile {string}
    set dstaddr <name1>, <name2>, ...
    set dstaddr-negate [enable|disable]
    set dstaddr6 <name1>, <name2>, ...
    set dstaddr6-negate [enable|disable]
    set dstintf <name1>, <name2>, ...
    set emailfilter-profile {string}
    set enforce-default-app-port [enable|disable]
    set file-filter-profile {string}
    set fsso-groups <name1>, <name2>, ...
    set groups <name1>, <name2>, ...
    set icap-profile {string}
    set internet-service [enable|disable]
    set internet-service-custom <name1>, <name2>, ...
    set internet-service-custom-group <name1>, <name2>, ...
    set internet-service-group <name1>, <name2>, ...
    set internet-service-name <name1>, <name2>, ...
    set internet-service-negate [enable|disable]
    set internet-service-src [enable|disable]
    set internet-service-src-custom <name1>, <name2>, ...
    set internet-service-src-custom-group <name1>, <name2>, ...
    set internet-service-src-group <name1>, <name2>, ...
    set internet-service-src-name <name1>, <name2>, ...
    set internet-service-src-negate [enable|disable]
    set internet-service6 [enable|disable]
    set internet-service6-custom <name1>, <name2>, ...
    set internet-service6-custom-group <name1>, <name2>, ...
    set internet-service6-group <name1>, <name2>, ...
    set internet-service6-name <name1>, <name2>, ...
    set internet-service6-negate [enable|disable]
    set internet-service6-src [enable|disable]
    set internet-service6-src-custom <name1>, <name2>, ...
    set internet-service6-src-custom-group <name1>, <name2>, ...
    set internet-service6-src-group <name1>, <name2>, ...
    set internet-service6-src-name <name1>, <name2>, ...
    set internet-service6-src-negate [enable|disable]
    set ips-sensor {string}
    set ips-voip-filter {string}
    set learning-mode [enable|disable]
    set logtraffic [all|utm|...]
    set name {string}
    set nat46 [enable|disable]

```

```

set nat64 [enable|disable]
set profile-group {string}
set profile-protocol-options {string}
set profile-type [single|group]
set schedule {string}
set sctp-filter-profile {string}
set send-deny-packet [disable|enable]
set service <name1>, <name2>, ...
set service-negate [enable|disable]
set srcaddr <name1>, <name2>, ...
set srcaddr-negate [enable|disable]
set srcaddr6 <name1>, <name2>, ...
set srcaddr6-negate [enable|disable]
set srcintf <name1>, <name2>, ...
set ssh-filter-profile {string}
set ssl-ssh-profile {string}
set status [enable|disable]
set url-category {user}
set users <name1>, <name2>, ...
set uuid {uuid}
set videofilter-profile {string}
set voip-profile {string}
set webfilter-profile {string}
next
end

```

config firewall security-policy

Parameter	Description	Type	Size	Default
action	Policy action (accept/deny).	option	-	deny
	Option	Description		
	accept	Allows session that match the firewall policy.		
	deny	Blocks sessions that match the firewall policy.		
app-category <id>	Application category ID list. Category IDs.	integer	Minimum value: 0 Maximum value: 4294967295	
app-group <name>	Application group names. Application group names.	string	Maximum length: 79	
application <id>	Application ID list. Application IDs.	integer	Minimum value: 0 Maximum value: 4294967295	

Parameter	Description	Type	Size	Default						
application-list	Name of an existing Application list.	string	Maximum length: 35							
av-profile	Name of an existing Antivirus profile.	string	Maximum length: 35							
cifs-profile	Name of an existing CIFS profile.	string	Maximum length: 35							
comments	Comment.	var-string	Maximum length: 1023							
dlp-profile	Name of an existing DLP profile.	string	Maximum length: 35							
dnsfilter-profile	Name of an existing DNS filter profile.	string	Maximum length: 35							
dstaddr <name>	Destination IPv4 address name and address group names. Address name.	string	Maximum length: 79							
dstaddr-negate	When enabled dstaddr specifies what the destination address must NOT be.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable destination address negate.</td></tr><tr><td>disable</td><td>Disable destination address negate.</td></tr></table>				Option	Description	enable	Enable destination address negate.	disable	Disable destination address negate.
Option	Description									
enable	Enable destination address negate.									
disable	Disable destination address negate.									
dstaddr6 <name>	Destination IPv6 address name and address group names. Address name.	string	Maximum length: 79							
dstaddr6-negate	When enabled dstaddr6 specifies what the destination address must NOT be.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable IPv6 destination address negate.</td></tr><tr><td>disable</td><td>Disable IPv6 destination address negate.</td></tr></table>				Option	Description	enable	Enable IPv6 destination address negate.	disable	Disable IPv6 destination address negate.
Option	Description									
enable	Enable IPv6 destination address negate.									
disable	Disable IPv6 destination address negate.									
dstintf <name>	Outgoing (egress) interface. Interface name.	string	Maximum length: 79							
emailfilter-profile	Name of an existing email filter profile.	string	Maximum length: 35							
enforce-default-app-port	Enable/disable default application port enforcement for allowed applications.	option	-	enable						

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		
file-filter-profile	Name of an existing file-filter profile.	string	Maximum length: 35	
fsso-groups <name>	Names of FSSO groups. Names of FSSO groups.	string	Maximum length: 511	
groups <name>	Names of user groups that can authenticate with this policy. User group name.	string	Maximum length: 79	
icap-profile	Name of an existing ICAP profile.	string	Maximum length: 35	
internet-service	Enable/disable use of Internet Services for this policy. If enabled, destination address, service and default application port enforcement are not used.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable use of Internet Services in policy.		
	<i>disable</i>	Disable use of Internet Services in policy.		
internet-service-custom <name>	Custom Internet Service name. Custom Internet Service name.	string	Maximum length: 79	
internet-service-custom-group <name>	Custom Internet Service group name. Custom Internet Service group name.	string	Maximum length: 79	
internet-service-group <name>	Internet Service group name. Internet Service group name.	string	Maximum length: 79	
internet-service-name <name>	Internet Service name. Internet Service name.	string	Maximum length: 79	
internet-service-negate	When enabled internet-service specifies what the service must NOT be.	option	-	disable

Parameter	Description	Type	Size	Default						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable negated Internet Service match.</td></tr><tr><td><i>disable</i></td><td>Disable negated Internet Service match.</td></tr></table>	Option	Description	<i>enable</i>	Enable negated Internet Service match.	<i>disable</i>	Disable negated Internet Service match.			
	Option	Description								
	<i>enable</i>	Enable negated Internet Service match.								
<i>disable</i>	Disable negated Internet Service match.									
internet-service-src	Enable/disable use of Internet Services in source for this policy. If enabled, source address is not used.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable use of Internet Services source in policy.</td></tr><tr><td><i>disable</i></td><td>Disable use of Internet Services source in policy.</td></tr></table>	Option	Description	<i>enable</i>	Enable use of Internet Services source in policy.	<i>disable</i>	Disable use of Internet Services source in policy.			
	Option	Description								
	<i>enable</i>	Enable use of Internet Services source in policy.								
<i>disable</i>	Disable use of Internet Services source in policy.									
internet-service-src-custom <name>	Custom Internet Service source name. Custom Internet Service name.	string	Maximum length: 79							
internet-service-src-custom-group <name>	Custom Internet Service source group name. Custom Internet Service group name.	string	Maximum length: 79							
internet-service-src-group <name>	Internet Service source group name. Internet Service group name.	string	Maximum length: 79							
internet-service-src-name <name>	Internet Service source name. Internet Service name.	string	Maximum length: 79							
internet-service-src-negate	When enabled internet-service-src specifies what the service must NOT be.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable negated Internet Service source match.</td></tr><tr><td><i>disable</i></td><td>Disable negated Internet Service source match.</td></tr></table>	Option	Description	<i>enable</i>	Enable negated Internet Service source match.	<i>disable</i>	Disable negated Internet Service source match.			
	Option	Description								
	<i>enable</i>	Enable negated Internet Service source match.								
<i>disable</i>	Disable negated Internet Service source match.									
internet-service6	Enable/disable use of IPv6 Internet Services for this policy. If enabled, destination address, service and default application port enforcement are not used.	option	-	disable						

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>enable</i>	Enable use of IPv6 Internet Services in policy.		
	<i>disable</i>	Disable use of IPv6 Internet Services in policy.		
internet-service6-custom <name>	Custom IPv6 Internet Service name. Custom IPv6 Internet Service name.	string	Maximum length: 79	
internet-service6-custom-group <name>	Custom IPv6 Internet Service group name. Custom IPv6 Internet Service group name.	string	Maximum length: 79	
internet-service6-group <name>	Internet Service group name. Internet Service group name.	string	Maximum length: 79	
internet-service6-name <name>	IPv6 Internet Service name. IPv6 Internet Service name.	string	Maximum length: 79	
internet-service6-negate	When enabled internet-service6 specifies what the service must NOT be.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable negated IPv6 Internet Service match.		
	<i>disable</i>	Disable negated IPv6 Internet Service match.		
internet-service6-src	Enable/disable use of IPv6 Internet Services in source for this policy. If enabled, source address is not used.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable use of IPv6 Internet Services source in policy.		
	<i>disable</i>	Disable use of IPv6 Internet Services source in policy.		
internet-service6-src-custom <name>	Custom IPv6 Internet Service source name. Custom Internet Service name.	string	Maximum length: 79	

Parameter	Description	Type	Size	Default								
internet-service6-src-custom-group <name>	Custom Internet Service6 source group name. Custom Internet Service6 group name.	string	Maximum length: 79									
internet-service6-src-group <name>	Internet Service6 source group name. Internet Service group name.	string	Maximum length: 79									
internet-service6-src-name <name>	IPv6 Internet Service source name. Internet Service name.	string	Maximum length: 79									
internet-service6-src-negate	When enabled internet-service6-src specifies what the service must NOT be.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable negated IPv6 Internet Service source match.</td></tr><tr><td><i>disable</i></td><td>Disable negated IPv6 Internet Service source match.</td></tr></table>				Option	Description	<i>enable</i>	Enable negated IPv6 Internet Service source match.	<i>disable</i>	Disable negated IPv6 Internet Service source match.		
Option	Description											
<i>enable</i>	Enable negated IPv6 Internet Service source match.											
<i>disable</i>	Disable negated IPv6 Internet Service source match.											
ips-sensor	Name of an existing IPS sensor.	string	Maximum length: 35									
ips-voip-filter	Name of an existing VoIP (ips) profile.	string	Maximum length: 35									
learning-mode	Enable to allow everything, but log all of the meaningful data for security information gathering. A learning report will be generated.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable learning mode.</td></tr><tr><td><i>disable</i></td><td>Disable learning mode.</td></tr></table>				Option	Description	<i>enable</i>	Enable learning mode.	<i>disable</i>	Disable learning mode.		
Option	Description											
<i>enable</i>	Enable learning mode.											
<i>disable</i>	Disable learning mode.											
logtraffic	Enable or disable logging. Log all sessions or security profile sessions.	option	-	utm								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>all</i></td><td>Log all sessions accepted or denied by this policy.</td></tr><tr><td><i>utm</i></td><td>Log traffic that has a security profile applied to it.</td></tr><tr><td><i>disable</i></td><td>Disable all logging for this policy.</td></tr></table>				Option	Description	<i>all</i>	Log all sessions accepted or denied by this policy.	<i>utm</i>	Log traffic that has a security profile applied to it.	<i>disable</i>	Disable all logging for this policy.
Option	Description											
<i>all</i>	Log all sessions accepted or denied by this policy.											
<i>utm</i>	Log traffic that has a security profile applied to it.											
<i>disable</i>	Disable all logging for this policy.											
name	Policy name.	string	Maximum length: 35									

Parameter	Description	Type	Size	Default
nat46	Enable/disable NAT46.	option	-	disable
	Option Description			
	<i>enable</i>	Enable NAT46.		
	<i>disable</i>	Disable NAT46.		
nat64	Enable/disable NAT64.	option	-	disable
	Option Description			
	<i>enable</i>	Enable NAT64.		
	<i>disable</i>	Disable NAT64.		
policyid	Policy ID.	integer	Minimum value: 0 Maximum value: 4294967294	
profile-group	Name of profile group.	string	Maximum length: 35	
profile-protocol-options	Name of an existing Protocol options profile.	string	Maximum length: 35	default
profile-type	Determine whether the firewall policy allows security profile groups or single profiles only.	option	-	single
	Option Description			
	<i>single</i>	Do not allow security profile groups.		
	<i>group</i>	Allow security profile groups.		
schedule	Schedule name.	string	Maximum length: 35	
sctp-filter-profile	Name of an existing SCTP filter profile.	string	Maximum length: 35	
send-deny-packet	Enable to send a reply when a session is denied or blocked by a firewall policy.	option	-	disable
	Option Description			
	<i>disable</i>	Disable deny-packet sending.		
	<i>enable</i>	Enable deny-packet sending.		

Parameter	Description	Type	Size	Default						
service <name>	Service and service group names. Service name.	string	Maximum length: 79							
service- negate	When enabled service specifies what the service must NOT be.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable negated service match.</td></tr><tr><td><i>disable</i></td><td>Disable negated service match.</td></tr></table>	Option	Description	<i>enable</i>	Enable negated service match.	<i>disable</i>	Disable negated service match.			
Option	Description									
<i>enable</i>	Enable negated service match.									
<i>disable</i>	Disable negated service match.									
srcaddr <name>	Source IPv4 address name and address group names. Address name.	string	Maximum length: 79							
srcaddr- negate	When enabled srcaddr specifies what the source address must NOT be.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable source address negate.</td></tr><tr><td><i>disable</i></td><td>Disable source address negate.</td></tr></table>	Option	Description	<i>enable</i>	Enable source address negate.	<i>disable</i>	Disable source address negate.			
Option	Description									
<i>enable</i>	Enable source address negate.									
<i>disable</i>	Disable source address negate.									
srcaddr6 <name>	Source IPv6 address name and address group names. Address name.	string	Maximum length: 79							
srcaddr6- negate	When enabled srcaddr6 specifies what the source address must NOT be.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable IPv6 source address negate.</td></tr><tr><td><i>disable</i></td><td>Disable IPv6 source address negate.</td></tr></table>	Option	Description	<i>enable</i>	Enable IPv6 source address negate.	<i>disable</i>	Disable IPv6 source address negate.			
Option	Description									
<i>enable</i>	Enable IPv6 source address negate.									
<i>disable</i>	Disable IPv6 source address negate.									
srcintf <name>	Incoming (ingress) interface. Interface name.	string	Maximum length: 79							
ssh-filter- profile	Name of an existing SSH filter profile.	string	Maximum length: 35							
ssl-ssh- profile	Name of an existing SSL SSH profile.	string	Maximum length: 35	no-inspection						
status	Enable or disable this policy.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable setting.</td></tr></table>	Option	Description	<i>enable</i>	Enable setting.					
Option	Description									
<i>enable</i>	Enable setting.									

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>disable</i>	Disable setting.		
url-category	URL categories or groups.	user	Not Specified	
users <name>	Names of individual users that can authenticate with this policy. User name.	string	Maximum length: 79	
uuid	Universally Unique Identifier (UUID; automatically assigned but can be manually reset).	uuid	Not Specified	00000000-0000-0000-0000-000000000000
videofilter-profile	Name of an existing VideoFilter profile.	string	Maximum length: 35	
voip-profile	Name of an existing VoIP (voipd) profile.	string	Maximum length: 35	
webfilter-profile	Name of an existing Web filter profile.	string	Maximum length: 35	

config firewall service category

Configure service categories.

```
config firewall service category
  Description: Configure service categories.
  edit <name>
    set comment {var-string}
    set fabric-object [enable|disable]
  next
end
```

config firewall service category

Parameter	Description	Type	Size	Default
comment	Comment.	var-string	Maximum length: 255	
fabric-object	Security Fabric global object setting.	option	-	disable
	Option	Description		
	<i>enable</i>	Object is set as a security fabric-wide global object.		

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>disable</i>	Object is local to this security fabric member.		
name	Service category name.	string	Maximum length: 63	

config firewall service custom

Configure custom services.

```

config firewall service custom
    Description: Configure custom services.
    edit <name>
        set app-category <id1>, <id2>, ...
        set app-service-type [disable|app-id|...]
        set application <id1>, <id2>, ...
        set category {string}
        set check-reset-range [disable|strict|...]
        set color {integer}
        set comment {var-string}
        set fabric-object [enable|disable]
        set fqdn {string}
        set helper [auto|disable|...]
        set icmpcode {integer}
        set icmptype {integer}
        set iprange {user}
        set protocol [TCP/UDP/SCTP/ICMP|...]
        set protocol-number {integer}
        set proxy [enable|disable]
        set sctp-portrange {user}
        set session-ttl {user}
        set tcp-halfclose-timer {integer}
        set tcp-halfopen-timer {integer}
        set tcp-portrange {user}
        set tcp-rst-timer {integer}
        set tcp-timewait-timer {integer}
        set udp-idle-timer {integer}
        set udp-portrange {user}
    next
end

```

config firewall service custom

Parameter	Description	Type	Size	Default
app-category <id>	Application category ID. Application category id.	integer	Minimum value: 0 Maximum value: 4294967295	
app-service- type	Application service type.	option	-	disable
	Option	Description		
	<i>disable</i>	Disable application type.		
	<i>app-id</i>	Application ID.		
	<i>app-category</i>	Applicatin category.		
application <id>	Application ID. Application id.	integer	Minimum value: 0 Maximum value: 4294967295	
category	Service category.	string	Maximum length: 63	
check-reset- range	Configure the type of ICMP error message verification.	option	-	default
	Option	Description		
	<i>disable</i>	Disable RST range check.		
	<i>strict</i>	Check RST range strictly.		
	<i>default</i>	Using system default setting.		
color	Color of icon on the GUI.	integer	Minimum value: 0 Maximum value: 32	
comment	Comment.	var-string	Maximum length: 255	
fabric-object	Security Fabric global object setting.	option	-	disable
	Option	Description		
	<i>enable</i>	Object is set as a security fabric-wide global object.		
	<i>disable</i>	Object is local to this security fabric member.		

Parameter	Description	Type	Size	Default																																				
fqdn	Fully qualified domain name.	string	Maximum length: 255																																					
helper	Helper name.	option	-	auto																																				
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>auto</i></td><td>Automatically select helper based on protocol and port.</td></tr><tr><td><i>disable</i></td><td>Disable helper.</td></tr><tr><td><i>ftp</i></td><td>FTP.</td></tr><tr><td><i>tftp</i></td><td>TFTP.</td></tr><tr><td><i>ras</i></td><td>RAS.</td></tr><tr><td><i>h323</i></td><td>H323.</td></tr><tr><td><i>tns</i></td><td>TNS.</td></tr><tr><td><i>mms</i></td><td>MMS.</td></tr><tr><td><i>sip</i></td><td>SIP.</td></tr><tr><td><i>pptp</i></td><td>PPTP.</td></tr><tr><td><i>rtsp</i></td><td>RTSP.</td></tr><tr><td><i>dns-udp</i></td><td>DNS UDP.</td></tr><tr><td><i>dns-tcp</i></td><td>DNS TCP.</td></tr><tr><td><i>pmap</i></td><td>PMAP.</td></tr><tr><td><i>rsh</i></td><td>RSH.</td></tr><tr><td><i>dcerpc</i></td><td>DCERPC.</td></tr><tr><td><i>mgcp</i></td><td>MGCP.</td></tr></table>	Option	Description	<i>auto</i>	Automatically select helper based on protocol and port.	<i>disable</i>	Disable helper.	<i>ftp</i>	FTP.	<i>tftp</i>	TFTP.	<i>ras</i>	RAS.	<i>h323</i>	H323.	<i>tns</i>	TNS.	<i>mms</i>	MMS.	<i>sip</i>	SIP.	<i>pptp</i>	PPTP.	<i>rtsp</i>	RTSP.	<i>dns-udp</i>	DNS UDP.	<i>dns-tcp</i>	DNS TCP.	<i>pmap</i>	PMAP.	<i>rsh</i>	RSH.	<i>dcerpc</i>	DCERPC.	<i>mgcp</i>	MGCP.			
	Option	Description																																						
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	<i>rtsp</i>	RTSP.																																						
	<i>dns-udp</i>	DNS UDP.																																						
	<i>dns-tcp</i>	DNS TCP.																																						
	<i>pmap</i>	PMAP.																																						
	<i>rsh</i>	RSH.																																						
	<i>dcerpc</i>	DCERPC.																																						
	<i>mgcp</i>	MGCP.																																						
icmpcode	ICMP code.	integer	Minimum value: 0 Maximum value: 255																																					
icmptype	ICMP type.	integer	Minimum value: 0 Maximum value: 4294967295																																					
iprange	Start and end of the IP range associated with service.	user	Not Specified																																					
name	Custom service name.	string	Maximum length: 79																																					
protocol	Protocol type based on IANA numbers.	option	-	TCP/UDP/SCTP																																				

Parameter	Description	Type	Size	Default																						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>TCP/UDP/SCTP</td><td>TCP, UDP and SCTP.</td></tr><tr><td>ICMP</td><td>ICMP.</td></tr><tr><td>ICMP6</td><td>ICMP6.</td></tr><tr><td>IP</td><td>IP.</td></tr><tr><td>HTTP</td><td>HTTP - for web proxy.</td></tr><tr><td>FTP</td><td>FTP - for web proxy.</td></tr><tr><td>CONNECT</td><td>Connect - for web proxy.</td></tr><tr><td>SOCKS-TCP</td><td>Socks TCP - for web proxy.</td></tr><tr><td>SOCKS-UDP</td><td>Socks UDP - for web proxy.</td></tr><tr><td>ALL</td><td>All - for web proxy.</td></tr></table>	Option	Description	TCP/UDP/SCTP	TCP, UDP and SCTP.	ICMP	ICMP.	ICMP6	ICMP6.	IP	IP.	HTTP	HTTP - for web proxy.	FTP	FTP - for web proxy.	CONNECT	Connect - for web proxy.	SOCKS-TCP	Socks TCP - for web proxy.	SOCKS-UDP	Socks UDP - for web proxy.	ALL	All - for web proxy.			
	Option	Description																								
	TCP/UDP/SCTP	TCP, UDP and SCTP.																								
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	FTP	FTP - for web proxy.																								
	CONNECT	Connect - for web proxy.																								
	SOCKS-TCP	Socks TCP - for web proxy.																								
	SOCKS-UDP	Socks UDP - for web proxy.																								
ALL	All - for web proxy.																									
protocol-number	IP protocol number.	integer	Minimum value: 0 0 Maximum value: 254																							
proxy	Enable/disable web proxy service.	option	-	disable																						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable setting.</td></tr><tr><td>disable</td><td>Disable setting.</td></tr></table>	Option	Description	enable	Enable setting.	disable	Disable setting.																			
	Option	Description																								
	enable	Enable setting.																								
disable	Disable setting.																									
sctp-portrange	Multiple SCTP port ranges.	user	Not Specified																							
session-ttl	Session TTL (300 - 2764800, 0 = default).	user	Not Specified																							
tcp-halfclose-timer	Wait time to close a TCP session waiting for an unanswered FIN packet (1 - 86400 sec, 0 = default).	integer	Minimum value: 0 0 Maximum value: 86400																							
tcp-halfopen-timer	Wait time to close a TCP session waiting for an unanswered open session packet (1 - 86400 sec, 0 = default).	integer	Minimum value: 0 0 Maximum value: 86400																							
tcp-portrange	Multiple TCP port ranges.	user	Not Specified																							
tcp-rst-timer	Set the length of the TCP CLOSE state in seconds (5 - 300 sec, 0 = default).	integer	Minimum value: 0 5 Maximum value: 300																							

Parameter	Description	Type	Size	Default
tcp-timewait-timer	Set the length of the TCP TIME-WAIT state in seconds (1 - 300 sec, 0 = default).	integer	Minimum value: 0 0 Maximum value: 300	0
udp-idle-timer	Number of seconds before an idle UDP connection times out (0 - 86400 sec, 0 = default).	integer	Minimum value: 0 0 Maximum value: 86400	0
udp-portrange	Multiple UDP port ranges.	user	Not Specified	

config firewall service group

Configure service groups.

```
config firewall service group
    Description: Configure service groups.
    edit <name>
        set color {integer}
        set comment {var-string}
        set fabric-object [enable|disable]
        set member <name1>, <name2>, ...
        set proxy [enable|disable]
    next
end
```

config firewall service group

Parameter	Description	Type	Size	Default						
color	Color of icon on the GUI.	integer	Minimum value: 0 Maximum value: 32	0						
comment	Comment.	var-string	Maximum length: 255							
fabric-object	Security Fabric global object setting.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Object is set as a security fabric-wide global object.</td></tr><tr><td><i>disable</i></td><td>Object is local to this security fabric member.</td></tr></table>				Option	Description	<i>enable</i>	Object is set as a security fabric-wide global object.	<i>disable</i>	Object is local to this security fabric member.
Option	Description									
<i>enable</i>	Object is set as a security fabric-wide global object.									
<i>disable</i>	Object is local to this security fabric member.									
member <name>	Service objects contained within the group. Service or service group name.	string	Maximum length: 79							

Parameter	Description	Type	Size	Default
name	Service group name.	string	Maximum length: 79	
proxy	Enable/disable web proxy service group.	option	-	disable
		Option	Description	
		<i>enable</i>	Enable setting.	
		<i>disable</i>	Disable setting.	

config firewall shaper per-ip-shaper

Configure per-IP traffic shaper.

```
config firewall shaper per-ip-shaper
  Description: Configure per-IP traffic shaper.
  edit <name>
    set bandwidth-unit [kbps|mbps|...]
    set diffserv-forward [enable|disable]
    set diffserv-reverse [enable|disable]
    set diffservcode-forward {user}
    set diffservcode-rev {user}
    set max-bandwidth {integer}
    set max-concurrent-session {integer}
    set max-concurrent-tcp-session {integer}
    set max-concurrent-udp-session {integer}
  next
end
```

config firewall shaper per-ip-shaper

Parameter	Description	Type	Size	Default
bandwidth-unit	Unit of measurement for maximum bandwidth for this shaper (Kbps, Mbps or Gbps).	option	-	kbps
		Option	Description	
		<i>kbps</i>	Kilobits per second.	
		<i>mbps</i>	Megabits per second.	
		<i>gbps</i>	Gigabits per second.	

Parameter	Description	Type	Size	Default						
diffserv-forward	Enable/disable changing the Forward (original) DiffServ setting applied to traffic accepted by this shaper.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable setting forward (original) traffic DiffServ.</td></tr><tr><td>disable</td><td>Disable setting forward (original) traffic DiffServ.</td></tr></table>	Option	Description	enable	Enable setting forward (original) traffic DiffServ.	disable	Disable setting forward (original) traffic DiffServ.			
	Option	Description								
	enable	Enable setting forward (original) traffic DiffServ.								
disable	Disable setting forward (original) traffic DiffServ.									
diffserv-reverse	Enable/disable changing the Reverse (reply) DiffServ setting applied to traffic accepted by this shaper.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable setting reverse (reply) traffic DiffServ.</td></tr><tr><td>disable</td><td>Disable setting reverse (reply) traffic DiffServ.</td></tr></table>	Option	Description	enable	Enable setting reverse (reply) traffic DiffServ.	disable	Disable setting reverse (reply) traffic DiffServ.			
	Option	Description								
	enable	Enable setting reverse (reply) traffic DiffServ.								
disable	Disable setting reverse (reply) traffic DiffServ.									
diffservcode-forward	Forward (original) DiffServ setting to be applied to traffic accepted by this shaper.	user	Not Specified							
diffservcode-rev	Reverse (reply) DiffServ setting to be applied to traffic accepted by this shaper.	user	Not Specified							
max-bandwidth	Upper bandwidth limit enforced by this shaper (0 - 80000000). 0 means no limit. Units depend on the bandwidth-unit setting.	integer	Minimum value: 0 Maximum value: 80000000 **	0						
max-concurrent-session	Maximum number of concurrent sessions allowed by this shaper (0 - 2097000). 0 means no limit.	integer	Minimum value: 0 Maximum value: 2097000	0						
max-concurrent-tcp-session	Maximum number of concurrent TCP sessions allowed by this shaper (0 - 2097000). 0 means no limit.	integer	Minimum value: 0 Maximum value: 2097000	0						
max-concurrent-udp-session	Maximum number of concurrent UDP sessions allowed by this shaper (0 - 2097000). 0 means no limit.	integer	Minimum value: 0 Maximum value: 2097000	0						
name	Traffic shaper name.	string	Maximum length: 35							

** Values may differ between models.

config firewall shaper traffic-shaper

Configure shared traffic shaper.

```
config firewall shaper traffic-shaper
  Description: Configure shared traffic shaper.
  edit <name>
    set bandwidth-unit [kbps|mbps|...]
    set diffserv [enable|disable]
    set diffservcode {user}
    set dscp-marking-method [multi-stage|static]
    set exceed-bandwidth {integer}
    set exceed-class-id {integer}
    set exceed-dscp {user}
    set guaranteed-bandwidth {integer}
    set maximum-bandwidth {integer}
    set maximum-dscp {user}
    set overhead {integer}
    set per-policy [disable|enable]
    set priority [low|medium|...]
  next
end
```

config firewall shaper traffic-shaper

Parameter	Description	Type	Size	Default
bandwidth-unit	Unit of measurement for guaranteed and maximum bandwidth for this shaper (Kbps, Mbps or Gbps).	option	-	kbps
	Option	Description		
	<i>kbps</i>	Kilobits per second.		
	<i>mbps</i>	Megabits per second.		
	<i>gbps</i>	Gigabits per second.		
diffserv	Enable/disable changing the DiffServ setting applied to traffic accepted by this shaper.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable setting traffic DiffServ.		
	<i>disable</i>	Disable setting traffic DiffServ.		

Parameter	Description	Type	Size	Default
diffservcode	DiffServ setting to be applied to traffic accepted by this shaper.	user	Not Specified	
dscp-marking-method	Select DSCP marking method.	option	-	static
	Option	Description		
	multi-stage	Multistage marking.		
	static	Static marking.		
exceed-bandwidth	Exceed bandwidth used for DSCP multi-stage marking. Units depend on the bandwidth-unit setting.	integer	Minimum value: 0 0 Maximum value: 80000000 **	
exceed-class-id	Class ID for traffic in guaranteed-bandwidth and maximum-bandwidth.	integer	Minimum value: 0 0 Maximum value: 4294967295	
exceed-dscp	DSCP mark for traffic in guaranteed-bandwidth and exceed-bandwidth.	user	Not Specified	
guaranteed-bandwidth	Amount of bandwidth guaranteed for this shaper (0 - 80000000). Units depend on the bandwidth-unit setting.	integer	Minimum value: 0 0 Maximum value: 80000000 **	
maximum-bandwidth	Upper bandwidth limit enforced by this shaper (0 - 80000000). 0 means no limit. Units depend on the bandwidth-unit setting.	integer	Minimum value: 0 0 Maximum value: 80000000 **	
maximum-dscp	DSCP mark for traffic in exceed-bandwidth and maximum-bandwidth.	user	Not Specified	
name	Traffic shaper name.	string	Maximum length: 35	
overhead	Per-packet size overhead used in rate computations.	integer	Minimum value: 0 0 Maximum value: 100	
per-policy	Enable/disable applying a separate shaper for each policy. For example, if enabled the guaranteed bandwidth is applied separately for each policy.	option	-	disable

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>disable</i>	All referring policies share one traffic shaper.		
	<i>enable</i>	Each referring policy has its own traffic shaper.		
priority	Higher priority traffic is more likely to be forwarded without delays and without compromising the guaranteed bandwidth.	option	-	high
	Option	Description		
	<i>low</i>	Low priority.		
	<i>medium</i>	Medium priority.		
	<i>high</i>	High priority.		

** Values may differ between models.

config firewall shaping-policy

Configure shaping policies.

```
config firewall shaping-policy
  Description: Configure shaping policies.
  edit <id>
    set app-category <id1>, <id2>, ...
    set app-group <name1>, <name2>, ...
    set application <id1>, <id2>, ...
    set class-id {integer}
    set comment {var-string}
    set diffserv-forward [enable|disable]
    set diffserv-reverse [enable|disable]
    set diffservcode-forward {user}
    set diffservcode-rev {user}
    set dstaddr <name1>, <name2>, ...
    set dstaddr6 <name1>, <name2>, ...
    set dstintf <name1>, <name2>, ...
    set groups <name1>, <name2>, ...
    set internet-service [enable|disable]
    set internet-service-custom <name1>, <name2>, ...
    set internet-service-custom-group <name1>, <name2>, ...
    set internet-service-group <name1>, <name2>, ...
    set internet-service-name <name1>, <name2>, ...
    set internet-service-src [enable|disable]
    set internet-service-src-custom <name1>, <name2>, ...
    set internet-service-src-custom-group <name1>, <name2>, ...
    set internet-service-src-group <name1>, <name2>, ...
```

```

set internet-service-src-name <name1>, <name2>, ...
set ip-version [4|6]
set name {string}
set per-ip-shaper {string}
set schedule {string}
set service <name1>, <name2>, ...
set srcaddr <name1>, <name2>, ...
set srcaddr6 <name1>, <name2>, ...
set srcintf <name1>, <name2>, ...
set status [enable|disable]
set tos {user}
set tos-mask {user}
set tos-negate [enable|disable]
set traffic-shaper {string}
set traffic-shaper-reverse {string}
set url-category <id1>, <id2>, ...
set users <name1>, <name2>, ...
set uuid {uuid}
next
end

```

config firewall shaping-policy

Parameter	Description	Type	Size	Default
app-category <id>	IDs of one or more application categories that this shaper applies application control traffic shaping to. Category IDs.	integer	Minimum value: 0 Maximum value: 4294967295	
app-group <name>	One or more application group names. Application group name.	string	Maximum length: 79	
application <id>	IDs of one or more applications that this shaper applies application control traffic shaping to. Application IDs.	integer	Minimum value: 0 Maximum value: 4294967295	
class-id	Traffic class ID.	integer	Minimum value: 0 Maximum value: 4294967295	
comment	Comments.	var-string	Maximum length: 255	
diffserv-forward	Enable to change packet's DiffServ values to the specified diffservcode-forward value.	option	-	disable

Parameter	Description	Type	Size	Default						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable setting forward (original) traffic DiffServ.</td></tr><tr><td><i>disable</i></td><td>Disable setting forward (original) traffic DiffServ.</td></tr></table>	Option	Description	<i>enable</i>	Enable setting forward (original) traffic DiffServ.	<i>disable</i>	Disable setting forward (original) traffic DiffServ.			
	Option	Description								
	<i>enable</i>	Enable setting forward (original) traffic DiffServ.								
<i>disable</i>	Disable setting forward (original) traffic DiffServ.									
diffserv-reverse	Enable to change packet's reverse (reply) DiffServ values to the specified diffservcode-rev value.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable setting reverse (reply) traffic DiffServ.</td></tr><tr><td><i>disable</i></td><td>Disable setting reverse (reply) traffic DiffServ.</td></tr></table>	Option	Description	<i>enable</i>	Enable setting reverse (reply) traffic DiffServ.	<i>disable</i>	Disable setting reverse (reply) traffic DiffServ.			
	Option	Description								
	<i>enable</i>	Enable setting reverse (reply) traffic DiffServ.								
<i>disable</i>	Disable setting reverse (reply) traffic DiffServ.									
diffservcode-forward	Change packet's DiffServ to this value.	user	Not Specified							
diffservcode-rev	Change packet's reverse (reply) DiffServ to this value.	user	Not Specified							
dstaddr <name>	IPv4 destination address and address group names. Address name.	string	Maximum length: 79							
dstaddr6 <name>	IPv6 destination address and address group names. Address name.	string	Maximum length: 79							
dstintf <name>	One or more outgoing (egress) interfaces. Interface name.	string	Maximum length: 79							
groups <name>	Apply this traffic shaping policy to user groups that have authenticated with the FortiGate. Group name.	string	Maximum length: 79							
id	Shaping policy ID (0 - 4294967295).	integer	Minimum value: 0 0 Maximum value: 4294967295							
internet-service	Enable/disable use of Internet Services for this policy. If enabled, destination address and service are not used.	option	-	disable						

Parameter	Description	Type	Size	Default						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable use of Internet Service in shaping-policy.</td></tr><tr><td><i>disable</i></td><td>Disable use of Internet Service in shaping-policy.</td></tr></table>				Option	Description	<i>enable</i>	Enable use of Internet Service in shaping-policy.	<i>disable</i>	Disable use of Internet Service in shaping-policy.
	Option	Description								
	<i>enable</i>	Enable use of Internet Service in shaping-policy.								
<i>disable</i>	Disable use of Internet Service in shaping-policy.									
internet-service-custom <name>	Custom Internet Service name. Custom Internet Service name.	string	Maximum length: 79							
internet-service-custom-group <name>	Custom Internet Service group name. Custom Internet Service group name.	string	Maximum length: 79							
internet-service-group <name>	Internet Service group name. Internet Service group name.	string	Maximum length: 79							
internet-service-name <name>	Internet Service ID. Internet Service name.	string	Maximum length: 79							
internet-service-src	Enable/disable use of Internet Services in source for this policy. If enabled, source address is not used.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable use of Internet Service source in shaping-policy.</td></tr><tr><td><i>disable</i></td><td>Disable use of Internet Service source in shaping-policy.</td></tr></table>				Option	Description	<i>enable</i>	Enable use of Internet Service source in shaping-policy.	<i>disable</i>	Disable use of Internet Service source in shaping-policy.
	Option	Description								
	<i>enable</i>	Enable use of Internet Service source in shaping-policy.								
<i>disable</i>	Disable use of Internet Service source in shaping-policy.									
internet-service-src-custom <name>	Custom Internet Service source name. Custom Internet Service name.	string	Maximum length: 79							
internet-service-src-custom-group <name>	Custom Internet Service source group name. Custom Internet Service group name.	string	Maximum length: 79							
internet-service-src-group <name>	Internet Service source group name. Internet Service group name.	string	Maximum length: 79							
internet-service-src-name <name>	Internet Service source name. Internet Service name.	string	Maximum length: 79							
ip-version	Apply this traffic shaping policy to IPv4 or IPv6 traffic.	option	-	4						

Parameter	Description	Type	Size	Default						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>4</td><td>Use IPv4 addressing for Configuration Method.</td></tr><tr><td>6</td><td>Use IPv6 addressing for Configuration Method.</td></tr></table>				Option	Description	4	Use IPv4 addressing for Configuration Method.	6	Use IPv6 addressing for Configuration Method.
	Option	Description								
	4	Use IPv4 addressing for Configuration Method.								
6	Use IPv6 addressing for Configuration Method.									
name	Shaping policy name.	string	Maximum length: 35							
per-ip-shaper	Per-IP traffic shaper to apply with this policy.	string	Maximum length: 35							
schedule	Schedule name.	string	Maximum length: 35							
service <name>	Service and service group names. Service name.	string	Maximum length: 79							
srcaddr <name>	IPv4 source address and address group names. Address name.	string	Maximum length: 79							
srcaddr6 <name>	IPv6 source address and address group names. Address name.	string	Maximum length: 79							
srcintf <name>	One or more incoming (ingress) interfaces. Interface name.	string	Maximum length: 79							
status	Enable/disable this traffic shaping policy.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable traffic shaping policy.</td></tr><tr><td>disable</td><td>Disable traffic shaping policy.</td></tr></table>				Option	Description	enable	Enable traffic shaping policy.	disable	Disable traffic shaping policy.
	Option	Description								
	enable	Enable traffic shaping policy.								
disable	Disable traffic shaping policy.									
tos	ToS (Type of Service) value used for comparison.	user	Not Specified							
tos-mask	Non-zero bit positions are used for comparison while zero bit positions are ignored.	user	Not Specified							
tos-negate	Enable negated TOS match.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable TOS match negate.</td></tr><tr><td>disable</td><td>Disable TOS match negate.</td></tr></table>				Option	Description	enable	Enable TOS match negate.	disable	Disable TOS match negate.
	Option	Description								
	enable	Enable TOS match negate.								
disable	Disable TOS match negate.									

Parameter	Description	Type	Size	Default
traffic-shaper	Traffic shaper to apply to traffic forwarded by the firewall policy.	string	Maximum length: 35	
traffic-shaper-reverse	Traffic shaper to apply to response traffic received by the firewall policy.	string	Maximum length: 35	
url-category <id>	IDs of one or more FortiGuard Web Filtering categories that this shaper applies traffic shaping to. URL category ID.	integer	Minimum value: 0 Maximum value: 4294967295	
users <name>	Apply this traffic shaping policy to individual users that have authenticated with the FortiGate. User name.	string	Maximum length: 79	
uuid	Universally Unique Identifier (UUID; automatically assigned but can be manually reset).	uuid	Not Specified	00000000-0000-0000-0000-000000000000

config firewall shaping-profile

Configure shaping profiles.

```

config firewall shaping-profile
  Description: Configure shaping profiles.
  edit <profile-name>
    set comment {var-string}
    set default-class-id {integer}
    set npu-offloading [disable|enable]
    config shaping-entries
      Description: Define shaping entries of this shaping profile.
      edit <id>
        set burst-in-msec {integer}
        set cburst-in-msec {integer}
        set class-id {integer}
        set guaranteed-bandwidth-percentage {integer}
        set limit {integer}
        set max {integer}
        set maximum-bandwidth-percentage {integer}
        set min {integer}
        set priority [top|critical|...]
        set red-probability {integer}
      next
    end
    set type [policing|queuing]
  next
end

```

config firewall shaping-profile

Parameter	Description	Type	Size	Default						
comment	Comment.	var-string	Maximum length: 1023							
default-class-id	Default class ID to handle unclassified packets (including all local traffic).	integer	Minimum value: 0 Maximum value: 4294967295	0						
npu-offloading	Enable/disable NPU offloading.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Diable shaper offloading.</td></tr><tr><td>enable</td><td>Enable shaper offloading.</td></tr></table>				Option	Description	disable	Diable shaper offloading.	enable	Enable shaper offloading.
	Option	Description								
	disable	Diable shaper offloading.								
enable	Enable shaper offloading.									
profile-name	Shaping profile name.	string	Maximum length: 35							
type	Select shaping profile type: policing / queuing.	option	-	policing						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>policing</td><td>Enable policing mode.</td></tr><tr><td>queuing</td><td>Enable queuing mode.</td></tr></table>				Option	Description	policing	Enable policing mode.	queuing	Enable queuing mode.
	Option	Description								
	policing	Enable policing mode.								
queuing	Enable queuing mode.									

config shaping-entries

Parameter	Description	Type	Size	Default
burst-in-msec	Number of bytes that can be burst at maximum-bandwidth speed. Formula: burst = maximum-bandwidth*burst-in-msec.	integer	Minimum value: 0 Maximum value: 2000	0
cburst-in-msec	Number of bytes that can be burst as fast as the interface can transmit. Formula: cburst = maximum-bandwidth*cburst-in-msec.	integer	Minimum value: 0 Maximum value: 2000	0
class-id	Class ID.	integer	Minimum value: 0 Maximum value: 4294967295	0
guaranteed-bandwidth-percentage	Guaranteed bandwidth in percentage.	integer	Minimum value: 0 Maximum value: 100	0

Parameter	Description	Type	Size	Default
id	ID number.	integer	Minimum value: 0 0 Maximum value: 4294967295	0
limit	Hard limit on the real queue size in packets.	integer	Minimum value: 5 5 Maximum value: 10000	1000
max	Average queue size in packets at which RED drop probability is maximal.	integer	Minimum value: 3 3 Maximum value: 3000	250
maximum-bandwidth-percentage	Maximum bandwidth in percentage.	integer	Minimum value: 1 1 Maximum value: 100	1
min	Average queue size in packets at which RED drop becomes a possibility.	integer	Minimum value: 3 3 Maximum value: 3000	83
priority	Priority.	option	-	high
	Option		Description	
	<i>top</i>		Top priority.	
	<i>critical</i>		Critical priority.	
	<i>high</i>		High priority.	
	<i>medium</i>		Medium priority.	
	<i>low</i>		Low priority.	
red-probability	Maximum probability (in percentage) for RED marking.	integer	Minimum value: 0 0 Maximum value: 20	0

config firewall sniffer

Configure sniffer.

```

config firewall sniffer
    Description: Configure sniffer.
    edit <id>
        config anomaly
            Description: Configuration method to edit Denial of Service (DoS) anomaly settings.
            edit <name>
                set action [pass|block]
                set log [enable|disable]
            
```

```

        set quarantine [none|attacker]
        set quarantine-expiry {user}
        set quarantine-log [disable|enable]
        set status [disable|enable]
        set threshold {integer}
        set threshold(default) {integer}
    next
end
set application-list {string}
set application-list-status [enable|disable]
set av-profile {string}
set av-profile-status [enable|disable]
set dlp-profile {string}
set dlp-profile-status [enable|disable]
set dsri [enable|disable]
set emailfilter-profile {string}
set emailfilter-profile-status [enable|disable]
set file-filter-profile {string}
set file-filter-profile-status [enable|disable]
set host {string}
set interface {string}
set ip-threatfeed <name1>, <name2>, ...
set ip-threatfeed-status [enable|disable]
set ips-dos-status [enable|disable]
set ips-sensor {string}
set ips-sensor-status [enable|disable]
set ipv6 [enable|disable]
set logtraffic [all|utm|...]
set non-ip [enable|disable]
set port {string}
set protocol {string}
set status [enable|disable]
set uuid {uuid}
set vlan {string}
set webfilter-profile {string}
set webfilter-profile-status [enable|disable]
next
end

```

config firewall sniffer

Parameter	Description	Type	Size	Default
application-list	Name of an existing application list.	string	Maximum length: 35	
application-list-status	Enable/disable application control profile.	option	-	disable

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		
av-profile	Name of an existing antivirus profile.	string	Maximum length: 35	
av-profile-status	Enable/disable antivirus profile.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		
dlp-profile	Name of an existing DLP profile.	string	Maximum length: 35	
dlp-profile-status	Enable/disable DLP profile.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		
dsri	Enable/disable DSRI.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable DSRI.		
	<i>disable</i>	Disable DSRI.		
emailfilter-profile	Name of an existing email filter profile.	string	Maximum length: 35	
emailfilter-profile-status	Enable/disable emailfilter.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		
file-filter-profile	Name of an existing file-filter profile.	string	Maximum length: 35	

Parameter	Description	Type	Size	Default
file-filter-profile-status	Enable/disable file filter.	option	-	disable
	Option	Description		
	enable	Enable setting.		
	disable	Disable setting.		
host	Hosts to filter for in sniffer traffic (Format examples: 1.1.1.1, 2.2.2.0/24, 3.3.3.3/255.255.255.0, 4.4.4.0-4.4.4.240).	string	Maximum length: 63	
id	Sniffer ID (0 - 9999).	integer	Minimum value: 0 Maximum value: 9999	0
interface	Interface name that traffic sniffing will take place on.	string	Maximum length: 35	
ip-threatfeed <name>	Name of an existing IP threat feed. Threat feed name.	string	Maximum length: 79	
ip-threatfeed-status	Enable/disable IP threat feed.	option	-	disable
	Option	Description		
	enable	Enable setting.		
	disable	Disable setting.		
ips-dos-status	Enable/disable IPS DoS anomaly detection.	option	-	disable
	Option	Description		
	enable	Enable setting.		
	disable	Disable setting.		
ips-sensor	Name of an existing IPS sensor.	string	Maximum length: 35	
ips-sensor-status	Enable/disable IPS sensor.	option	-	disable
	Option	Description		
	enable	Enable setting.		
	disable	Disable setting.		

Parameter	Description	Type	Size	Default								
ipv6	Enable/disable sniffing IPv6 packets.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable sniffer for IPv6 packets.</td></tr><tr><td><i>disable</i></td><td>Disable sniffer for IPv6 packets.</td></tr></table>	Option	Description	<i>enable</i>	Enable sniffer for IPv6 packets.	<i>disable</i>	Disable sniffer for IPv6 packets.					
Option	Description											
<i>enable</i>	Enable sniffer for IPv6 packets.											
<i>disable</i>	Disable sniffer for IPv6 packets.											
logtraffic	Either log all sessions, only sessions that have a security profile applied, or disable all logging for this policy.	option	-	utm								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>all</i></td><td>Log all sessions accepted or denied by this policy.</td></tr><tr><td><i>utm</i></td><td>Log traffic that has a security profile applied to it.</td></tr><tr><td><i>disable</i></td><td>Disable all logging for this policy.</td></tr></table>	Option	Description	<i>all</i>	Log all sessions accepted or denied by this policy.	<i>utm</i>	Log traffic that has a security profile applied to it.	<i>disable</i>	Disable all logging for this policy.			
Option	Description											
<i>all</i>	Log all sessions accepted or denied by this policy.											
<i>utm</i>	Log traffic that has a security profile applied to it.											
<i>disable</i>	Disable all logging for this policy.											
non-ip	Enable/disable sniffing non-IP packets.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable sniffer for non-IP packets.</td></tr><tr><td><i>disable</i></td><td>Disable sniffer for non-IP packets.</td></tr></table>	Option	Description	<i>enable</i>	Enable sniffer for non-IP packets.	<i>disable</i>	Disable sniffer for non-IP packets.					
Option	Description											
<i>enable</i>	Enable sniffer for non-IP packets.											
<i>disable</i>	Disable sniffer for non-IP packets.											
port	Ports to sniff (Format examples: 10, :20, 30:40, 50-, 100-200).	string	Maximum length: 63									
protocol	Integer value for the protocol type as defined by IANA (0 - 255).	string	Maximum length: 63									
status	Enable/disable the active status of the sniffer.	option	-	enable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable sniffer status.</td></tr><tr><td><i>disable</i></td><td>Disable sniffer status.</td></tr></table>	Option	Description	<i>enable</i>	Enable sniffer status.	<i>disable</i>	Disable sniffer status.					
Option	Description											
<i>enable</i>	Enable sniffer status.											
<i>disable</i>	Disable sniffer status.											
uuid	Universally Unique Identifier (UUID; automatically assigned but can be manually reset).	uuid	Not Specified	00000000-0000-0000-0000-000000000000								
vlan	List of VLANs to sniff.	string	Maximum length: 63									
webfilter-profile	Name of an existing web filter profile.	string	Maximum length: 35									

Parameter	Description	Type	Size	Default
webfilter-profile-status	Enable/disable web filter profile.	option	-	disable
	Option	Description		
	enable	Enable setting.		
	disable	Disable setting.		

config anomaly

Parameter	Description	Type	Size	Default						
action	Action taken when the threshold is reached.	option	-	pass						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>pass</td><td>Allow traffic but record a log message if logging is enabled.</td></tr><tr><td>block</td><td>Block traffic if this anomaly is found.</td></tr></table>	Option	Description	pass	Allow traffic but record a log message if logging is enabled.	block	Block traffic if this anomaly is found.			
Option	Description									
pass	Allow traffic but record a log message if logging is enabled.									
block	Block traffic if this anomaly is found.									
log	Enable/disable anomaly logging.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable anomaly logging.</td></tr><tr><td>disable</td><td>Disable anomaly logging.</td></tr></table>	Option	Description	enable	Enable anomaly logging.	disable	Disable anomaly logging.			
Option	Description									
enable	Enable anomaly logging.									
disable	Disable anomaly logging.									
name	Anomaly name.	string	Maximum length: 63							
quarantine	Quarantine method.	option	-	none						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>none</td><td>Quarantine is disabled.</td></tr><tr><td>attacker</td><td>Block all traffic sent from attacker's IP address. The attacker's IP address is also added to the banned user list. The target's address is not affected.</td></tr></table>	Option	Description	none	Quarantine is disabled.	attacker	Block all traffic sent from attacker's IP address. The attacker's IP address is also added to the banned user list. The target's address is not affected.			
Option	Description									
none	Quarantine is disabled.									
attacker	Block all traffic sent from attacker's IP address. The attacker's IP address is also added to the banned user list. The target's address is not affected.									
quarantine-expiry	Duration of quarantine. (Format ####d###h###m, minimum 1m, maximum 364d23h59m, default = 5m). Requires quarantine set to attacker.	user	Not Specified	5m						
quarantine-log	Enable/disable quarantine logging.	option	-	enable						

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>disable</i>	Disable quarantine logging.		
	<i>enable</i>	Enable quarantine logging.		
status	Enable/disable this anomaly.	option	-	disable
	Option	Description		
	<i>disable</i>	Disable this status.		
	<i>enable</i>	Enable this status.		
threshold	Anomaly threshold. Number of detected instances (packets per second or concurrent session number) that triggers the anomaly action.	integer	Minimum value: 0 1 Maximum value: 2147483647	
threshold (default)	Number of detected instances (packets per second or concurrent session number) which triggers action (1 - 2147483647, default = 1000). Note that each anomaly has a different threshold value assigned to it. Read-only.	integer	Minimum value: 0 0 Maximum value: 4294967295	

config firewall ssh host-key

SSH proxy host public keys.

```
config firewall ssh host-key
  Description: SSH proxy host public keys.
  edit <name>
    set hostname {string}
    set ip {ipv4-address-any}
    set nid [256|384|...]
    set port {integer}
    set public-key {var-string}
    set status [trusted|revoked]
    set type [RSA|DSA|...]
    set usage [transparent-proxy|access-proxy]
  next
end
```

config firewall ssh host-key

Parameter	Description	Type	Size	Default																
hostname	Hostname of the SSH server to match SSH certificate principals.	string	Maximum length: 255																	
ip	IP address of the SSH server.	ipv4-address-any	Not Specified	0.0.0.0																
name	SSH public key name.	string	Maximum length: 35																	
nid	Set the nid of the ECDSA key.	option	-	256																
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>256</td><td>The NID is ecdsa-sha2-nistp256.</td></tr><tr><td>384</td><td>The NID is ecdsa-sha2-nistp384.</td></tr><tr><td>521</td><td>The NID is ecdsa-sha2-nistp521.</td></tr></table>				Option	Description	256	The NID is ecdsa-sha2-nistp256.	384	The NID is ecdsa-sha2-nistp384.	521	The NID is ecdsa-sha2-nistp521.								
Option	Description																			
256	The NID is ecdsa-sha2-nistp256.																			
384	The NID is ecdsa-sha2-nistp384.																			
521	The NID is ecdsa-sha2-nistp521.																			
port	Port of the SSH server.	integer	Minimum value: 22 0 Maximum value: 4294967295																	
public-key	SSH public key.	var-string	Maximum length: 32768																	
status	Set the trust status of the public key.	option	-	trusted																
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>trusted</td><td>The public key is trusted.</td></tr><tr><td>revoked</td><td>The public key is revoked.</td></tr></table>				Option	Description	trusted	The public key is trusted.	revoked	The public key is revoked.										
Option	Description																			
trusted	The public key is trusted.																			
revoked	The public key is revoked.																			
type	Set the type of the public key.	option	-	RSA																
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>RSA</td><td>The type of the public key is RSA.</td></tr><tr><td>DSA</td><td>The type of the public key is DSA.</td></tr><tr><td>ECDSA</td><td>The type of the public key is ECDSA.</td></tr><tr><td>ED25519</td><td>The type of the public key is ED25519.</td></tr><tr><td>RSA-CA</td><td>The type of the public key is from RSA CA.</td></tr><tr><td>DSA-CA</td><td>The type of the public key is from DSA CA.</td></tr><tr><td>ECDSA-CA</td><td>The type of the public key is from ECDSA CA.</td></tr></table>				Option	Description	RSA	The type of the public key is RSA.	DSA	The type of the public key is DSA.	ECDSA	The type of the public key is ECDSA.	ED25519	The type of the public key is ED25519.	RSA-CA	The type of the public key is from RSA CA.	DSA-CA	The type of the public key is from DSA CA.	ECDSA-CA	The type of the public key is from ECDSA CA.
Option	Description																			
RSA	The type of the public key is RSA.																			
DSA	The type of the public key is DSA.																			
ECDSA	The type of the public key is ECDSA.																			
ED25519	The type of the public key is ED25519.																			
RSA-CA	The type of the public key is from RSA CA.																			
DSA-CA	The type of the public key is from DSA CA.																			
ECDSA-CA	The type of the public key is from ECDSA CA.																			

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>ED25519-CA</i>	The type of the public key is from ED25519 CA.		
usage	Usage for this public key.	option	-	transparent-proxy
	Option	Description		
	<i>transparent-proxy</i>	Transparent proxy uses this public key to validate server.		
	<i>access-proxy</i>	Access proxy uses this public key to validate server.		

config firewall ssh local-ca

SSH proxy local CA.

```
config firewall ssh local-ca
  Description: SSH proxy local CA.
  edit <name>
    set password {password}
    set private-key {user}
    set public-key {user}
    set source [built-in|user]
  next
end
```

config firewall ssh local-ca

Parameter	Description	Type	Size	Default
name	SSH proxy local CA name.	string	Maximum length: 35	
password	Password for SSH private key.	password	Not Specified	
private-key	SSH proxy private key, encrypted with a password.	user	Not Specified	
public-key	SSH proxy public key.	user	Not Specified	
source	SSH proxy local CA source type.	option	-	user

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>built-in</i>	Built-in SSH proxy local keys.		
	<i>user</i>	User imported SSH proxy local keys.		

config firewall ssh local-key

SSH proxy local keys.

```
config firewall ssh local-key
  Description: SSH proxy local keys.
  edit <name>
    set password {password}
    set private-key {user}
    set public-key {user}
    set source [built-in|user]
  next
end
```

config firewall ssh local-key

Parameter	Description	Type	Size	Default
name	SSH proxy local key name.	string	Maximum length: 35	
password	Password for SSH private key.	password	Not Specified	
private-key	SSH proxy private key, encrypted with a password.	user	Not Specified	
public-key	SSH proxy public key.	user	Not Specified	
source	SSH proxy local key source type.	option	-	user
	Option	Description		
	<i>built-in</i>	Built-in SSH proxy local keys.		
	<i>user</i>	User imported SSH proxy local keys.		

config firewall ssh setting

SSH proxy settings.

```

config firewall ssh setting
    Description: SSH proxy settings.
    set caname {string}
    set host-trusted-checking [enable|disable]
    set hostkey-dsa1024 {string}
    set hostkey-ecdsa256 {string}
    set hostkey-ecdsa384 {string}
    set hostkey-ecdsa521 {string}
    set hostkey-ed25519 {string}
    set hostkey-rsa2048 {string}
    set untrusted-caname {string}
end

```

config firewall ssh setting

Parameter	Description	Type	Size	Default						
caname	CA certificate used by SSH Inspection.	string	Maximum length: 35							
host-trusted-checking	Enable/disable host trusted checking.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable host key trusted checking.</td></tr><tr><td>disable</td><td>Disable host key trusted checking.</td></tr></table>	Option	Description	enable	Enable host key trusted checking.	disable	Disable host key trusted checking.			
Option	Description									
enable	Enable host key trusted checking.									
disable	Disable host key trusted checking.									
hostkey-dsa1024	DSA certificate used by SSH proxy.	string	Maximum length: 35							
hostkey-ecdsa256	ECDSA nid256 certificate used by SSH proxy.	string	Maximum length: 35							
hostkey-ecdsa384	ECDSA nid384 certificate used by SSH proxy.	string	Maximum length: 35							
hostkey-ecdsa521	ECDSA nid384 certificate used by SSH proxy.	string	Maximum length: 35							
hostkey-ed25519	ED25519 hostkey used by SSH proxy.	string	Maximum length: 35							
hostkey-rsa2048	RSA certificate used by SSH proxy.	string	Maximum length: 35							
untrusted-caname	Untrusted CA certificate used by SSH Inspection.	string	Maximum length: 35							

config firewall ssl setting

SSL proxy settings.

```
config firewall ssl setting
  Description: SSL proxy settings.
  set abbreviate-handshake [enable|disable]
  set cert-cache-capacity {integer}
  set cert-cache-timeout {integer}
  set kxp-queue-threshold {integer}
  set no-matching-cipher-action [bypass|drop]
  set proxy-connect-timeout {integer}
  set session-cache-capacity {integer}
  set session-cache-timeout {integer}
  set ssl-dh-bits [768|1024|...]
  set ssl-queue-threshold {integer}
  set ssl-send-empty-frags [enable|disable]
end
```

config firewall ssl setting

Parameter	Description	Type	Size	Default
abbreviate-handshake	Enable/disable use of SSL abbreviated handshake.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable use of SSL abbreviated handshake.		
	<i>disable</i>	Disable use of SSL abbreviated handshake.		
cert-cache-capacity	Maximum capacity of the host certificate cache (0 - 500, default = 200).	integer	Minimum value: 0 Maximum value: 500	200
cert-cache-timeout	Time limit to keep certificate cache (1 - 120 min, default = 10).	integer	Minimum value: 1 Maximum value: 120	10
kxp-queue-threshold *	Maximum length of the CP KXP queue. When the queue becomes full, the proxy switches cipher functions to the main CPU (0 - 512, default = 16).	integer	Minimum value: 0 Maximum value: 512	16
no-matching-cipher-action	Bypass or drop the connection when no matching cipher is found.	option	-	bypass

Parameter	Description	Type	Size	Default										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>bypass</td><td>Bypass connection.</td></tr><tr><td>drop</td><td>Drop connection.</td></tr></table>	Option	Description	bypass	Bypass connection.	drop	Drop connection.							
	Option	Description												
	bypass	Bypass connection.												
drop	Drop connection.													
proxy-connect-timeout	Time limit to make an internal connection to the appropriate proxy process (1 - 60 sec, default = 30).	integer	Minimum value: 1 Maximum value: 60	30										
session-cache-capacity	Capacity of the SSL session cache (--Obsolete--) (1 - 1000, default = 500).	integer	Minimum value: 0 Maximum value: 1000	500										
session-cache-timeout	Time limit to keep SSL session state (1 - 60 min, default = 20).	integer	Minimum value: 1 Maximum value: 60	20										
ssl-dh-bits	Bit-size of Diffie-Hellman (DH) prime used in DHE-RSA negotiation (default = 2048).	option	-	2048										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>768</td><td>768-bit Diffie-Hellman prime.</td></tr><tr><td>1024</td><td>1024-bit Diffie-Hellman prime.</td></tr><tr><td>1536</td><td>1536-bit Diffie-Hellman prime.</td></tr><tr><td>2048</td><td>2048-bit Diffie-Hellman prime.</td></tr></table>	Option	Description	768	768-bit Diffie-Hellman prime.	1024	1024-bit Diffie-Hellman prime.	1536	1536-bit Diffie-Hellman prime.	2048	2048-bit Diffie-Hellman prime.			
	Option	Description												
	768	768-bit Diffie-Hellman prime.												
	1024	1024-bit Diffie-Hellman prime.												
	1536	1536-bit Diffie-Hellman prime.												
2048	2048-bit Diffie-Hellman prime.													
ssl-queue-threshold *	Maximum length of the CP SSL queue. When the queue becomes full, the proxy switches cipher functions to the main CPU (0 - 512, default = 32).	integer	Minimum value: 0 Maximum value: 512	32										
ssl-send-empty-frags	Enable/disable sending empty fragments to avoid attack on CBC IV (for SSL 3.0 and TLS 1.0 only).	option	-	enable										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Send empty fragments.</td></tr><tr><td>disable</td><td>Do not send empty fragments.</td></tr></table>	Option	Description	enable	Send empty fragments.	disable	Do not send empty fragments.							
	Option	Description												
	enable	Send empty fragments.												
disable	Do not send empty fragments.													

* This parameter may not exist in some models.

config firewall ssl-server

Configure SSL servers.

```
config firewall ssl-server
  Description: Configure SSL servers.
  edit <name>
    set add-header-x-forwarded-proto [enable|disable]
    set ip {ipv4-address-any}
    set mapped-port {integer}
    set port {integer}
    set ssl-algorithm [high|medium|...]
    set ssl-cert {string}
    set ssl-client-renegotiation [allow|deny|...]
    set ssl-dh-bits [768|1024|...]
    set ssl-max-version [tls-1.0|tls-1.1|...]
    set ssl-min-version [tls-1.0|tls-1.1|...]
    set ssl-mode [half|full]
    set ssl-send-empty-frags [enable|disable]
    set url-rewrite [enable|disable]
  next
end
```

config firewall ssl-server

Parameter	Description	Type	Size	Default
add-header-x-forwarded-proto	Enable/disable adding an X-Forwarded-Proto header to forwarded requests.	option	-	enable
	Option	Description		
	<i>enable</i>	Add X-Forwarded-Proto header.		
	<i>disable</i>	Do not add X-Forwarded-Proto header.		
ip	IPv4 address of the SSL server.	ipv4-address-any	Not Specified	0.0.0.0
mapped-port	Mapped server service port (1 - 65535, default = 80).	integer	Minimum value: 1 Maximum value: 65535	80
name	Server name.	string	Maximum length: 35	

Parameter	Description	Type	Size	Default										
port	Server service port (1 - 65535, default = 443).	integer	Minimum value: 1 Maximum value: 65535	443										
ssl-algorithm	Relative strength of encryption algorithms accepted in negotiation.	option	-	high										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>high</td><td>High encryption. Allow only AES and ChaCha</td></tr><tr><td>medium</td><td>Medium encryption. Allow AES, ChaCha, 3DES, and RC4.</td></tr><tr><td>low</td><td>Low encryption. Allow AES, ChaCha, 3DES, RC4, and DES.</td></tr></table>	Option	Description	high	High encryption. Allow only AES and ChaCha	medium	Medium encryption. Allow AES, ChaCha, 3DES, and RC4.	low	Low encryption. Allow AES, ChaCha, 3DES, RC4, and DES.					
Option	Description													
high	High encryption. Allow only AES and ChaCha													
medium	Medium encryption. Allow AES, ChaCha, 3DES, and RC4.													
low	Low encryption. Allow AES, ChaCha, 3DES, RC4, and DES.													
ssl-cert	Name of certificate for SSL connections to this server (default = "Fortinet_CA_SSL").	string	Maximum length: 35	Fortinet_CA_SSL										
ssl-client-renegotiation	Allow or block client renegotiation by server.	option	-	allow										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>allow</td><td>Allow a SSL client to renegotiate.</td></tr><tr><td>deny</td><td>Abort any SSL connection that attempts to renegotiate.</td></tr><tr><td>secure</td><td>Reject any SSL connection that does not offer a RFC 5746 Secure Renegotiation Indication.</td></tr></table>	Option	Description	allow	Allow a SSL client to renegotiate.	deny	Abort any SSL connection that attempts to renegotiate.	secure	Reject any SSL connection that does not offer a RFC 5746 Secure Renegotiation Indication.					
Option	Description													
allow	Allow a SSL client to renegotiate.													
deny	Abort any SSL connection that attempts to renegotiate.													
secure	Reject any SSL connection that does not offer a RFC 5746 Secure Renegotiation Indication.													
ssl-dh-bits	Bit-size of Diffie-Hellman (DH) prime used in DHE-RSA negotiation (default = 2048).	option	-	2048										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>768</td><td>768-bit Diffie-Hellman prime.</td></tr><tr><td>1024</td><td>1024-bit Diffie-Hellman prime.</td></tr><tr><td>1536</td><td>1536-bit Diffie-Hellman prime.</td></tr><tr><td>2048</td><td>2048-bit Diffie-Hellman prime.</td></tr></table>	Option	Description	768	768-bit Diffie-Hellman prime.	1024	1024-bit Diffie-Hellman prime.	1536	1536-bit Diffie-Hellman prime.	2048	2048-bit Diffie-Hellman prime.			
Option	Description													
768	768-bit Diffie-Hellman prime.													
1024	1024-bit Diffie-Hellman prime.													
1536	1536-bit Diffie-Hellman prime.													
2048	2048-bit Diffie-Hellman prime.													
ssl-max-version	Highest SSL/TLS version to negotiate.	option	-	tls-1.3										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>tls-1.0</td><td>TLS 1.0.</td></tr><tr><td>tls-1.1</td><td>TLS 1.1.</td></tr></table>	Option	Description	tls-1.0	TLS 1.0.	tls-1.1	TLS 1.1.							
Option	Description													
tls-1.0	TLS 1.0.													
tls-1.1	TLS 1.1.													

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>tls-1.2</i>	TLS 1.2.		
	<i>tls-1.3</i>	TLS 1.3.		
ssl-min-version	Lowest SSL/TLS version to negotiate.	option	-	tls-1.1
	Option	Description		
	<i>tls-1.0</i>	TLS 1.0.		
	<i>tls-1.1</i>	TLS 1.1.		
	<i>tls-1.2</i>	TLS 1.2.		
	<i>tls-1.3</i>	TLS 1.3.		
ssl-mode	SSL/TLS mode for encryption and decryption of traffic.	option	-	full
	Option	Description		
	<i>half</i>	Client to FortiGate SSL.		
	<i>full</i>	Client to FortiGate and FortiGate to Server SSL.		
ssl-send-empty-frags	Enable/disable sending empty fragments to avoid attack on CBC IV.	option	-	enable
	Option	Description		
	<i>enable</i>	Send empty fragments.		
	<i>disable</i>	Do not send empty fragments.		
url-rewrite	Enable/disable rewriting the URL.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		

config firewall ssl-ssh-profile

Configure SSL/SSH protocol options.

```
config firewall ssl-ssh-profile
  Description: Configure SSL/SSH protocol options.
  edit <name>
    set allowlist [enable|disable]
```

```

set block-blocklisted-certificates [disable|enable]
set caname {string}
set comment {var-string}
config dot
    Description: Configure DNS over TLS options.
    set cert-validation-failure [allow|block|...]
    set cert-validation-timeout [allow|block|...]
    set client-certificate [bypass|inspect|...]
    set expired-server-cert [allow|block|...]
    set proxy-after-tcp-handshake [enable|disable]
    set revoked-server-cert [allow|block|...]
    set sni-server-cert-check [enable|strict|...]
    set status [disable|deep-inspection]
    set unsupported-ssl-cipher [allow|block]
    set unsupported-ssl-negotiation [allow|block]
    set unsupported-ssl-version [allow|block]
    set untrusted-server-cert [allow|block|...]
end
config ftps
    Description: Configure FTPS options.
    set cert-validation-failure [allow|block|...]
    set cert-validation-timeout [allow|block|...]
    set client-certificate [bypass|inspect|...]
    set expired-server-cert [allow|block|...]
    set min-allowed-ssl-version [ssl-3.0|tls-1.0|...]
    set ports {integer}
    set revoked-server-cert [allow|block|...]
    set sni-server-cert-check [enable|strict|...]
    set status [disable|deep-inspection]
    set unsupported-ssl-cipher [allow|block]
    set unsupported-ssl-negotiation [allow|block]
    set unsupported-ssl-version [allow|block]
    set untrusted-server-cert [allow|block|...]
end
config https
    Description: Configure HTTPS options.
    set cert-probe-failure [allow|block]
    set cert-validation-failure [allow|block|...]
    set cert-validation-timeout [allow|block|...]
    set client-certificate [bypass|inspect|...]
    set expired-server-cert [allow|block|...]
    set min-allowed-ssl-version [ssl-3.0|tls-1.0|...]
    set ports {integer}
    set proxy-after-tcp-handshake [enable|disable]
    set revoked-server-cert [allow|block|...]
    set sni-server-cert-check [enable|strict|...]
    set status [disable|certificate-inspection|...]
    set unsupported-ssl-cipher [allow|block]
    set unsupported-ssl-negotiation [allow|block]
    set unsupported-ssl-version [allow|block]
    set untrusted-server-cert [allow|block|...]
end

```

```

config imaps
    Description: Configure IMAPS options.
    set cert-validation-failure [allow|block|...]
    set cert-validation-timeout [allow|block|...]
    set client-certificate [bypass|inspect|...]
    set expired-server-cert [allow|block|...]
    set ports {integer}
    set proxy-after-tcp-handshake [enable|disable]
    set revoked-server-cert [allow|block|...]
    set sni-server-cert-check [enable|strict|...]
    set status [disable|deep-inspection]
    set unsupported-ssl-cipher [allow|block]
    set unsupported-ssl-negotiation [allow|block]
    set unsupported-ssl-version [allow|block]
    set untrusted-server-cert [allow|block|...]
end
set mapi-over-https [enable|disable]
config pop3s
    Description: Configure POP3S options.
    set cert-validation-failure [allow|block|...]
    set cert-validation-timeout [allow|block|...]
    set client-certificate [bypass|inspect|...]
    set expired-server-cert [allow|block|...]
    set ports {integer}
    set proxy-after-tcp-handshake [enable|disable]
    set revoked-server-cert [allow|block|...]
    set sni-server-cert-check [enable|strict|...]
    set status [disable|deep-inspection]
    set unsupported-ssl-cipher [allow|block]
    set unsupported-ssl-negotiation [allow|block]
    set unsupported-ssl-version [allow|block]
    set untrusted-server-cert [allow|block|...]
end
set rpc-over-https [enable|disable]
set server-cert <name1>, <name2>, ...
set server-cert-mode [re-sign|replace]
config smtps
    Description: Configure SMTPS options.
    set cert-validation-failure [allow|block|...]
    set cert-validation-timeout [allow|block|...]
    set client-certificate [bypass|inspect|...]
    set expired-server-cert [allow|block|...]
    set ports {integer}
    set proxy-after-tcp-handshake [enable|disable]
    set revoked-server-cert [allow|block|...]
    set sni-server-cert-check [enable|strict|...]
    set status [disable|deep-inspection]
    set unsupported-ssl-cipher [allow|block]
    set unsupported-ssl-negotiation [allow|block]
    set unsupported-ssl-version [allow|block]
    set untrusted-server-cert [allow|block|...]
end

```

```

config ssh
    Description: Configure SSH options.
    set inspect-all [disable|deep-inspection]
    set ports {integer}
    set proxy-after-tcp-handshake [enable|disable]
    set ssh-algorithm [compatible|high-encryption]
    set ssh-tun-policy-check [disable|enable]
    set status [disable|deep-inspection]
    set unsupported-version [bypass|block]
end
config ssl
    Description: Configure SSL options.
    set cert-probe-failure [allow|block]
    set cert-validation-failure [allow|block|...]
    set cert-validation-timeout [allow|block|...]
    set client-certificate [bypass|inspect|...]
    set expired-server-cert [allow|block|...]
    set inspect-all [disable|certificate-inspection|...]
    set min-allowed-ssl-version [ssl-3.0|tls-1.0|...]
    set revoked-server-cert [allow|block|...]
    set sni-server-cert-check [enable|strict|...]
    set unsupported-ssl-cipher [allow|block]
    set unsupported-ssl-negotiation [allow|block]
    set unsupported-ssl-version [allow|block]
    set untrusted-server-cert [allow|block|...]
end
set ssl-anomaly-log [disable|enable]
config ssl-exempt
    Description: Servers to exempt from SSL inspection.
    edit <id>
        set address {string}
        set address6 {string}
        set fortiguard-category {integer}
        set regex {string}
        set type [fortiguard-category|address|...]
        set wildcard-fqdn {string}
    next
end
set ssl-exemption-ip-rating [enable|disable]
set ssl-exemption-log [disable|enable]
set ssl-handshake-log [disable|enable]
set ssl-negotiation-log [disable|enable]
config ssl-server
    Description: SSL server settings used for client certificate request.
    edit <id>
        set ftps-client-certificate [bypass|inspect|...]
        set https-client-certificate [bypass|inspect|...]
        set imaps-client-certificate [bypass|inspect|...]
        set ip {ipv4-address-any}
        set pop3s-client-certificate [bypass|inspect|...]
        set smtps-client-certificate [bypass|inspect|...]
        set ssl-other-client-certificate [bypass|inspect|...]

```

```

        next
    end
    set ssl-server-cert-log [disable|enable]
    set supported-alpn [http1-1|http2|...]
    set untrusted-caname {string}
    set use-ssl-server [disable|enable]
next
end

```

config firewall ssl-ssh-profile

Parameter	Description	Type	Size	Default
allowlist	Enable/disable exempting servers by FortiGuard allowlist.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		
block-blocklisted-certificates	Enable/disable blocking SSL-based botnet communication by FortiGuard certificate blocklist.	option	-	enable
	Option	Description		
	<i>disable</i>	Disable FortiGuard certificate blocklist.		
	<i>enable</i>	Enable FortiGuard certificate blocklist.		
caname	CA certificate used by SSL Inspection.	string	Maximum length: 35	Fortinet_CA_SSL
comment	Optional comments.	var-string	Maximum length: 255	
mapi-over-https	Enable/disable inspection of MAPI over HTTPS.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable inspection of MAPI over HTTPS.		
	<i>disable</i>	Disable inspection of MAPI over HTTPS.		
name	Name.	string	Maximum length: 35	
rpc-over-https	Enable/disable inspection of RPC over HTTPS.	option	-	disable

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>enable</i>	Enable inspection of RPC over HTTPS.		
	<i>disable</i>	Disable inspection of RPC over HTTPS.		
server-cert <name>	Certificate used by SSL Inspection to replace server certificate. Certificate list.	string	Maximum length: 35	
server-cert-mode	Re-sign or replace the server's certificate.	option	-	re-sign
	Option	Description		
	<i>re-sign</i>	Multiple clients connecting to multiple servers.		
	<i>replace</i>	Protect an SSL server.		
ssl-anomaly-log	Enable/disable logging of SSL anomalies.	option	-	enable
	Option	Description		
	<i>disable</i>	Disable logging of SSL anomalies.		
	<i>enable</i>	Enable logging of SSL anomalies.		
ssl-exemption-ip-rating	Enable/disable IP based URL rating.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable IP based URL rating.		
	<i>disable</i>	Disable IP based URL rating.		
ssl-exemption-log	Enable/disable logging SSL exemptions.	option	-	disable
	Option	Description		
	<i>disable</i>	Disable logging SSL exemptions.		
	<i>enable</i>	Enable logging SSL exemptions.		
ssl-handshake-log	Enable/disable logging of TLS handshakes.	option	-	disable

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>disable</i>	Disable logging TLS handshakes.		
	<i>enable</i>	Enable logging TLS handshakes.		
ssl-negotiation-log	Enable/disable logging SSL negotiation.	option	-	disable
	Option	Description		
	<i>disable</i>	Disable logging SSL negotiation.		
	<i>enable</i>	Enable logging SSL negotiation.		
ssl-server-cert-log	Enable/disable logging of server certificate information.	option	-	disable
	Option	Description		
	<i>disable</i>	Disable logging server certificate.		
	<i>enable</i>	Enable logging server certificate.		
supported-alpn	Configure ALPN option.	option	-	all
	Option	Description		
	<i>http1-1</i>	Enable ALPN of HTTP1.1.		
	<i>http2</i>	Enable ALPN of HTTP2.		
	<i>all</i>	Enable ALPN of HTTP1.1 and HTTP2.		
	<i>none</i>	Do not use ALPN.		
untrusted-caname	Untrusted CA certificate used by SSL Inspection.	string	Maximum length: 35	Fortinet_CA_Untrusted
use-ssl-server	Enable/disable the use of SSL server table for SSL offloading.	option	-	disable
	Option	Description		
	<i>disable</i>	Don't use SSL server configuration.		
	<i>enable</i>	Use SSL server configuration.		

config dot

Parameter	Description	Type	Size	Default								
cert-validation-failure	Action based on certificate validation failure.	option	-	block								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>allow</i></td><td>Allow the server certificate.</td></tr><tr><td><i>block</i></td><td>Block the session.</td></tr><tr><td><i>ignore</i></td><td>Re-sign the server certificate as trusted.</td></tr></table>	Option	Description	<i>allow</i>	Allow the server certificate.	<i>block</i>	Block the session.	<i>ignore</i>	Re-sign the server certificate as trusted.			
Option	Description											
<i>allow</i>	Allow the server certificate.											
<i>block</i>	Block the session.											
<i>ignore</i>	Re-sign the server certificate as trusted.											
cert-validation-timeout	Action based on certificate validation timeout.	option	-	allow								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>allow</i></td><td>Allow the server certificate.</td></tr><tr><td><i>block</i></td><td>Block the session.</td></tr><tr><td><i>ignore</i></td><td>Re-sign the server certificate as trusted.</td></tr></table>	Option	Description	<i>allow</i>	Allow the server certificate.	<i>block</i>	Block the session.	<i>ignore</i>	Re-sign the server certificate as trusted.			
Option	Description											
<i>allow</i>	Allow the server certificate.											
<i>block</i>	Block the session.											
<i>ignore</i>	Re-sign the server certificate as trusted.											
client-certificate	Action based on received client certificate.	option	-	bypass								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>bypass</i></td><td>Bypass the session.</td></tr><tr><td><i>inspect</i></td><td>Inspect the session.</td></tr><tr><td><i>block</i></td><td>Block the session.</td></tr></table>	Option	Description	<i>bypass</i>	Bypass the session.	<i>inspect</i>	Inspect the session.	<i>block</i>	Block the session.			
Option	Description											
<i>bypass</i>	Bypass the session.											
<i>inspect</i>	Inspect the session.											
<i>block</i>	Block the session.											
expired-server-cert	Action based on server certificate is expired.	option	-	block								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>allow</i></td><td>Allow the server certificate.</td></tr><tr><td><i>block</i></td><td>Block the session.</td></tr><tr><td><i>ignore</i></td><td>Re-sign the server certificate as trusted.</td></tr></table>	Option	Description	<i>allow</i>	Allow the server certificate.	<i>block</i>	Block the session.	<i>ignore</i>	Re-sign the server certificate as trusted.			
Option	Description											
<i>allow</i>	Allow the server certificate.											
<i>block</i>	Block the session.											
<i>ignore</i>	Re-sign the server certificate as trusted.											
proxy-after-tcp-handshake	Proxy traffic after the TCP 3-way handshake has been established (not before).	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable setting.</td></tr><tr><td><i>disable</i></td><td>Disable setting.</td></tr></table>	Option	Description	<i>enable</i>	Enable setting.	<i>disable</i>	Disable setting.					
Option	Description											
<i>enable</i>	Enable setting.											
<i>disable</i>	Disable setting.											

Parameter	Description	Type	Size	Default								
revoked-server-cert	Action based on server certificate is revoked.	option	-	block								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>allow</td><td>Allow the server certificate.</td></tr><tr><td>block</td><td>Block the session.</td></tr><tr><td>ignore</td><td>Re-sign the server certificate as trusted.</td></tr></table>	Option	Description	allow	Allow the server certificate.	block	Block the session.	ignore	Re-sign the server certificate as trusted.			
Option	Description											
allow	Allow the server certificate.											
block	Block the session.											
ignore	Re-sign the server certificate as trusted.											
sni-server-cert-check	Check the SNI in the client hello message with the CN or SAN fields in the returned server certificate.	option	-	enable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Check the SNI in the client hello message with the CN or SAN fields in the returned server certificate. If mismatched, use the CN in the server certificate to do URL filtering.</td></tr><tr><td>strict</td><td>Check the SNI in the client hello message with the CN or SAN fields in the returned server certificate. If mismatched, close the connection.</td></tr><tr><td>disable</td><td>Do not check the SNI in the client hello message with the CN or SAN fields in the returned server certificate.</td></tr></table>	Option	Description	enable	Check the SNI in the client hello message with the CN or SAN fields in the returned server certificate. If mismatched, use the CN in the server certificate to do URL filtering.	strict	Check the SNI in the client hello message with the CN or SAN fields in the returned server certificate. If mismatched, close the connection.	disable	Do not check the SNI in the client hello message with the CN or SAN fields in the returned server certificate.			
Option	Description											
enable	Check the SNI in the client hello message with the CN or SAN fields in the returned server certificate. If mismatched, use the CN in the server certificate to do URL filtering.											
strict	Check the SNI in the client hello message with the CN or SAN fields in the returned server certificate. If mismatched, close the connection.											
disable	Do not check the SNI in the client hello message with the CN or SAN fields in the returned server certificate.											
status	Configure protocol inspection status.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Disable.</td></tr><tr><td>deep-inspection</td><td>Full SSL inspection.</td></tr></table>	Option	Description	disable	Disable.	deep-inspection	Full SSL inspection.					
Option	Description											
disable	Disable.											
deep-inspection	Full SSL inspection.											
unsupported-ssl-cipher	Action based on the SSL cipher used being unsupported.	option	-	allow								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>allow</td><td>Bypass the session when the cipher is not supported.</td></tr><tr><td>block</td><td>Block the session when the cipher is not supported.</td></tr></table>	Option	Description	allow	Bypass the session when the cipher is not supported.	block	Block the session when the cipher is not supported.					
Option	Description											
allow	Bypass the session when the cipher is not supported.											
block	Block the session when the cipher is not supported.											
unsupported-ssl-negotiation	Action based on the SSL negotiation used being unsupported.	option	-	allow								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>allow</td><td>Bypass the session when the negotiation is not supported.</td></tr><tr><td>block</td><td>Block the session when the negotiation is not supported.</td></tr></table>	Option	Description	allow	Bypass the session when the negotiation is not supported.	block	Block the session when the negotiation is not supported.					
Option	Description											
allow	Bypass the session when the negotiation is not supported.											
block	Block the session when the negotiation is not supported.											

Parameter	Description	Type	Size	Default								
unsupported-ssl-version	Action based on the SSL version used being unsupported.	option	-	block								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>allow</i></td><td>Bypass the session when the version is not supported.</td></tr><tr><td><i>block</i></td><td>Block the session when the version is not supported.</td></tr></table>	Option	Description	<i>allow</i>	Bypass the session when the version is not supported.	<i>block</i>	Block the session when the version is not supported.					
Option	Description											
<i>allow</i>	Bypass the session when the version is not supported.											
<i>block</i>	Block the session when the version is not supported.											
untrusted-server-cert	Action based on server certificate is not issued by a trusted CA.	option	-	allow								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>allow</i></td><td>Allow the server certificate.</td></tr><tr><td><i>block</i></td><td>Block the session.</td></tr><tr><td><i>ignore</i></td><td>Re-sign the server certificate as trusted.</td></tr></table>	Option	Description	<i>allow</i>	Allow the server certificate.	<i>block</i>	Block the session.	<i>ignore</i>	Re-sign the server certificate as trusted.			
Option	Description											
<i>allow</i>	Allow the server certificate.											
<i>block</i>	Block the session.											
<i>ignore</i>	Re-sign the server certificate as trusted.											

config ftps

Parameter	Description	Type	Size	Default								
cert-validation-failure	Action based on certificate validation failure.	option	-	block								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>allow</i></td><td>Allow the server certificate.</td></tr><tr><td><i>block</i></td><td>Block the session.</td></tr><tr><td><i>ignore</i></td><td>Re-sign the server certificate as trusted.</td></tr></table>	Option	Description	<i>allow</i>	Allow the server certificate.	<i>block</i>	Block the session.	<i>ignore</i>	Re-sign the server certificate as trusted.			
Option	Description											
<i>allow</i>	Allow the server certificate.											
<i>block</i>	Block the session.											
<i>ignore</i>	Re-sign the server certificate as trusted.											
cert-validation-timeout	Action based on certificate validation timeout.	option	-	allow								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>allow</i></td><td>Allow the server certificate.</td></tr><tr><td><i>block</i></td><td>Block the session.</td></tr><tr><td><i>ignore</i></td><td>Re-sign the server certificate as trusted.</td></tr></table>	Option	Description	<i>allow</i>	Allow the server certificate.	<i>block</i>	Block the session.	<i>ignore</i>	Re-sign the server certificate as trusted.			
Option	Description											
<i>allow</i>	Allow the server certificate.											
<i>block</i>	Block the session.											
<i>ignore</i>	Re-sign the server certificate as trusted.											
client-certificate	Action based on received client certificate.	option	-	bypass								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>bypass</i></td><td>Bypass the session.</td></tr></table>	Option	Description	<i>bypass</i>	Bypass the session.							
Option	Description											
<i>bypass</i>	Bypass the session.											

Parameter	Description	Type	Size	Default												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>inspect</i></td><td>Inspect the session.</td></tr><tr><td><i>block</i></td><td>Block the session.</td></tr></table>	Option	Description	<i>inspect</i>	Inspect the session.	<i>block</i>	Block the session.									
	Option	Description														
	<i>inspect</i>	Inspect the session.														
<i>block</i>	Block the session.															
expired-server-cert	Action based on server certificate is expired.	option	-	block												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>allow</i></td><td>Allow the server certificate.</td></tr><tr><td><i>block</i></td><td>Block the session.</td></tr><tr><td><i>ignore</i></td><td>Re-sign the server certificate as trusted.</td></tr></table>	Option	Description	<i>allow</i>	Allow the server certificate.	<i>block</i>	Block the session.	<i>ignore</i>	Re-sign the server certificate as trusted.							
	Option	Description														
	<i>allow</i>	Allow the server certificate.														
	<i>block</i>	Block the session.														
<i>ignore</i>	Re-sign the server certificate as trusted.															
min-allowed-ssl-version	Minimum SSL version to be allowed. Flow-based inspection does not support SSL version control.	option	-	tls-1.1												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>ssl-3.0</i></td><td>SSL 3.0.</td></tr><tr><td><i>tls-1.0</i></td><td>TLS 1.0.</td></tr><tr><td><i>tls-1.1</i></td><td>TLS 1.1.</td></tr><tr><td><i>tls-1.2</i></td><td>TLS 1.2.</td></tr><tr><td><i>tls-1.3</i></td><td>TLS 1.3.</td></tr></table>	Option	Description	<i>ssl-3.0</i>	SSL 3.0.	<i>tls-1.0</i>	TLS 1.0.	<i>tls-1.1</i>	TLS 1.1.	<i>tls-1.2</i>	TLS 1.2.	<i>tls-1.3</i>	TLS 1.3.			
	Option	Description														
	<i>ssl-3.0</i>	SSL 3.0.														
	<i>tls-1.0</i>	TLS 1.0.														
	<i>tls-1.1</i>	TLS 1.1.														
	<i>tls-1.2</i>	TLS 1.2.														
<i>tls-1.3</i>	TLS 1.3.															
ports	Ports to use for scanning (1 - 65535, default = 443).	integer	Minimum value: 1 Maximum value: 65535													
revoked-server-cert	Action based on server certificate is revoked.	option	-	block												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>allow</i></td><td>Allow the server certificate.</td></tr><tr><td><i>block</i></td><td>Block the session.</td></tr><tr><td><i>ignore</i></td><td>Re-sign the server certificate as trusted.</td></tr></table>	Option	Description	<i>allow</i>	Allow the server certificate.	<i>block</i>	Block the session.	<i>ignore</i>	Re-sign the server certificate as trusted.							
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	<i>block</i>	Block the session.														
<i>ignore</i>	Re-sign the server certificate as trusted.															
sni-server-cert-check	Check the SNI in the client hello message with the CN or SAN fields in the returned server certificate.	option	-	enable												

Parameter	Description	Type	Size	Default								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Check the SNI in the client hello message with the CN or SAN fields in the returned server certificate. If mismatched, use the CN in the server certificate to do URL filtering.</td></tr><tr><td><i>strict</i></td><td>Check the SNI in the client hello message with the CN or SAN fields in the returned server certificate. If mismatched, close the connection.</td></tr><tr><td><i>disable</i></td><td>Do not check the SNI in the client hello message with the CN or SAN fields in the returned server certificate.</td></tr></table>	Option	Description	<i>enable</i>	Check the SNI in the client hello message with the CN or SAN fields in the returned server certificate. If mismatched, use the CN in the server certificate to do URL filtering.	<i>strict</i>	Check the SNI in the client hello message with the CN or SAN fields in the returned server certificate. If mismatched, close the connection.	<i>disable</i>	Do not check the SNI in the client hello message with the CN or SAN fields in the returned server certificate.			
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<i>disable</i>	Do not check the SNI in the client hello message with the CN or SAN fields in the returned server certificate.											
status	Configure protocol inspection status.	option	-	deep-inspection								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>disable</i></td><td>Disable.</td></tr><tr><td><i>deep-inspection</i></td><td>Full SSL inspection.</td></tr></table>	Option	Description	<i>disable</i>	Disable.	<i>deep-inspection</i>	Full SSL inspection.					
	Option	Description										
	<i>disable</i>	Disable.										
<i>deep-inspection</i>	Full SSL inspection.											
unsupported-ssl-cipher	Action based on the SSL cipher used being unsupported.	option	-	allow								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>allow</i></td><td>Bypass the session when the cipher is not supported.</td></tr><tr><td><i>block</i></td><td>Block the session when the cipher is not supported.</td></tr></table>	Option	Description	<i>allow</i>	Bypass the session when the cipher is not supported.	<i>block</i>	Block the session when the cipher is not supported.					
	Option	Description										
	<i>allow</i>	Bypass the session when the cipher is not supported.										
<i>block</i>	Block the session when the cipher is not supported.											
unsupported-ssl-negotiation	Action based on the SSL negotiation used being unsupported.	option	-	allow								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>allow</i></td><td>Bypass the session when the negotiation is not supported.</td></tr><tr><td><i>block</i></td><td>Block the session when the negotiation is not supported.</td></tr></table>	Option	Description	<i>allow</i>	Bypass the session when the negotiation is not supported.	<i>block</i>	Block the session when the negotiation is not supported.					
	Option	Description										
	<i>allow</i>	Bypass the session when the negotiation is not supported.										
<i>block</i>	Block the session when the negotiation is not supported.											
unsupported-ssl-version	Action based on the SSL version used being unsupported.	option	-	block								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>allow</i></td><td>Bypass the session when the version is not supported.</td></tr><tr><td><i>block</i></td><td>Block the session when the version is not supported.</td></tr></table>	Option	Description	<i>allow</i>	Bypass the session when the version is not supported.	<i>block</i>	Block the session when the version is not supported.					
	Option	Description										
	<i>allow</i>	Bypass the session when the version is not supported.										
<i>block</i>	Block the session when the version is not supported.											
untrusted-server-cert	Action based on server certificate is not issued by a trusted CA.	option	-	allow								

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>allow</i>	Allow the server certificate.		
	<i>block</i>	Block the session.		
	<i>ignore</i>	Re-sign the server certificate as trusted.		

config https

Parameter	Description	Type	Size	Default
cert-probe-failure	Action based on certificate probe failure.	option	-	block
	Option	Description		
	<i>allow</i>	Bypass the session when unable to retrieve server's certificate for inspection.		
	<i>block</i>	Block the session when unable to retrieve server's certificate for inspection.		
cert-validation-failure	Action based on certificate validation failure.	option	-	block
	Option	Description		
	<i>allow</i>	Allow the server certificate.		
	<i>block</i>	Block the session.		
	<i>ignore</i>	Re-sign the server certificate as trusted.		
cert-validation-timeout	Action based on certificate validation timeout.	option	-	allow
	Option	Description		
	<i>allow</i>	Allow the server certificate.		
	<i>block</i>	Block the session.		
	<i>ignore</i>	Re-sign the server certificate as trusted.		
client-certificate	Action based on received client certificate.	option	-	bypass
	Option	Description		
	<i>bypass</i>	Bypass the session.		

Parameter	Description	Type	Size	Default												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>inspect</i></td><td>Inspect the session.</td></tr><tr><td><i>block</i></td><td>Block the session.</td></tr></table>	Option	Description	<i>inspect</i>	Inspect the session.	<i>block</i>	Block the session.									
	Option	Description														
	<i>inspect</i>	Inspect the session.														
<i>block</i>	Block the session.															
expired-server-cert	Action based on server certificate is expired.	option	-	block												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>allow</i></td><td>Allow the server certificate.</td></tr><tr><td><i>block</i></td><td>Block the session.</td></tr><tr><td><i>ignore</i></td><td>Re-sign the server certificate as trusted.</td></tr></table>	Option	Description	<i>allow</i>	Allow the server certificate.	<i>block</i>	Block the session.	<i>ignore</i>	Re-sign the server certificate as trusted.							
	Option	Description														
	<i>allow</i>	Allow the server certificate.														
	<i>block</i>	Block the session.														
<i>ignore</i>	Re-sign the server certificate as trusted.															
min-allowed-ssl-version	Minimum SSL version to be allowed. Flow-based inspection does not support SSL version control.	option	-	tls-1.1												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>ssl-3.0</i></td><td>SSL 3.0.</td></tr><tr><td><i>tls-1.0</i></td><td>TLS 1.0.</td></tr><tr><td><i>tls-1.1</i></td><td>TLS 1.1.</td></tr><tr><td><i>tls-1.2</i></td><td>TLS 1.2.</td></tr><tr><td><i>tls-1.3</i></td><td>TLS 1.3.</td></tr></table>	Option	Description	<i>ssl-3.0</i>	SSL 3.0.	<i>tls-1.0</i>	TLS 1.0.	<i>tls-1.1</i>	TLS 1.1.	<i>tls-1.2</i>	TLS 1.2.	<i>tls-1.3</i>	TLS 1.3.			
	Option	Description														
	<i>ssl-3.0</i>	SSL 3.0.														
	<i>tls-1.0</i>	TLS 1.0.														
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	<i>tls-1.2</i>	TLS 1.2.														
<i>tls-1.3</i>	TLS 1.3.															
ports	Ports to use for scanning (1 - 65535, default = 443).	integer	Minimum value: 1 Maximum value: 65535													
proxy-after-tcp-handshake	Proxy traffic after the TCP 3-way handshake has been established (not before).	option	-	disable												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable setting.</td></tr><tr><td><i>disable</i></td><td>Disable setting.</td></tr></table>	Option	Description	<i>enable</i>	Enable setting.	<i>disable</i>	Disable setting.									
	Option	Description														
	<i>enable</i>	Enable setting.														
<i>disable</i>	Disable setting.															
revoked-server-cert	Action based on server certificate is revoked.	option	-	block												

Parameter	Description	Type	Size	Default								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>allow</i></td><td>Allow the server certificate.</td></tr><tr><td><i>block</i></td><td>Block the session.</td></tr><tr><td><i>ignore</i></td><td>Re-sign the server certificate as trusted.</td></tr></table>	Option	Description	<i>allow</i>	Allow the server certificate.	<i>block</i>	Block the session.	<i>ignore</i>	Re-sign the server certificate as trusted.			
	Option	Description										
	<i>allow</i>	Allow the server certificate.										
	<i>block</i>	Block the session.										
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sni-server-cert-check	Check the SNI in the client hello message with the CN or SAN fields in the returned server certificate.	option	-	enable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Check the SNI in the client hello message with the CN or SAN fields in the returned server certificate. If mismatched, use the CN in the server certificate to do URL filtering.</td></tr><tr><td><i>strict</i></td><td>Check the SNI in the client hello message with the CN or SAN fields in the returned server certificate. If mismatched, close the connection.</td></tr><tr><td><i>disable</i></td><td>Do not check the SNI in the client hello message with the CN or SAN fields in the returned server certificate.</td></tr></table>	Option	Description	<i>enable</i>	Check the SNI in the client hello message with the CN or SAN fields in the returned server certificate. If mismatched, use the CN in the server certificate to do URL filtering.	<i>strict</i>	Check the SNI in the client hello message with the CN or SAN fields in the returned server certificate. If mismatched, close the connection.	<i>disable</i>	Do not check the SNI in the client hello message with the CN or SAN fields in the returned server certificate.			
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	<i>enable</i>	Check the SNI in the client hello message with the CN or SAN fields in the returned server certificate. If mismatched, use the CN in the server certificate to do URL filtering.										
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<i>disable</i>	Do not check the SNI in the client hello message with the CN or SAN fields in the returned server certificate.											
status	Configure protocol inspection status.	option	-	deep-inspection								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>disable</i></td><td>Disable.</td></tr><tr><td><i>certificate-inspection</i></td><td>Inspect SSL handshake only.</td></tr><tr><td><i>deep-inspection</i></td><td>Full SSL inspection.</td></tr></table>	Option	Description	<i>disable</i>	Disable.	<i>certificate-inspection</i>	Inspect SSL handshake only.	<i>deep-inspection</i>	Full SSL inspection.			
	Option	Description										
	<i>disable</i>	Disable.										
	<i>certificate-inspection</i>	Inspect SSL handshake only.										
<i>deep-inspection</i>	Full SSL inspection.											
unsupported-ssl-cipher	Action based on the SSL cipher used being unsupported.	option	-	allow								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>allow</i></td><td>Bypass the session when the cipher is not supported.</td></tr><tr><td><i>block</i></td><td>Block the session when the cipher is not supported.</td></tr></table>	Option	Description	<i>allow</i>	Bypass the session when the cipher is not supported.	<i>block</i>	Block the session when the cipher is not supported.					
	Option	Description										
	<i>allow</i>	Bypass the session when the cipher is not supported.										
<i>block</i>	Block the session when the cipher is not supported.											
unsupported-ssl-negotiation	Action based on the SSL negotiation used being unsupported.	option	-	allow								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>allow</i></td><td>Bypass the session when the negotiation is not supported.</td></tr></table>	Option	Description	<i>allow</i>	Bypass the session when the negotiation is not supported.							
	Option	Description										
<i>allow</i>	Bypass the session when the negotiation is not supported.											

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>block</i>	Block the session when the negotiation is not supported.		
unsupported-ssl-version	Action based on the SSL version used being unsupported.	option	-	block
	Option	Description		
	<i>allow</i>	Bypass the session when the version is not supported.		
	<i>block</i>	Block the session when the version is not supported.		
untrusted-server-cert	Action based on server certificate is not issued by a trusted CA.	option	-	allow
	Option	Description		
	<i>allow</i>	Allow the server certificate.		
	<i>block</i>	Block the session.		
	<i>ignore</i>	Re-sign the server certificate as trusted.		

config imaps

Parameter	Description	Type	Size	Default
cert-validation-failure	Action based on certificate validation failure.	option	-	block
	Option	Description		
	<i>allow</i>	Allow the server certificate.		
	<i>block</i>	Block the session.		
	<i>ignore</i>	Re-sign the server certificate as trusted.		
cert-validation-timeout	Action based on certificate validation timeout.	option	-	allow
	Option	Description		
	<i>allow</i>	Allow the server certificate.		
	<i>block</i>	Block the session.		
	<i>ignore</i>	Re-sign the server certificate as trusted.		
client-certificate	Action based on received client certificate.	option	-	inspect

Parameter	Description	Type	Size	Default
	Option	Description		
	bypass	Bypass the session.		
	inspect	Inspect the session.		
	block	Block the session.		
expired-server-cert	Action based on server certificate is expired.	option	-	block
	Option	Description		
	allow	Allow the server certificate.		
	block	Block the session.		
	ignore	Re-sign the server certificate as trusted.		
ports	Ports to use for scanning (1 - 65535, default = 443).	integer	Minimum value: 1 Maximum value: 65535	
proxy-after-tcp-handshake	Proxy traffic after the TCP 3-way handshake has been established (not before).	option	-	disable
	Option	Description		
	enable	Enable setting.		
	disable	Disable setting.		
revoked-server-cert	Action based on server certificate is revoked.	option	-	block
	Option	Description		
	allow	Allow the server certificate.		
	block	Block the session.		
	ignore	Re-sign the server certificate as trusted.		
sni-server-cert-check	Check the SNI in the client hello message with the CN or SAN fields in the returned server certificate.	option	-	enable

Parameter	Description	Type	Size	Default								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Check the SNI in the client hello message with the CN or SAN fields in the returned server certificate. If mismatched, use the CN in the server certificate to do URL filtering.</td></tr><tr><td><i>strict</i></td><td>Check the SNI in the client hello message with the CN or SAN fields in the returned server certificate. If mismatched, close the connection.</td></tr><tr><td><i>disable</i></td><td>Do not check the SNI in the client hello message with the CN or SAN fields in the returned server certificate.</td></tr></table>	Option	Description	<i>enable</i>	Check the SNI in the client hello message with the CN or SAN fields in the returned server certificate. If mismatched, use the CN in the server certificate to do URL filtering.	<i>strict</i>	Check the SNI in the client hello message with the CN or SAN fields in the returned server certificate. If mismatched, close the connection.	<i>disable</i>	Do not check the SNI in the client hello message with the CN or SAN fields in the returned server certificate.			
	Option	Description										
	<i>enable</i>	Check the SNI in the client hello message with the CN or SAN fields in the returned server certificate. If mismatched, use the CN in the server certificate to do URL filtering.										
	<i>strict</i>	Check the SNI in the client hello message with the CN or SAN fields in the returned server certificate. If mismatched, close the connection.										
<i>disable</i>	Do not check the SNI in the client hello message with the CN or SAN fields in the returned server certificate.											
status	Configure protocol inspection status.	option	-	deep-inspection								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>disable</i></td><td>Disable.</td></tr><tr><td><i>deep-inspection</i></td><td>Full SSL inspection.</td></tr></table>	Option	Description	<i>disable</i>	Disable.	<i>deep-inspection</i>	Full SSL inspection.					
	Option	Description										
	<i>disable</i>	Disable.										
<i>deep-inspection</i>	Full SSL inspection.											
unsupported-ssl-cipher	Action based on the SSL cipher used being unsupported.	option	-	allow								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>allow</i></td><td>Bypass the session when the cipher is not supported.</td></tr><tr><td><i>block</i></td><td>Block the session when the cipher is not supported.</td></tr></table>	Option	Description	<i>allow</i>	Bypass the session when the cipher is not supported.	<i>block</i>	Block the session when the cipher is not supported.					
	Option	Description										
	<i>allow</i>	Bypass the session when the cipher is not supported.										
<i>block</i>	Block the session when the cipher is not supported.											
unsupported-ssl-negotiation	Action based on the SSL negotiation used being unsupported.	option	-	allow								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>allow</i></td><td>Bypass the session when the negotiation is not supported.</td></tr><tr><td><i>block</i></td><td>Block the session when the negotiation is not supported.</td></tr></table>	Option	Description	<i>allow</i>	Bypass the session when the negotiation is not supported.	<i>block</i>	Block the session when the negotiation is not supported.					
	Option	Description										
	<i>allow</i>	Bypass the session when the negotiation is not supported.										
<i>block</i>	Block the session when the negotiation is not supported.											
unsupported-ssl-version	Action based on the SSL version used being unsupported.	option	-	block								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>allow</i></td><td>Bypass the session when the version is not supported.</td></tr><tr><td><i>block</i></td><td>Block the session when the version is not supported.</td></tr></table>	Option	Description	<i>allow</i>	Bypass the session when the version is not supported.	<i>block</i>	Block the session when the version is not supported.					
	Option	Description										
	<i>allow</i>	Bypass the session when the version is not supported.										
<i>block</i>	Block the session when the version is not supported.											
untrusted-server-cert	Action based on server certificate is not issued by a trusted CA.	option	-	allow								

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>allow</i>	Allow the server certificate.		
	<i>block</i>	Block the session.		
	<i>ignore</i>	Re-sign the server certificate as trusted.		

config pop3s

Parameter	Description	Type	Size	Default
cert-validation-failure	Action based on certificate validation failure.	option	-	block
	Option	Description		
	<i>allow</i>	Allow the server certificate.		
	<i>block</i>	Block the session.		
	<i>ignore</i>	Re-sign the server certificate as trusted.		
cert-validation-timeout	Action based on certificate validation timeout.	option	-	allow
	Option	Description		
	<i>allow</i>	Allow the server certificate.		
	<i>block</i>	Block the session.		
	<i>ignore</i>	Re-sign the server certificate as trusted.		
client-certificate	Action based on received client certificate.	option	-	inspect
	Option	Description		
	<i>bypass</i>	Bypass the session.		
	<i>inspect</i>	Inspect the session.		
	<i>block</i>	Block the session.		
expired-server-cert	Action based on server certificate is expired.	option	-	block
	Option	Description		
	<i>allow</i>	Allow the server certificate.		

Parameter	Description	Type	Size	Default								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>block</i></td><td>Block the session.</td></tr><tr><td><i>ignore</i></td><td>Re-sign the server certificate as trusted.</td></tr></table>	Option	Description	<i>block</i>	Block the session.	<i>ignore</i>	Re-sign the server certificate as trusted.					
	Option	Description										
	<i>block</i>	Block the session.										
<i>ignore</i>	Re-sign the server certificate as trusted.											
ports	Ports to use for scanning (1 - 65535, default = 443).	integer	Minimum value: 1 Maximum value: 65535									
proxy-after-tcp-handshake	Proxy traffic after the TCP 3-way handshake has been established (not before).	option	-	disable								
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	Option	Description										
	<i>enable</i>	Enable setting.										
<i>disable</i>	Disable setting.											
revoked-server-cert	Action based on server certificate is revoked.	option	-	block								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>allow</i></td><td>Allow the server certificate.</td></tr><tr><td><i>block</i></td><td>Block the session.</td></tr><tr><td><i>ignore</i></td><td>Re-sign the server certificate as trusted.</td></tr></table>	Option	Description	<i>allow</i>	Allow the server certificate.	<i>block</i>	Block the session.	<i>ignore</i>	Re-sign the server certificate as trusted.			
	Option	Description										
	<i>allow</i>	Allow the server certificate.										
	<i>block</i>	Block the session.										
<i>ignore</i>	Re-sign the server certificate as trusted.											
sni-server-cert-check	Check the SNI in the client hello message with the CN or SAN fields in the returned server certificate.	option	-	enable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Check the SNI in the client hello message with the CN or SAN fields in the returned server certificate. If mismatched, use the CN in the server certificate to do URL filtering.</td></tr><tr><td><i>strict</i></td><td>Check the SNI in the client hello message with the CN or SAN fields in the returned server certificate. If mismatched, close the connection.</td></tr><tr><td><i>disable</i></td><td>Do not check the SNI in the client hello message with the CN or SAN fields in the returned server certificate.</td></tr></table>	Option	Description	<i>enable</i>	Check the SNI in the client hello message with the CN or SAN fields in the returned server certificate. If mismatched, use the CN in the server certificate to do URL filtering.	<i>strict</i>	Check the SNI in the client hello message with the CN or SAN fields in the returned server certificate. If mismatched, close the connection.	<i>disable</i>	Do not check the SNI in the client hello message with the CN or SAN fields in the returned server certificate.			
	Option	Description										
	<i>enable</i>	Check the SNI in the client hello message with the CN or SAN fields in the returned server certificate. If mismatched, use the CN in the server certificate to do URL filtering.										
<i>strict</i>	Check the SNI in the client hello message with the CN or SAN fields in the returned server certificate. If mismatched, close the connection.											
<i>disable</i>	Do not check the SNI in the client hello message with the CN or SAN fields in the returned server certificate.											
status	Configure protocol inspection status.	option	-	deep-inspection								

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>disable</i>	Disable.		
	<i>deep-inspection</i>	Full SSL inspection.		
unsupported-ssl-cipher	Action based on the SSL cipher used being unsupported.	option	-	allow
	Option	Description		
	<i>allow</i>	Bypass the session when the cipher is not supported.		
	<i>block</i>	Block the session when the cipher is not supported.		
unsupported-ssl-negotiation	Action based on the SSL negotiation used being unsupported.	option	-	allow
	Option	Description		
	<i>allow</i>	Bypass the session when the negotiation is not supported.		
	<i>block</i>	Block the session when the negotiation is not supported.		
unsupported-ssl-version	Action based on the SSL version used being unsupported.	option	-	block
	Option	Description		
	<i>allow</i>	Bypass the session when the version is not supported.		
	<i>block</i>	Block the session when the version is not supported.		
untrusted-server-cert	Action based on server certificate is not issued by a trusted CA.	option	-	allow
	Option	Description		
	<i>allow</i>	Allow the server certificate.		
	<i>block</i>	Block the session.		
	<i>ignore</i>	Re-sign the server certificate as trusted.		

config smtps

Parameter	Description	Type	Size	Default
cert-validation-failure	Action based on certificate validation failure.	option	-	block

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>allow</i>	Allow the server certificate.		
	<i>block</i>	Block the session.		
	<i>ignore</i>	Re-sign the server certificate as trusted.		
cert-validation-timeout	Action based on certificate validation timeout.	option	-	allow
	Option	Description		
	<i>allow</i>	Allow the server certificate.		
	<i>block</i>	Block the session.		
	<i>ignore</i>	Re-sign the server certificate as trusted.		
client-certificate	Action based on received client certificate.	option	-	inspect
	Option	Description		
	<i>bypass</i>	Bypass the session.		
	<i>inspect</i>	Inspect the session.		
	<i>block</i>	Block the session.		
expired-server-cert	Action based on server certificate is expired.	option	-	block
	Option	Description		
	<i>allow</i>	Allow the server certificate.		
	<i>block</i>	Block the session.		
	<i>ignore</i>	Re-sign the server certificate as trusted.		
ports	Ports to use for scanning (1 - 65535, default = 443).	integer	Minimum value: 1 Maximum value: 65535	
proxy-after-tcp-handshake	Proxy traffic after the TCP 3-way handshake has been established (not before).	option	-	disable

Parameter	Description	Type	Size	Default								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable setting.</td></tr><tr><td><i>disable</i></td><td>Disable setting.</td></tr></table>	Option	Description	<i>enable</i>	Enable setting.	<i>disable</i>	Disable setting.					
	Option	Description										
	<i>enable</i>	Enable setting.										
<i>disable</i>	Disable setting.											
revoked-server-cert	Action based on server certificate is revoked.	option	-	block								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>allow</i></td><td>Allow the server certificate.</td></tr><tr><td><i>block</i></td><td>Block the session.</td></tr><tr><td><i>ignore</i></td><td>Re-sign the server certificate as trusted.</td></tr></table>	Option	Description	<i>allow</i>	Allow the server certificate.	<i>block</i>	Block the session.	<i>ignore</i>	Re-sign the server certificate as trusted.			
	Option	Description										
	<i>allow</i>	Allow the server certificate.										
	<i>block</i>	Block the session.										
<i>ignore</i>	Re-sign the server certificate as trusted.											
sni-server-cert-check	Check the SNI in the client hello message with the CN or SAN fields in the returned server certificate.	option	-	enable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Check the SNI in the client hello message with the CN or SAN fields in the returned server certificate. If mismatched, use the CN in the server certificate to do URL filtering.</td></tr><tr><td><i>strict</i></td><td>Check the SNI in the client hello message with the CN or SAN fields in the returned server certificate. If mismatched, close the connection.</td></tr><tr><td><i>disable</i></td><td>Do not check the SNI in the client hello message with the CN or SAN fields in the returned server certificate.</td></tr></table>	Option	Description	<i>enable</i>	Check the SNI in the client hello message with the CN or SAN fields in the returned server certificate. If mismatched, use the CN in the server certificate to do URL filtering.	<i>strict</i>	Check the SNI in the client hello message with the CN or SAN fields in the returned server certificate. If mismatched, close the connection.	<i>disable</i>	Do not check the SNI in the client hello message with the CN or SAN fields in the returned server certificate.			
	Option	Description										
	<i>enable</i>	Check the SNI in the client hello message with the CN or SAN fields in the returned server certificate. If mismatched, use the CN in the server certificate to do URL filtering.										
	<i>strict</i>	Check the SNI in the client hello message with the CN or SAN fields in the returned server certificate. If mismatched, close the connection.										
<i>disable</i>	Do not check the SNI in the client hello message with the CN or SAN fields in the returned server certificate.											
status	Configure protocol inspection status.	option	-	deep-inspection								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>disable</i></td><td>Disable.</td></tr><tr><td><i>deep-inspection</i></td><td>Full SSL inspection.</td></tr></table>	Option	Description	<i>disable</i>	Disable.	<i>deep-inspection</i>	Full SSL inspection.					
	Option	Description										
	<i>disable</i>	Disable.										
<i>deep-inspection</i>	Full SSL inspection.											
unsupported-ssl-cipher	Action based on the SSL cipher used being unsupported.	option	-	allow								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>allow</i></td><td>Bypass the session when the cipher is not supported.</td></tr><tr><td><i>block</i></td><td>Block the session when the cipher is not supported.</td></tr></table>	Option	Description	<i>allow</i>	Bypass the session when the cipher is not supported.	<i>block</i>	Block the session when the cipher is not supported.					
	Option	Description										
	<i>allow</i>	Bypass the session when the cipher is not supported.										
<i>block</i>	Block the session when the cipher is not supported.											

Parameter	Description	Type	Size	Default								
unsupported-ssl-negotiation	Action based on the SSL negotiation used being unsupported.	option	-	allow								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>allow</td><td>Bypass the session when the negotiation is not supported.</td></tr><tr><td>block</td><td>Block the session when the negotiation is not supported.</td></tr></table>	Option	Description	allow	Bypass the session when the negotiation is not supported.	block	Block the session when the negotiation is not supported.					
Option	Description											
allow	Bypass the session when the negotiation is not supported.											
block	Block the session when the negotiation is not supported.											
unsupported-ssl-version	Action based on the SSL version used being unsupported.	option	-	block								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>allow</td><td>Bypass the session when the version is not supported.</td></tr><tr><td>block</td><td>Block the session when the version is not supported.</td></tr></table>	Option	Description	allow	Bypass the session when the version is not supported.	block	Block the session when the version is not supported.					
Option	Description											
allow	Bypass the session when the version is not supported.											
block	Block the session when the version is not supported.											
untrusted-server-cert	Action based on server certificate is not issued by a trusted CA.	option	-	allow								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>allow</td><td>Allow the server certificate.</td></tr><tr><td>block</td><td>Block the session.</td></tr><tr><td>ignore</td><td>Re-sign the server certificate as trusted.</td></tr></table>	Option	Description	allow	Allow the server certificate.	block	Block the session.	ignore	Re-sign the server certificate as trusted.			
Option	Description											
allow	Allow the server certificate.											
block	Block the session.											
ignore	Re-sign the server certificate as trusted.											

config ssh

Parameter	Description	Type	Size	Default						
inspect-all	Level of SSL inspection.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>disable</i></td><td>Disable.</td></tr><tr><td><i>deep-inspection</i></td><td>Full SSL inspection.</td></tr></table>				Option	Description	<i>disable</i>	Disable.	<i>deep-inspection</i>	Full SSL inspection.
	Option	Description								
	<i>disable</i>	Disable.								
<i>deep-inspection</i>	Full SSL inspection.									
ports	Ports to use for scanning (1 - 65535, default = 443).	integer	Minimum value: 1 Maximum value: 65535							
proxy-after-tcp-handshake	Proxy traffic after the TCP 3-way handshake has been established (not before).	option	-	disable						

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		
ssh-algorithm	Relative strength of encryption algorithms accepted during negotiation.	option	-	compatible
	Option	Description		
	<i>compatible</i>	Allow a broader set of encryption algorithms for best compatibility.		
	<i>high-encryption</i>	Allow only AES-CTR, AES-GCM ciphers and high encryption algorithms.		
ssh-tun-policy-check	Enable/disable SSH tunnel policy check.	option	-	disable
	Option	Description		
	<i>disable</i>	Disable SSH tunnel policy check.		
	<i>enable</i>	Enable SSH tunnel policy check.		
status	Configure protocol inspection status.	option	-	disable
	Option	Description		
	<i>disable</i>	Disable.		
	<i>deep-inspection</i>	Full SSL inspection.		
unsupported-version	Action based on SSH version being unsupported.	option	-	bypass
	Option	Description		
	<i>bypass</i>	Bypass the session.		
	<i>block</i>	Block the session.		

config ssl

Parameter	Description	Type	Size	Default
cert-probe-failure	Action based on certificate probe failure.	option	-	block

Parameter	Description	Type	Size	Default								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>allow</i></td><td>Bypass the session when unable to retrieve server's certificate for inspection.</td></tr><tr><td><i>block</i></td><td>Block the session when unable to retrieve server's certificate for inspection.</td></tr></table>	Option	Description	<i>allow</i>	Bypass the session when unable to retrieve server's certificate for inspection.	<i>block</i>	Block the session when unable to retrieve server's certificate for inspection.					
	Option	Description										
	<i>allow</i>	Bypass the session when unable to retrieve server's certificate for inspection.										
<i>block</i>	Block the session when unable to retrieve server's certificate for inspection.											
cert-validation-failure	Action based on certificate validation failure.	option	-	block								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>allow</i></td><td>Allow the server certificate.</td></tr><tr><td><i>block</i></td><td>Block the session.</td></tr><tr><td><i>ignore</i></td><td>Re-sign the server certificate as trusted.</td></tr></table>	Option	Description	<i>allow</i>	Allow the server certificate.	<i>block</i>	Block the session.	<i>ignore</i>	Re-sign the server certificate as trusted.			
	Option	Description										
	<i>allow</i>	Allow the server certificate.										
	<i>block</i>	Block the session.										
<i>ignore</i>	Re-sign the server certificate as trusted.											
cert-validation-timeout	Action based on certificate validation timeout.	option	-	allow								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>allow</i></td><td>Allow the server certificate.</td></tr><tr><td><i>block</i></td><td>Block the session.</td></tr><tr><td><i>ignore</i></td><td>Re-sign the server certificate as trusted.</td></tr></table>	Option	Description	<i>allow</i>	Allow the server certificate.	<i>block</i>	Block the session.	<i>ignore</i>	Re-sign the server certificate as trusted.			
	Option	Description										
	<i>allow</i>	Allow the server certificate.										
	<i>block</i>	Block the session.										
<i>ignore</i>	Re-sign the server certificate as trusted.											
client-certificate	Action based on received client certificate.	option	-	bypass								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>bypass</i></td><td>Bypass the session.</td></tr><tr><td><i>inspect</i></td><td>Inspect the session.</td></tr><tr><td><i>block</i></td><td>Block the session.</td></tr></table>	Option	Description	<i>bypass</i>	Bypass the session.	<i>inspect</i>	Inspect the session.	<i>block</i>	Block the session.			
	Option	Description										
	<i>bypass</i>	Bypass the session.										
	<i>inspect</i>	Inspect the session.										
<i>block</i>	Block the session.											
expired-server-cert	Action based on server certificate is expired.	option	-	block								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>allow</i></td><td>Allow the server certificate.</td></tr><tr><td><i>block</i></td><td>Block the session.</td></tr><tr><td><i>ignore</i></td><td>Re-sign the server certificate as trusted.</td></tr></table>	Option	Description	<i>allow</i>	Allow the server certificate.	<i>block</i>	Block the session.	<i>ignore</i>	Re-sign the server certificate as trusted.			
	Option	Description										
	<i>allow</i>	Allow the server certificate.										
	<i>block</i>	Block the session.										
<i>ignore</i>	Re-sign the server certificate as trusted.											
inspect-all	Level of SSL inspection.	option	-	disable								

Parameter	Description	Type	Size	Default												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>disable</i></td><td>Disable.</td></tr><tr><td><i>certificate-inspection</i></td><td>Inspect SSL handshake only.</td></tr><tr><td><i>deep-inspection</i></td><td>Full SSL inspection.</td></tr></table>	Option	Description	<i>disable</i>	Disable.	<i>certificate-inspection</i>	Inspect SSL handshake only.	<i>deep-inspection</i>	Full SSL inspection.							
	Option	Description														
	<i>disable</i>	Disable.														
	<i>certificate-inspection</i>	Inspect SSL handshake only.														
<i>deep-inspection</i>	Full SSL inspection.															
min-allowed-ssl-version	Minimum SSL version to be allowed. Flow-based inspection does not support SSL version control.	option	-	tls-1.1												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>ssl-3.0</i></td><td>SSL 3.0.</td></tr><tr><td><i>tls-1.0</i></td><td>TLS 1.0.</td></tr><tr><td><i>tls-1.1</i></td><td>TLS 1.1.</td></tr><tr><td><i>tls-1.2</i></td><td>TLS 1.2.</td></tr><tr><td><i>tls-1.3</i></td><td>TLS 1.3.</td></tr></table>	Option	Description	<i>ssl-3.0</i>	SSL 3.0.	<i>tls-1.0</i>	TLS 1.0.	<i>tls-1.1</i>	TLS 1.1.	<i>tls-1.2</i>	TLS 1.2.	<i>tls-1.3</i>	TLS 1.3.			
	Option	Description														
	<i>ssl-3.0</i>	SSL 3.0.														
	<i>tls-1.0</i>	TLS 1.0.														
	<i>tls-1.1</i>	TLS 1.1.														
	<i>tls-1.2</i>	TLS 1.2.														
<i>tls-1.3</i>	TLS 1.3.															
revoked-server-cert	Action based on server certificate is revoked.	option	-	block												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>allow</i></td><td>Allow the server certificate.</td></tr><tr><td><i>block</i></td><td>Block the session.</td></tr><tr><td><i>ignore</i></td><td>Re-sign the server certificate as trusted.</td></tr></table>	Option	Description	<i>allow</i>	Allow the server certificate.	<i>block</i>	Block the session.	<i>ignore</i>	Re-sign the server certificate as trusted.							
	Option	Description														
	<i>allow</i>	Allow the server certificate.														
	<i>block</i>	Block the session.														
<i>ignore</i>	Re-sign the server certificate as trusted.															
sni-server-cert-check	Check the SNI in the client hello message with the CN or SAN fields in the returned server certificate.	option	-	enable												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Check the SNI in the client hello message with the CN or SAN fields in the returned server certificate. If mismatched, use the CN in the server certificate to do URL filtering.</td></tr><tr><td><i>strict</i></td><td>Check the SNI in the client hello message with the CN or SAN fields in the returned server certificate. If mismatched, close the connection.</td></tr><tr><td><i>disable</i></td><td>Do not check the SNI in the client hello message with the CN or SAN fields in the returned server certificate.</td></tr></table>	Option	Description	<i>enable</i>	Check the SNI in the client hello message with the CN or SAN fields in the returned server certificate. If mismatched, use the CN in the server certificate to do URL filtering.	<i>strict</i>	Check the SNI in the client hello message with the CN or SAN fields in the returned server certificate. If mismatched, close the connection.	<i>disable</i>	Do not check the SNI in the client hello message with the CN or SAN fields in the returned server certificate.							
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	<i>enable</i>	Check the SNI in the client hello message with the CN or SAN fields in the returned server certificate. If mismatched, use the CN in the server certificate to do URL filtering.														
	<i>strict</i>	Check the SNI in the client hello message with the CN or SAN fields in the returned server certificate. If mismatched, close the connection.														
<i>disable</i>	Do not check the SNI in the client hello message with the CN or SAN fields in the returned server certificate.															
unsupported-ssl-cipher	Action based on the SSL cipher used being unsupported.	option	-	allow												

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>allow</i>	Bypass the session when the cipher is not supported.		
	<i>block</i>	Block the session when the cipher is not supported.		
unsupported-ssl-negotiation	Action based on the SSL negotiation used being unsupported.	option	-	allow
	Option	Description		
	<i>allow</i>	Bypass the session when the negotiation is not supported.		
	<i>block</i>	Block the session when the negotiation is not supported.		
unsupported-ssl-version	Action based on the SSL version used being unsupported.	option	-	block
	Option	Description		
	<i>allow</i>	Bypass the session when the version is not supported.		
	<i>block</i>	Block the session when the version is not supported.		
untrusted-server-cert	Action based on server certificate is not issued by a trusted CA.	option	-	allow
	Option	Description		
	<i>allow</i>	Allow the server certificate.		
	<i>block</i>	Block the session.		
	<i>ignore</i>	Re-sign the server certificate as trusted.		

config ssl-exempt

Parameter	Description	Type	Size	Default
address	IPv4 address object.	string	Maximum length: 79	
address6	IPv6 address object.	string	Maximum length: 79	
fortiguard-category	FortiGuard category ID.	integer	Minimum value: 0 Maximum value: 255	0

Parameter	Description	Type	Size	Default												
id	ID number.	integer	Minimum value: 0 Maximum value: 512	0												
regex	Exempt servers by regular expression.	string	Maximum length: 255													
type	Type of address object (IPv4 or IPv6) or FortiGuard category.	option	-	fortiguard-category												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>fortiguard-category</td><td>FortiGuard category.</td></tr><tr><td>address</td><td>Firewall IPv4 address.</td></tr><tr><td>address6</td><td>Firewall IPv6 address.</td></tr><tr><td>wildcard-fqdn</td><td>Fully Qualified Domain Name with wildcard characters.</td></tr><tr><td>regex</td><td>Regular expression FQDN.</td></tr></table>				Option	Description	fortiguard-category	FortiGuard category.	address	Firewall IPv4 address.	address6	Firewall IPv6 address.	wildcard-fqdn	Fully Qualified Domain Name with wildcard characters.	regex	Regular expression FQDN.
	Option	Description														
	fortiguard-category	FortiGuard category.														
	address	Firewall IPv4 address.														
	address6	Firewall IPv6 address.														
	wildcard-fqdn	Fully Qualified Domain Name with wildcard characters.														
regex	Regular expression FQDN.															
wildcard-fqdn	Exempt servers by wildcard FQDN.	string	Maximum length: 79													

config ssl-server

Parameter	Description	Type	Size	Default								
ftps-client-certificate	Action based on received client certificate during the FTPS handshake.	option	-	bypass								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>bypass</td><td>Bypass the session.</td></tr><tr><td>inspect</td><td>Inspect the session.</td></tr><tr><td>block</td><td>Block the session.</td></tr></table>	Option	Description	bypass	Bypass the session.	inspect	Inspect the session.	block	Block the session.			
Option	Description											
bypass	Bypass the session.											
inspect	Inspect the session.											
block	Block the session.											
https-client-certificate	Action based on received client certificate during the HTTPS handshake.	option	-	bypass								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>bypass</td><td>Bypass the session.</td></tr><tr><td>inspect</td><td>Inspect the session.</td></tr><tr><td>block</td><td>Block the session.</td></tr></table>	Option	Description	bypass	Bypass the session.	inspect	Inspect the session.	block	Block the session.			
Option	Description											
bypass	Bypass the session.											
inspect	Inspect the session.											
block	Block the session.											

Parameter	Description	Type	Size	Default								
id	SSL server ID.	integer	Minimum value: 0 0 Maximum value: 4294967295	0								
imaps-client-certificate	Action based on received client certificate during the IMAPS handshake.	option	-	bypass								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>bypass</td><td>Bypass the session.</td></tr><tr><td>inspect</td><td>Inspect the session.</td></tr><tr><td>block</td><td>Block the session.</td></tr></table>	Option	Description	bypass	Bypass the session.	inspect	Inspect the session.	block	Block the session.			
Option	Description											
bypass	Bypass the session.											
inspect	Inspect the session.											
block	Block the session.											
ip	IPv4 address of the SSL server.	ipv4-address-any	Not Specified	0.0.0.0								
pop3s-client-certificate	Action based on received client certificate during the POP3S handshake.	option	-	bypass								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>bypass</td><td>Bypass the session.</td></tr><tr><td>inspect</td><td>Inspect the session.</td></tr><tr><td>block</td><td>Block the session.</td></tr></table>	Option	Description	bypass	Bypass the session.	inspect	Inspect the session.	block	Block the session.			
Option	Description											
bypass	Bypass the session.											
inspect	Inspect the session.											
block	Block the session.											
smtps-client-certificate	Action based on received client certificate during the SMTPS handshake.	option	-	bypass								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>bypass</td><td>Bypass the session.</td></tr><tr><td>inspect</td><td>Inspect the session.</td></tr><tr><td>block</td><td>Block the session.</td></tr></table>	Option	Description	bypass	Bypass the session.	inspect	Inspect the session.	block	Block the session.			
Option	Description											
bypass	Bypass the session.											
inspect	Inspect the session.											
block	Block the session.											
ssl-other-client-certificate	Action based on received client certificate during an SSL protocol handshake.	option	-	bypass								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>bypass</td><td>Bypass the session.</td></tr><tr><td>inspect</td><td>Inspect the session.</td></tr><tr><td>block</td><td>Block the session.</td></tr></table>	Option	Description	bypass	Bypass the session.	inspect	Inspect the session.	block	Block the session.			
Option	Description											
bypass	Bypass the session.											
inspect	Inspect the session.											
block	Block the session.											

config firewall traffic-class

Configure names for shaping classes.

```
config firewall traffic-class
  Description: Configure names for shaping classes.
  edit <class-id>
    set class-name {string}
  next
end
```

config firewall traffic-class

Parameter	Description	Type	Size	Default
class-id	Class ID to be named.	integer	Minimum value: 2 Maximum value: 31	0
class-name	Define the name for this class-id.	string	Maximum length: 35	

config firewall ttl-policy

Configure TTL policies.

```
config firewall ttl-policy
  Description: Configure TTL policies.
  edit <id>
    set action [accept|deny]
    set schedule {string}
    set service <name1>, <name2>, ...
    set srcaddr <name1>, <name2>, ...
    set srcintf {string}
    set status [enable|disable]
    set ttl {user}
  next
end
```

config firewall ttl-policy

Parameter	Description	Type	Size	Default
action	Action to be performed on traffic matching this policy (default = deny).	option	-	deny
	Option	Description		
	accept	Allow traffic matching this policy.		
	deny	Deny or block traffic matching this policy.		
id	ID.	integer	Minimum value: 0 Maximum value: 4294967295	0
schedule	Schedule object from available options.	string	Maximum length: 35	
service <name>	Service object(s) from available options. Separate multiple names with a space. Service name.	string	Maximum length: 79	
srcaddr <name>	Source address object(s) from available options. Separate multiple names with a space. Address name.	string	Maximum length: 79	
srcintf	Source interface name from available interfaces.	string	Maximum length: 35	
status	Enable/disable this TTL policy.	option	-	enable
	Option	Description		
	enable	Enable this TTL policy.		
	disable	Disable this TTL policy.		
ttl	Value/range to match against the packet's Time to Live value (format: ttl[- ttl_high], 1 - 255).	user	Not Specified	

config firewall vendor-mac

Show vendor and the MAC address they have. Read-only.

```
config firewall vendor-mac
  Description: Show vendor and the MAC address they have. Read-only.
  edit <id>
    set mac-number {integer}
    set name {string}
```

```
        set obsolete {integer}
    next
end
```

config firewall vendor-mac

Parameter	Description	Type	Size	Default
id	Vendor ID. Read-only.	integer	Minimum value: 0 0 Maximum value: 4294967295	0
mac-number	Total number of MAC addresses. Read-only.	integer	Minimum value: 0 0 Maximum value: 4294967295	0
name	Vendor name. Read-only.	string	Maximum length: 63	
obsolete	Indicates whether the Vendor ID can be used. Read-only.	integer	Minimum value: 0 0 Maximum value: 255	0

config firewall vip

Configure virtual IP for IPv4.

```
config firewall vip
    Description: Configure virtual IP for IPv4.
    edit <name>
        set add-nat46-route [disable|enable]
        set arp-reply [disable|enable]
        set color {integer}
        set comment {var-string}
        set dns-mapping-ttl {integer}
        set extaddr <name1>, <name2>, ...
        set extintf {string}
        set extip {user}
        set extport {user}
        set gratuitous-arp-interval {integer}
        set http-cookie-age {integer}
        set http-cookie-domain {string}
        set http-cookie-domain-from-host [disable|enable]
        set http-cookie-generation {integer}
        set http-cookie-path {string}
        set http-cookie-share [disable|same-ip]
        set http-ip-header [enable|disable]
```

```

set http-ip-header-name {string}
set http-multiplex [enable|disable]
set http-multiplex-max-request {integer}
set http-multiplex-ttl {integer}
set http-redirect [enable|disable]
set http-supported-max-version [http1|http2]
set https-cookie-secure [disable|enable]
set id {integer}
set ipv6-mappedip {user}
set ipv6-mappedport {user}
set ldb-method [static|round-robin|...]
set mapped-addr {string}
set mappedip <range1>, <range2>, ...
set mappedport {user}
set max-embryonic-connections {integer}
set monitor <name1>, <name2>, ...
set nat-source-vip [disable|enable]
set nat44 [disable|enable]
set nat46 [disable|enable]
set outlook-web-access [disable|enable]
set persistence [none|http-cookie|...]
set portforward [disable|enable]
set portmapping-type [1-to-1|m-to-n]
set protocol [tcp|udp|...]
config realservers

```

Description: Select the real servers that this server load balancing VIP will distribute traffic to.

```

edit <id>
    set address {string}
    set client-ip {user}
    set healthcheck [disable|enable|...]
    set holddown-interval {integer}
    set http-host {string}
    set ip {user}
    set max-connections {integer}
    set monitor <name1>, <name2>, ...
    set port {integer}
    set status [active|standby|...]
    set translate-host [enable|disable]
    set type [ip|address]
    set weight {integer}
next
end
set server-type [http|https|...]
set service <name1>, <name2>, ...
set src-filter <range1>, <range2>, ...
set srcintf-filter <interface-name1>, <interface-name2>, ...
set ssl-accept-ffdhe-groups [enable|disable]
set ssl-algorithm [high|medium|...]
set ssl-certificate {string}
config ssl-cipher-suites

```

Description: SSL/TLS cipher suites acceptable from a client, ordered by priority.

```

        edit <priority>
            set cipher [TLS-AES-128-GCM-SHA256|TLS-AES-256-GCM-SHA384|...]
            set versions {option1}, {option2}, ...
        next
    end
    set ssl-client-fallback [disable|enable]
    set ssl-client-rekey-count {integer}
    set ssl-client-renegotiation [allow|deny|...]
    set ssl-client-session-state-max {integer}
    set ssl-client-session-state-timeout {integer}
    set ssl-client-session-state-type [disable|time|...]
    set ssl-dh-bits [768|1024|...]
    set ssl-hpkip [disable|enable|...]
    set ssl-hpkip-age {integer}
    set ssl-hpkip-backup {string}
    set ssl-hpkip-include-subdomains [disable|enable]
    set ssl-hpkip-primary {string}
    set ssl-hpkip-report-uri {var-string}
    set ssl-hsts [disable|enable]
    set ssl-hsts-age {integer}
    set ssl-hsts-include-subdomains [disable|enable]
    set ssl-http-location-conversion [enable|disable]
    set ssl-http-match-host [enable|disable]
    set ssl-max-version [ssl-3.0|tls-1.0|...]
    set ssl-min-version [ssl-3.0|tls-1.0|...]
    set ssl-mode [half|full]
    set ssl-pfs [require|deny|...]
    set ssl-send-empty-frags [enable|disable]
    set ssl-server-algorithm [high|medium|...]
    config ssl-server-cipher-suites
        Description: SSL/TLS cipher suites to offer to a server, ordered by priority.
        edit <priority>
            set cipher [TLS-AES-128-GCM-SHA256|TLS-AES-256-GCM-SHA384|...]
            set versions {option1}, {option2}, ...
        next
    end
    set ssl-server-max-version [ssl-3.0|tls-1.0|...]
    set ssl-server-min-version [ssl-3.0|tls-1.0|...]
    set ssl-server-renegotiation [enable|disable]
    set ssl-server-session-state-max {integer}
    set ssl-server-session-state-timeout {integer}
    set ssl-server-session-state-type [disable|time|...]
    set status [disable|enable]
    set type [static-nat|load-balance|...]
    set uuid {uuid}
    set weblogic-server [disable|enable]
    set websphere-server [disable|enable]
next
end

```

config firewall vip

Parameter	Description	Type	Size	Default						
add-nat46-route	Enable/disable adding NAT46 route.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Disable adding NAT46 route.</td></tr><tr><td>enable</td><td>Enable adding NAT46 route.</td></tr></table>	Option	Description	disable	Disable adding NAT46 route.	enable	Enable adding NAT46 route.			
Option	Description									
disable	Disable adding NAT46 route.									
enable	Enable adding NAT46 route.									
arp-reply	Enable to respond to ARP requests for this virtual IP address. Enabled by default.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Disable ARP reply.</td></tr><tr><td>enable</td><td>Enable ARP reply.</td></tr></table>	Option	Description	disable	Disable ARP reply.	enable	Enable ARP reply.			
Option	Description									
disable	Disable ARP reply.									
enable	Enable ARP reply.									
color	Color of icon on the GUI.	integer	Minimum value: 0 Maximum value: 32							
comment	Comment.	var-string	Maximum length: 255							
dns-mapping-ttl	DNS mapping TTL (Set to zero to use TTL in DNS response, default = 0).	integer	Minimum value: 0 Maximum value: 604800							
extaddr <name>	External FQDN address name. Address name.	string	Maximum length: 79							
extintf	Interface connected to the source network that receives the packets that will be forwarded to the destination network.	string	Maximum length: 35							
extip	IP address or address range on the external interface that you want to map to an address or address range on the destination network.	user	Not Specified							
extport	Incoming port number range that you want to map to a port number range on the destination network.	user	Not Specified							

Parameter	Description	Type	Size	Default
gratuitous-arp-interval	Enable to have the VIP send gratuitous ARPs. 0=disabled. Set from 5 up to 8640000 seconds to enable.	integer	Minimum value: 5 Maximum value: 8640000	0
http-cookie-age	Time in minutes that client web browsers should keep a cookie. Default is 60 minutes. 0 = no time limit.	integer	Minimum value: 0 Maximum value: 525600	60
http-cookie-domain	Domain that HTTP cookie persistence should apply to.	string	Maximum length: 35	
http-cookie-domain-from-host	Enable/disable use of HTTP cookie domain from host field in HTTP.	option	-	disable
	Option		Description	
	disable		Disable use of HTTP cookie domain from host field in HTTP (use http-cooke-domain setting).	
	enable		Enable use of HTTP cookie domain from host field in HTTP.	
http-cookie-generation	Generation of HTTP cookie to be accepted. Changing invalidates all existing cookies.	integer	Minimum value: 0 Maximum value: 4294967295	
http-cookie-path	Limit HTTP cookie persistence to the specified path.	string	Maximum length: 35	
http-cookie-share	Control sharing of cookies across virtual servers. Use of same-ip means a cookie from one virtual server can be used by another. Disable stops cookie sharing.	option	-	same-ip
	Option		Description	
	disable		Only allow HTTP cookie to match this virtual server.	
	same-ip		Allow HTTP cookie to match any virtual server with same IP.	
http-ip-header	For HTTP multiplexing, enable to add the original client IP address in the XForwarded-For HTTP header.	option	-	disable
	Option		Description	
	enable		Enable adding HTTP header.	
	disable		Disable adding HTTP header.	

Parameter	Description	Type	Size	Default						
http-ip-header-name	For HTTP multiplexing, enter a custom HTTPS header name. The original client IP address is added to this header. If empty, X-Forwarded-For is used.	string	Maximum length: 35							
http-multiplex	Enable/disable HTTP multiplexing.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable HTTP session multiplexing.</td></tr><tr><td>disable</td><td>Disable HTTP session multiplexing.</td></tr></table>	Option	Description	enable	Enable HTTP session multiplexing.	disable	Disable HTTP session multiplexing.			
Option	Description									
enable	Enable HTTP session multiplexing.									
disable	Disable HTTP session multiplexing.									
http-multiplex-max-request	Maximum number of requests that a multiplex server can handle before disconnecting sessions (default = unlimited).	integer	Minimum value: 0 Maximum value: 2147483647							
http-multiplex-ttl	Time-to-live for idle connections to servers.	integer	Minimum value: 0 Maximum value: 2147483647	15						
http-redirect	Enable/disable redirection of HTTP to HTTPS.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable redirection of HTTP to HTTPS.</td></tr><tr><td>disable</td><td>Disable redirection of HTTP to HTTPS.</td></tr></table>	Option	Description	enable	Enable redirection of HTTP to HTTPS.	disable	Disable redirection of HTTP to HTTPS.			
Option	Description									
enable	Enable redirection of HTTP to HTTPS.									
disable	Disable redirection of HTTP to HTTPS.									
http-supported-max-version	Maximum supported HTTP versions. default = HTTP2	option	-	http2						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>http1</td><td>Support HTTP 1.1 and HTTP1.</td></tr><tr><td>http2</td><td>Support HTTP2, HTTP 1.1, and HTTP1.</td></tr></table>	Option	Description	http1	Support HTTP 1.1 and HTTP1.	http2	Support HTTP2, HTTP 1.1, and HTTP1.			
Option	Description									
http1	Support HTTP 1.1 and HTTP1.									
http2	Support HTTP2, HTTP 1.1, and HTTP1.									
https-cookie-secure	Enable/disable verification that inserted HTTPS cookies are secure.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Do not mark cookie as secure, allow sharing between an HTTP and HTTPS connection.</td></tr><tr><td>enable</td><td>Mark inserted cookie as secure, cookie can only be used for HTTPS a connection.</td></tr></table>	Option	Description	disable	Do not mark cookie as secure, allow sharing between an HTTP and HTTPS connection.	enable	Mark inserted cookie as secure, cookie can only be used for HTTPS a connection.			
Option	Description									
disable	Do not mark cookie as secure, allow sharing between an HTTP and HTTPS connection.									
enable	Mark inserted cookie as secure, cookie can only be used for HTTPS a connection.									

Parameter	Description	Type	Size	Default																
id	Custom defined ID.	integer	Minimum value: 0 0 Maximum value: 65535																	
ipv6-mappedip	Range of mapped IPv6 addresses. Specify the start IPv6 address followed by a space and the end IPv6 address.	user	Not Specified																	
ipv6-mappedport	IPv6 port number range on the destination network to which the external port number range is mapped.	user	Not Specified																	
ldb-method	Method used to distribute sessions to real servers.	option	-	static																
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>static</i></td><td>Distribute to server based on source IP.</td></tr><tr><td><i>round-robin</i></td><td>Distribute to server based round robin order.</td></tr><tr><td><i>weighted</i></td><td>Distribute to server based on weight.</td></tr><tr><td><i>least-session</i></td><td>Distribute to server with lowest session count.</td></tr><tr><td><i>least-rtt</i></td><td>Distribute to server with lowest Round-Trip-Time.</td></tr><tr><td><i>first-alive</i></td><td>Distribute to the first server that is alive.</td></tr><tr><td><i>http-host</i></td><td>Distribute to server based on host field in HTTP header.</td></tr></table>				Option	Description	<i>static</i>	Distribute to server based on source IP.	<i>round-robin</i>	Distribute to server based round robin order.	<i>weighted</i>	Distribute to server based on weight.	<i>least-session</i>	Distribute to server with lowest session count.	<i>least-rtt</i>	Distribute to server with lowest Round-Trip-Time.	<i>first-alive</i>	Distribute to the first server that is alive.	<i>http-host</i>	Distribute to server based on host field in HTTP header.
	Option	Description																		
	<i>static</i>	Distribute to server based on source IP.																		
	<i>round-robin</i>	Distribute to server based round robin order.																		
	<i>weighted</i>	Distribute to server based on weight.																		
	<i>least-session</i>	Distribute to server with lowest session count.																		
	<i>least-rtt</i>	Distribute to server with lowest Round-Trip-Time.																		
	<i>first-alive</i>	Distribute to the first server that is alive.																		
<i>http-host</i>	Distribute to server based on host field in HTTP header.																			
mapped-addr	Mapped FQDN address name.	string	Maximum length: 79																	
mappedip <range>	IP address or address range on the destination network to which the external IP address is mapped. Mapped IP range.	string	Maximum length: 79																	
mappedport	Port number range on the destination network to which the external port number range is mapped.	user	Not Specified																	
max-embryonic-connections	Maximum number of incomplete connections.	integer	Minimum value: 1000 0 Maximum value: 100000																	
monitor <name>	Name of the health check monitor to use when polling to determine a virtual server's connectivity status. Health monitor name.	string	Maximum length: 79																	

Parameter	Description	Type	Size	Default								
name	Virtual IP name.	string	Maximum length: 79									
nat-source-vip	Enable/disable forcing the source NAT mapped IP to the external IP for all traffic.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Force only the source NAT mapped IP to the external IP for traffic egressing the external interface of the VIP.</td></tr><tr><td>enable</td><td>Force the source NAT mapped IP to the external IP for all traffic.</td></tr></table>	Option	Description	disable	Force only the source NAT mapped IP to the external IP for traffic egressing the external interface of the VIP.	enable	Force the source NAT mapped IP to the external IP for all traffic.					
Option	Description											
disable	Force only the source NAT mapped IP to the external IP for traffic egressing the external interface of the VIP.											
enable	Force the source NAT mapped IP to the external IP for all traffic.											
nat44	Enable/disable NAT44.	option	-	enable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Disable NAT44.</td></tr><tr><td>enable</td><td>Enable NAT44.</td></tr></table>	Option	Description	disable	Disable NAT44.	enable	Enable NAT44.					
Option	Description											
disable	Disable NAT44.											
enable	Enable NAT44.											
nat46	Enable/disable NAT46.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Disable NAT46.</td></tr><tr><td>enable</td><td>Enable NAT46.</td></tr></table>	Option	Description	disable	Disable NAT46.	enable	Enable NAT46.					
Option	Description											
disable	Disable NAT46.											
enable	Enable NAT46.											
outlook-web-access	Enable to add the Front-End-Https header for Microsoft Outlook Web Access.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Disable Outlook Web Access support.</td></tr><tr><td>enable</td><td>Enable Outlook Web Access support.</td></tr></table>	Option	Description	disable	Disable Outlook Web Access support.	enable	Enable Outlook Web Access support.					
Option	Description											
disable	Disable Outlook Web Access support.											
enable	Enable Outlook Web Access support.											
persistence	Configure how to make sure that clients connect to the same server every time they make a request that is part of the same session.	option	-	none								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>none</td><td>None.</td></tr><tr><td>http-cookie</td><td>HTTP cookie.</td></tr><tr><td>ssl-session-id</td><td>SSL session ID.</td></tr></table>	Option	Description	none	None.	http-cookie	HTTP cookie.	ssl-session-id	SSL session ID.			
Option	Description											
none	None.											
http-cookie	HTTP cookie.											
ssl-session-id	SSL session ID.											

Parameter	Description	Type	Size	Default																				
portforward	Enable/disable port forwarding.	option	-	disable																				
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>disable</i></td><td>Disable port forward.</td></tr><tr><td><i>enable</i></td><td>Enable port forward.</td></tr></table>	Option	Description	<i>disable</i>	Disable port forward.	<i>enable</i>	Enable port forward.																	
Option	Description																							
<i>disable</i>	Disable port forward.																							
<i>enable</i>	Enable port forward.																							
portmapping-type	Port mapping type.	option	-	1-to-1																				
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>1-to-1</i></td><td>One to one.</td></tr><tr><td><i>m-to-n</i></td><td>Many to many.</td></tr></table>	Option	Description	<i>1-to-1</i>	One to one.	<i>m-to-n</i>	Many to many.																	
Option	Description																							
<i>1-to-1</i>	One to one.																							
<i>m-to-n</i>	Many to many.																							
protocol	Protocol to use when forwarding packets.	option	-	tcp																				
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>tcp</i></td><td>TCP.</td></tr><tr><td><i>udp</i></td><td>UDP.</td></tr><tr><td><i>sctp</i></td><td>SCTP.</td></tr><tr><td><i>icmp</i></td><td>ICMP.</td></tr></table>	Option	Description	<i>tcp</i>	TCP.	<i>udp</i>	UDP.	<i>sctp</i>	SCTP.	<i>icmp</i>	ICMP.													
Option	Description																							
<i>tcp</i>	TCP.																							
<i>udp</i>	UDP.																							
<i>sctp</i>	SCTP.																							
<i>icmp</i>	ICMP.																							
server-type	Protocol to be load balanced by the virtual server (also called the server load balance virtual IP).	option	-																					
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>http</i></td><td>HTTP.</td></tr><tr><td><i>https</i></td><td>HTTPS.</td></tr><tr><td><i>imaps</i></td><td>IMAPS.</td></tr><tr><td><i>pop3s</i></td><td>POP3S.</td></tr><tr><td><i>smtps</i></td><td>SMTPS.</td></tr><tr><td><i>ssl</i></td><td>SSL.</td></tr><tr><td><i>tcp</i></td><td>TCP.</td></tr><tr><td><i>udp</i></td><td>UDP.</td></tr><tr><td><i>ip</i></td><td>IP.</td></tr></table>	Option	Description	<i>http</i>	HTTP.	<i>https</i>	HTTPS.	<i>imaps</i>	IMAPS.	<i>pop3s</i>	POP3S.	<i>smtps</i>	SMTPS.	<i>ssl</i>	SSL.	<i>tcp</i>	TCP.	<i>udp</i>	UDP.	<i>ip</i>	IP.			
Option	Description																							
<i>http</i>	HTTP.																							
<i>https</i>	HTTPS.																							
<i>imaps</i>	IMAPS.																							
<i>pop3s</i>	POP3S.																							
<i>smtps</i>	SMTPS.																							
<i>ssl</i>	SSL.																							
<i>tcp</i>	TCP.																							
<i>udp</i>	UDP.																							
<i>ip</i>	IP.																							
service <name>	Service name. Service name.	string	Maximum length: 79																					

Parameter	Description	Type	Size	Default										
src-filter <range>	Source address filter. Each address must be either an IP/subnet (x.x.x.x/n) or a range (x.x.x.x-y.y.y.y). Separate addresses with spaces. Source-filter range.	string	Maximum length: 79											
srcintf-filter <interface-name>	Interfaces to which the VIP applies. Separate the names with spaces. Interface name.	string	Maximum length: 79											
ssl-accept-ffdhe-groups	Enable/disable FFDHE cipher suite for SSL key exchange.	option	-	enable										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Accept FFDHE groups.</td></tr><tr><td>disable</td><td>Do not accept FFDHE groups.</td></tr></table>				Option	Description	enable	Accept FFDHE groups.	disable	Do not accept FFDHE groups.				
Option	Description													
enable	Accept FFDHE groups.													
disable	Do not accept FFDHE groups.													
ssl-algorithm	Permitted encryption algorithms for SSL sessions according to encryption strength.	option	-	high										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>high</td><td>High encryption. Allow only AES and ChaCha.</td></tr><tr><td>medium</td><td>Medium encryption. Allow AES, ChaCha, 3DES, and RC4.</td></tr><tr><td>low</td><td>Low encryption. Allow AES, ChaCha, 3DES, RC4, and DES.</td></tr><tr><td>custom</td><td>Custom encryption. Use config ssl-cipher-suites to select the cipher suites that are allowed.</td></tr></table>				Option	Description	high	High encryption. Allow only AES and ChaCha.	medium	Medium encryption. Allow AES, ChaCha, 3DES, and RC4.	low	Low encryption. Allow AES, ChaCha, 3DES, RC4, and DES.	custom	Custom encryption. Use config ssl-cipher-suites to select the cipher suites that are allowed.
Option	Description													
high	High encryption. Allow only AES and ChaCha.													
medium	Medium encryption. Allow AES, ChaCha, 3DES, and RC4.													
low	Low encryption. Allow AES, ChaCha, 3DES, RC4, and DES.													
custom	Custom encryption. Use config ssl-cipher-suites to select the cipher suites that are allowed.													
ssl-certificate	The name of the certificate to use for SSL handshake.	string	Maximum length: 35											
ssl-client-fallback	Enable/disable support for preventing Downgrade Attacks on client connections (RFC 7507).	option	-	enable										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Disable.</td></tr><tr><td>enable</td><td>Enable.</td></tr></table>				Option	Description	disable	Disable.	enable	Enable.				
Option	Description													
disable	Disable.													
enable	Enable.													
ssl-client-rekey-count	Maximum length of data in MB before triggering a client rekey (0 = disable).	integer	Minimum value: 0 200 Maximum value: 1048576											

Parameter	Description	Type	Size	Default														
ssl-client-renegotiation	Allow, deny, or require secure renegotiation of client sessions to comply with RFC 5746.	option	-	secure														
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>allow</i></td><td>Allow a SSL client to renegotiate.</td></tr><tr><td><i>deny</i></td><td>Abort any client initiated SSL re-negotiation attempt.</td></tr><tr><td><i>secure</i></td><td>Abort any client initiated SSL re-negotiation attempt that does not use RFC 5746 Secure Renegotiation.</td></tr></table>	Option	Description	<i>allow</i>	Allow a SSL client to renegotiate.	<i>deny</i>	Abort any client initiated SSL re-negotiation attempt.	<i>secure</i>	Abort any client initiated SSL re-negotiation attempt that does not use RFC 5746 Secure Renegotiation.									
Option	Description																	
<i>allow</i>	Allow a SSL client to renegotiate.																	
<i>deny</i>	Abort any client initiated SSL re-negotiation attempt.																	
<i>secure</i>	Abort any client initiated SSL re-negotiation attempt that does not use RFC 5746 Secure Renegotiation.																	
ssl-client-session-state-max	Maximum number of client to FortiGate SSL session states to keep.	integer	Minimum value: 1 Maximum value: 10000	1000														
ssl-client-session-state-timeout	Number of minutes to keep client to FortiGate SSL session state.	integer	Minimum value: 1 Maximum value: 14400	30														
ssl-client-session-state-type	How to expire SSL sessions for the segment of the SSL connection between the client and the FortiGate.	option	-	both														
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>disable</i></td><td>Do not keep session states.</td></tr><tr><td><i>time</i></td><td>Expire session states after this many minutes.</td></tr><tr><td><i>count</i></td><td>Expire session states when this maximum is reached.</td></tr><tr><td><i>both</i></td><td>Expire session states based on time or count, whichever occurs first.</td></tr></table>	Option	Description	<i>disable</i>	Do not keep session states.	<i>time</i>	Expire session states after this many minutes.	<i>count</i>	Expire session states when this maximum is reached.	<i>both</i>	Expire session states based on time or count, whichever occurs first.							
Option	Description																	
<i>disable</i>	Do not keep session states.																	
<i>time</i>	Expire session states after this many minutes.																	
<i>count</i>	Expire session states when this maximum is reached.																	
<i>both</i>	Expire session states based on time or count, whichever occurs first.																	
ssl-dh-bits	Number of bits to use in the Diffie-Hellman exchange for RSA encryption of SSL sessions.	option	-	2048														
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>768</i></td><td>768-bit Diffie-Hellman prime.</td></tr><tr><td><i>1024</i></td><td>1024-bit Diffie-Hellman prime.</td></tr><tr><td><i>1536</i></td><td>1536-bit Diffie-Hellman prime.</td></tr><tr><td><i>2048</i></td><td>2048-bit Diffie-Hellman prime.</td></tr><tr><td><i>3072</i></td><td>3072-bit Diffie-Hellman prime.</td></tr><tr><td><i>4096</i></td><td>4096-bit Diffie-Hellman prime.</td></tr></table>	Option	Description	<i>768</i>	768-bit Diffie-Hellman prime.	<i>1024</i>	1024-bit Diffie-Hellman prime.	<i>1536</i>	1536-bit Diffie-Hellman prime.	<i>2048</i>	2048-bit Diffie-Hellman prime.	<i>3072</i>	3072-bit Diffie-Hellman prime.	<i>4096</i>	4096-bit Diffie-Hellman prime.			
Option	Description																	
<i>768</i>	768-bit Diffie-Hellman prime.																	
<i>1024</i>	1024-bit Diffie-Hellman prime.																	
<i>1536</i>	1536-bit Diffie-Hellman prime.																	
<i>2048</i>	2048-bit Diffie-Hellman prime.																	
<i>3072</i>	3072-bit Diffie-Hellman prime.																	
<i>4096</i>	4096-bit Diffie-Hellman prime.																	
ssl-hpkip	Enable/disable including HPKP header in response.	option	-	disable														

Parameter	Description	Type	Size	Default								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>disable</i></td><td>Do not add a HPKP header to each HTTP response.</td></tr><tr><td><i>enable</i></td><td>Add a HPKP header to each a HTTP response.</td></tr><tr><td><i>report-only</i></td><td>Add a HPKP Report-Only header to each HTTP response.</td></tr></table>	Option	Description	<i>disable</i>	Do not add a HPKP header to each HTTP response.	<i>enable</i>	Add a HPKP header to each a HTTP response.	<i>report-only</i>	Add a HPKP Report-Only header to each HTTP response.			
	Option	Description										
	<i>disable</i>	Do not add a HPKP header to each HTTP response.										
	<i>enable</i>	Add a HPKP header to each a HTTP response.										
<i>report-only</i>	Add a HPKP Report-Only header to each HTTP response.											
ssl-hpkp-age	Number of seconds the client should honor the HPKP setting.	integer	Minimum value: 60 Maximum value: 157680000	5184000								
ssl-hpkp-backup	Certificate to generate backup HPKP pin from.	string	Maximum length: 79									
ssl-hpkp-include-subdomains	Indicate that HPKP header applies to all subdomains.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>disable</i></td><td>HPKP header does not apply to subdomains.</td></tr><tr><td><i>enable</i></td><td>HPKP header applies to subdomains.</td></tr></table>	Option	Description	<i>disable</i>	HPKP header does not apply to subdomains.	<i>enable</i>	HPKP header applies to subdomains.					
	Option	Description										
	<i>disable</i>	HPKP header does not apply to subdomains.										
<i>enable</i>	HPKP header applies to subdomains.											
ssl-hpkp-primary	Certificate to generate primary HPKP pin from.	string	Maximum length: 79									
ssl-hpkp-report-uri	URL to report HPKP violations to.	var-string	Maximum length: 255									
ssl-hsts	Enable/disable including HSTS header in response.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>disable</i></td><td>Do not add a HSTS header to each a HTTP response.</td></tr><tr><td><i>enable</i></td><td>Add a HSTS header to each HTTP response.</td></tr></table>	Option	Description	<i>disable</i>	Do not add a HSTS header to each a HTTP response.	<i>enable</i>	Add a HSTS header to each HTTP response.					
	Option	Description										
	<i>disable</i>	Do not add a HSTS header to each a HTTP response.										
<i>enable</i>	Add a HSTS header to each HTTP response.											
ssl-hsts-age	Number of seconds the client should honor the HSTS setting.	integer	Minimum value: 60 Maximum value: 157680000	5184000								
ssl-hsts-include-subdomains	Indicate that HSTS header applies to all subdomains.	option	-	disable								

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>disable</i>	HSTS header does not apply to subdomains.		
	<i>enable</i>	HSTS header applies to subdomains.		
ssl-http-location-conversion	Enable to replace HTTP with HTTPS in the reply's Location HTTP header field.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable HTTP location conversion.		
	<i>disable</i>	Disable HTTP location conversion.		
ssl-http-match-host	Enable/disable HTTP host matching for location conversion.	option	-	enable
	Option	Description		
	<i>enable</i>	Match HTTP host in response header.		
	<i>disable</i>	Do not match HTTP host.		
ssl-max-version	Highest SSL/TLS version acceptable from a client.	option	-	tls-1.3
	Option	Description		
	<i>ssl-3.0</i>	SSL 3.0.		
	<i>tls-1.0</i>	TLS 1.0.		
	<i>tls-1.1</i>	TLS 1.1.		
	<i>tls-1.2</i>	TLS 1.2.		
	<i>tls-1.3</i>	TLS 1.3.		
ssl-min-version	Lowest SSL/TLS version acceptable from a client.	option	-	tls-1.1
	Option	Description		
	<i>ssl-3.0</i>	SSL 3.0.		
	<i>tls-1.0</i>	TLS 1.0.		
	<i>tls-1.1</i>	TLS 1.1.		
	<i>tls-1.2</i>	TLS 1.2.		
	<i>tls-1.3</i>	TLS 1.3.		

Parameter	Description	Type	Size	Default										
ssl-mode	Apply SSL offloading between the client and the FortiGate (half) or from the client to the FortiGate and from the FortiGate to the server (full).	option	-	half										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>half</td><td>Client to FortiGate SSL.</td></tr><tr><td>full</td><td>Client to FortiGate and FortiGate to Server SSL.</td></tr></table>	Option	Description	half	Client to FortiGate SSL.	full	Client to FortiGate and FortiGate to Server SSL.							
Option	Description													
half	Client to FortiGate SSL.													
full	Client to FortiGate and FortiGate to Server SSL.													
ssl-pfs	Select the cipher suites that can be used for SSL perfect forward secrecy (PFS). Applies to both client and server sessions.	option	-	require										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>require</td><td>Allow only Diffie-Hellman cipher-suites, so PFS is applied.</td></tr><tr><td>deny</td><td>Allow only non-Diffie-Hellman cipher-suites, so PFS is not applied.</td></tr><tr><td>allow</td><td>Allow use of any cipher suite so PFS may or may not be used depending on the cipher suite selected.</td></tr></table>	Option	Description	require	Allow only Diffie-Hellman cipher-suites, so PFS is applied.	deny	Allow only non-Diffie-Hellman cipher-suites, so PFS is not applied.	allow	Allow use of any cipher suite so PFS may or may not be used depending on the cipher suite selected.					
Option	Description													
require	Allow only Diffie-Hellman cipher-suites, so PFS is applied.													
deny	Allow only non-Diffie-Hellman cipher-suites, so PFS is not applied.													
allow	Allow use of any cipher suite so PFS may or may not be used depending on the cipher suite selected.													
ssl-send-empty-frags	Enable/disable sending empty fragments to avoid CBC IV attacks (SSL 3.0 & TLS 1.0 only). May need to be disabled for compatibility with older systems.	option	-	enable										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Send empty fragments.</td></tr><tr><td>disable</td><td>Do not send empty fragments.</td></tr></table>	Option	Description	enable	Send empty fragments.	disable	Do not send empty fragments.							
Option	Description													
enable	Send empty fragments.													
disable	Do not send empty fragments.													
ssl-server-algorithm	Permitted encryption algorithms for the server side of SSL full mode sessions according to encryption strength.	option	-	client										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>high</td><td>High encryption. Allow only AES and ChaCha.</td></tr><tr><td>medium</td><td>Medium encryption. Allow AES, ChaCha, 3DES, and RC4.</td></tr><tr><td>low</td><td>Low encryption. Allow AES, ChaCha, 3DES, RC4, and DES.</td></tr><tr><td>custom</td><td>Custom encryption. Use ssl-server-cipher-suites to select the cipher suites that are allowed.</td></tr></table>	Option	Description	high	High encryption. Allow only AES and ChaCha.	medium	Medium encryption. Allow AES, ChaCha, 3DES, and RC4.	low	Low encryption. Allow AES, ChaCha, 3DES, RC4, and DES.	custom	Custom encryption. Use ssl-server-cipher-suites to select the cipher suites that are allowed.			
Option	Description													
high	High encryption. Allow only AES and ChaCha.													
medium	Medium encryption. Allow AES, ChaCha, 3DES, and RC4.													
low	Low encryption. Allow AES, ChaCha, 3DES, RC4, and DES.													
custom	Custom encryption. Use ssl-server-cipher-suites to select the cipher suites that are allowed.													

Parameter	Description	Type	Size	Default														
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>client</i></td><td>Use the same encryption algorithms for both client and server sessions.</td></tr></table>	Option	Description	<i>client</i>	Use the same encryption algorithms for both client and server sessions.													
	Option	Description																
<i>client</i>	Use the same encryption algorithms for both client and server sessions.																	
ssl-server-max-version	Highest SSL/TLS version acceptable from a server. Use the client setting by default.	option	-	client														
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>ssl-3.0</i></td><td>SSL 3.0.</td></tr><tr><td><i>tls-1.0</i></td><td>TLS 1.0.</td></tr><tr><td><i>tls-1.1</i></td><td>TLS 1.1.</td></tr><tr><td><i>tls-1.2</i></td><td>TLS 1.2.</td></tr><tr><td><i>tls-1.3</i></td><td>TLS 1.3.</td></tr><tr><td><i>client</i></td><td>Use same value as client configuration.</td></tr></table>	Option	Description	<i>ssl-3.0</i>	SSL 3.0.	<i>tls-1.0</i>	TLS 1.0.	<i>tls-1.1</i>	TLS 1.1.	<i>tls-1.2</i>	TLS 1.2.	<i>tls-1.3</i>	TLS 1.3.	<i>client</i>	Use same value as client configuration.			
	Option	Description																
	<i>ssl-3.0</i>	SSL 3.0.																
	<i>tls-1.0</i>	TLS 1.0.																
	<i>tls-1.1</i>	TLS 1.1.																
	<i>tls-1.2</i>	TLS 1.2.																
	<i>tls-1.3</i>	TLS 1.3.																
<i>client</i>	Use same value as client configuration.																	
ssl-server-min-version	Lowest SSL/TLS version acceptable from a server. Use the client setting by default.	option	-	client														
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>ssl-3.0</i></td><td>SSL 3.0.</td></tr><tr><td><i>tls-1.0</i></td><td>TLS 1.0.</td></tr><tr><td><i>tls-1.1</i></td><td>TLS 1.1.</td></tr><tr><td><i>tls-1.2</i></td><td>TLS 1.2.</td></tr><tr><td><i>tls-1.3</i></td><td>TLS 1.3.</td></tr><tr><td><i>client</i></td><td>Use same value as client configuration.</td></tr></table>	Option	Description	<i>ssl-3.0</i>	SSL 3.0.	<i>tls-1.0</i>	TLS 1.0.	<i>tls-1.1</i>	TLS 1.1.	<i>tls-1.2</i>	TLS 1.2.	<i>tls-1.3</i>	TLS 1.3.	<i>client</i>	Use same value as client configuration.			
	Option	Description																
	<i>ssl-3.0</i>	SSL 3.0.																
	<i>tls-1.0</i>	TLS 1.0.																
	<i>tls-1.1</i>	TLS 1.1.																
	<i>tls-1.2</i>	TLS 1.2.																
	<i>tls-1.3</i>	TLS 1.3.																
<i>client</i>	Use same value as client configuration.																	
ssl-server-renegotiation	Enable/disable secure renegotiation to comply with RFC 5746.	option	-	enable														
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable secure renegotiation.</td></tr><tr><td><i>disable</i></td><td>Disable secure renegotiation.</td></tr></table>	Option	Description	<i>enable</i>	Enable secure renegotiation.	<i>disable</i>	Disable secure renegotiation.											
	Option	Description																
	<i>enable</i>	Enable secure renegotiation.																
<i>disable</i>	Disable secure renegotiation.																	
ssl-server-session-state-max	Maximum number of FortiGate to Server SSL session states to keep.	integer	Minimum value: 100 1 Maximum value: 10000															

Parameter	Description	Type	Size	Default														
ssl-server-session-state-timeout	Number of minutes to keep FortiGate to Server SSL session state.	integer	Minimum value: 1 Maximum value: 14400	60														
ssl-server-session-state-type	How to expire SSL sessions for the segment of the SSL connection between the server and the FortiGate.	option	-	both														
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Do not keep session states.</td></tr><tr><td>time</td><td>Expire session states after this many minutes.</td></tr><tr><td>count</td><td>Expire session states when this maximum is reached.</td></tr><tr><td>both</td><td>Expire session states based on time or count, whichever occurs first.</td></tr></table>	Option	Description	disable	Do not keep session states.	time	Expire session states after this many minutes.	count	Expire session states when this maximum is reached.	both	Expire session states based on time or count, whichever occurs first.							
Option	Description																	
disable	Do not keep session states.																	
time	Expire session states after this many minutes.																	
count	Expire session states when this maximum is reached.																	
both	Expire session states based on time or count, whichever occurs first.																	
status	Enable/disable VIP.	option	-	enable														
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Disable the VIP.</td></tr><tr><td>enable</td><td>Enable the VIP.</td></tr></table>	Option	Description	disable	Disable the VIP.	enable	Enable the VIP.											
Option	Description																	
disable	Disable the VIP.																	
enable	Enable the VIP.																	
type	Configure a static NAT, load balance, server load balance, access proxy, DNS translation, or FQDN VIP.	option	-	static-nat														
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>static-nat</td><td>Static NAT.</td></tr><tr><td>load-balance</td><td>Load balance.</td></tr><tr><td>server-load-balance</td><td>Server load balance.</td></tr><tr><td>dns-translation</td><td>DNS translation.</td></tr><tr><td>fqdn</td><td>Fully qualified domain name.</td></tr><tr><td>access-proxy</td><td>Access proxy.</td></tr></table>	Option	Description	static-nat	Static NAT.	load-balance	Load balance.	server-load-balance	Server load balance.	dns-translation	DNS translation.	fqdn	Fully qualified domain name.	access-proxy	Access proxy.			
Option	Description																	
static-nat	Static NAT.																	
load-balance	Load balance.																	
server-load-balance	Server load balance.																	
dns-translation	DNS translation.																	
fqdn	Fully qualified domain name.																	
access-proxy	Access proxy.																	
uuid	Universally Unique Identifier (UUID; automatically assigned but can be manually reset).	uuid	Not Specified	00000000-0000-0000-0000-000000000000														
weblogic-server	Enable to add an HTTP header to indicate SSL offloading for a WebLogic server.	option	-	disable														

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>disable</i>	Do not add HTTP header indicating SSL offload for WebLogic server.		
	<i>enable</i>	Add HTTP header indicating SSL offload for WebLogic server.		
websphere-server	Enable to add an HTTP header to indicate SSL offloading for a WebSphere server.	option	-	disable
	Option	Description		
	<i>disable</i>	Do not add HTTP header indicating SSL offload for WebSphere server.		
	<i>enable</i>	Add HTTP header indicating SSL offload for WebSphere server.		

config realservers

Parameter	Description	Type	Size	Default								
address	Dynamic address of the real server.	string	Maximum length: 79									
client-ip	Only clients in this IP range can connect to this real server.	user	Not Specified									
healthcheck	Enable to check the responsiveness of the real server before forwarding traffic.	option	-	vip								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Disable per server health check.</td></tr><tr><td>enable</td><td>Enable per server health check.</td></tr><tr><td>vip</td><td>Use health check defined in VIP.</td></tr></table>				Option	Description	disable	Disable per server health check.	enable	Enable per server health check.	vip	Use health check defined in VIP.
Option	Description											
disable	Disable per server health check.											
enable	Enable per server health check.											
vip	Use health check defined in VIP.											
holddown-interval	Time in seconds that the system waits before re-activating a previously down active server in the active-standby mode. This is to prevent any flapping issues.	integer	Minimum value: 30 Maximum value: 65535	300								
http-host	HTTP server domain name in HTTP header.	string	Maximum length: 63									
id	Real server ID.	integer	Minimum value: 0 Maximum value: 4294967295	0								
ip	IP address of the real server.	user	Not Specified									

Parameter	Description	Type	Size	Default								
max-connections	Max number of active connections that can be directed to the real server. When reached, sessions are sent to other real servers.	integer	Minimum value: 0 Maximum value: 2147483647	0								
monitor <name>	Name of the health check monitor to use when polling to determine a virtual server's connectivity status. Health monitor name.	string	Maximum length: 79									
port	Port for communicating with the real server. Required if port forwarding is enabled.	integer	Minimum value: 1 Maximum value: 65535	0								
status	Set the status of the real server to active so that it can accept traffic, or on standby or disabled so no traffic is sent.	option	-	active								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>active</td><td>Server status active.</td></tr><tr><td>standby</td><td>Server status standby.</td></tr><tr><td>disable</td><td>Server status disable.</td></tr></table>	Option	Description	active	Server status active.	standby	Server status standby.	disable	Server status disable.			
Option	Description											
active	Server status active.											
standby	Server status standby.											
disable	Server status disable.											
translate-host	Enable/disable translation of hostname/IP from virtual server to real server.	option	-	enable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable virtual hostname/IP translation.</td></tr><tr><td>disable</td><td>Disable virtual hostname/IP translation.</td></tr></table>	Option	Description	enable	Enable virtual hostname/IP translation.	disable	Disable virtual hostname/IP translation.					
Option	Description											
enable	Enable virtual hostname/IP translation.											
disable	Disable virtual hostname/IP translation.											
type	Type of address.	option	-	ip								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>ip</td><td>Standard IPv4 address.</td></tr><tr><td>address</td><td>Dynamic address object.</td></tr></table>	Option	Description	ip	Standard IPv4 address.	address	Dynamic address object.					
Option	Description											
ip	Standard IPv4 address.											
address	Dynamic address object.											
weight	Weight of the real server. If weighted load balancing is enabled, the server with the highest weight gets more connections.	integer	Minimum value: 1 Maximum value: 255	1								

config ssl-cipher-suites

Parameter	Description	Type	Size	Default
cipher	Cipher suite name.	option	-	

Parameter	Description	Type	Size	Default
	Option	Description		
	TLS-AES-128-GCM-SHA256	Cipher suite TLS-AES-128-GCM-SHA256.		
	TLS-AES-256-GCM-SHA384	Cipher suite TLS-AES-256-GCM-SHA384.		
	TLS-CHACHA20-POLY1305-SHA256	Cipher suite TLS-CHACHA20-POLY1305-SHA256.		
	TLS-ECDHE-RSA-WITH-CHACHA20-POLY1305-SHA256	Cipher suite TLS-ECDHE-RSA-WITH-CHACHA20-POLY1305-SHA256.		
	TLS-ECDHE-ECDSA-WITH-CHACHA20-POLY1305-SHA256	Cipher suite TLS-ECDHE-ECDSA-WITH-CHACHA20-POLY1305-SHA256.		
	TLS-DHE-RSA-WITH-CHACHA20-POLY1305-SHA256	Cipher suite TLS-DHE-RSA-WITH-CHACHA20-POLY1305-SHA256.		
	TLS-DHE-RSA-WITH-AES-128-CBC-SHA	Cipher suite TLS-DHE-RSA-WITH-AES-128-CBC-SHA.		
	TLS-DHE-RSA-WITH-AES-256-CBC-SHA	Cipher suite TLS-DHE-RSA-WITH-AES-256-CBC-SHA.		
	TLS-DHE-RSA-WITH-AES-128-CBC-SHA256	Cipher suite TLS-DHE-RSA-WITH-AES-128-CBC-SHA256.		
TLS-DHE-RSA-WITH-AES-128-GCM-SHA256	Cipher suite TLS-DHE-RSA-WITH-AES-128-GCM-SHA256.			

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>TLS-DHE-RSA-WITH-AES-256-CBC-SHA256</i>	Cipher suite TLS-DHE-RSA-WITH-AES-256-CBC-SHA256.		
	<i>TLS-DHE-RSA-WITH-AES-256-GCM-SHA384</i>	Cipher suite TLS-DHE-RSA-WITH-AES-256-GCM-SHA384.		
	<i>TLS-DHE-DSS-WITH-AES-128-CBC-SHA</i>	Cipher suite TLS-DHE-DSS-WITH-AES-128-CBC-SHA.		
	<i>TLS-DHE-DSS-WITH-AES-256-CBC-SHA</i>	Cipher suite TLS-DHE-DSS-WITH-AES-256-CBC-SHA.		
	<i>TLS-DHE-DSS-WITH-AES-128-CBC-SHA256</i>	Cipher suite TLS-DHE-DSS-WITH-AES-128-CBC-SHA256.		
	<i>TLS-DHE-DSS-WITH-AES-128-GCM-SHA256</i>	Cipher suite TLS-DHE-DSS-WITH-AES-128-GCM-SHA256.		
	<i>TLS-DHE-DSS-WITH-AES-256-CBC-SHA256</i>	Cipher suite TLS-DHE-DSS-WITH-AES-256-CBC-SHA256.		
	<i>TLS-DHE-DSS-WITH-AES-256-GCM-SHA384</i>	Cipher suite TLS-DHE-DSS-WITH-AES-256-GCM-SHA384.		
	<i>TLS-ECDHE-RSA-WITH-AES-128-CBC-SHA</i>	Cipher suite TLS-ECDHE-RSA-WITH-AES-128-CBC-SHA.		
	<i>TLS-ECDHE-RSA-WITH-AES-128-CBC-SHA256</i>	Cipher suite TLS-ECDHE-RSA-WITH-AES-128-CBC-SHA256.		

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>TLS-ECDHE-RSA-WITH-AES-128-GCM-SHA256</i>	Cipher suite TLS-ECDHE-RSA-WITH-AES-128-GCM-SHA256.		
	<i>TLS-ECDHE-RSA-WITH-AES-256-CBC-SHA</i>	Cipher suite TLS-ECDHE-RSA-WITH-AES-256-CBC-SHA.		
	<i>TLS-ECDHE-RSA-WITH-AES-256-CBC-SHA384</i>	Cipher suite TLS-ECDHE-RSA-WITH-AES-256-CBC-SHA384.		
	<i>TLS-ECDHE-RSA-WITH-AES-256-GCM-SHA384</i>	Cipher suite TLS-ECDHE-RSA-WITH-AES-256-GCM-SHA384.		
	<i>TLS-ECDHE-ECDSA-WITH-AES-128-CBC-SHA</i>	Cipher suite TLS-ECDHE-ECDSA-WITH-AES-128-CBC-SHA.		
	<i>TLS-ECDHE-ECDSA-WITH-AES-128-CBC-SHA256</i>	Cipher suite TLS-ECDHE-ECDSA-WITH-AES-128-CBC-SHA256.		
	<i>TLS-ECDHE-ECDSA-WITH-AES-128-GCM-SHA256</i>	Cipher suite TLS-ECDHE-ECDSA-WITH-AES-128-GCM-SHA256.		
	<i>TLS-ECDHE-ECDSA-WITH-AES-256-CBC-SHA</i>	Cipher suite TLS-ECDHE-ECDSA-WITH-AES-256-CBC-SHA.		
	<i>TLS-ECDHE-ECDSA-WITH-AES-256-CBC-SHA384</i>	Cipher suite TLS-ECDHE-ECDSA-WITH-AES-256-CBC-SHA384.		

Parameter	Description	Type	Size	Default
	Option	Description		
	TLS-ECDHE-ECDSA-WITH-AES-256-GCM-SHA384	Cipher suite TLS-ECDHE-ECDSA-WITH-AES-256-GCM-SHA384.		
	TLS-RSA-WITH-AES-128-CBC-SHA	Cipher suite TLS-RSA-WITH-AES-128-CBC-SHA.		
	TLS-RSA-WITH-AES-256-CBC-SHA	Cipher suite TLS-RSA-WITH-AES-256-CBC-SHA.		
	TLS-RSA-WITH-AES-128-CBC-SHA256	Cipher suite TLS-RSA-WITH-AES-128-CBC-SHA256.		
	TLS-RSA-WITH-AES-128-GCM-SHA256	Cipher suite TLS-RSA-WITH-AES-128-GCM-SHA256.		
	TLS-RSA-WITH-AES-256-CBC-SHA256	Cipher suite TLS-RSA-WITH-AES-256-CBC-SHA256.		
	TLS-RSA-WITH-AES-256-GCM-SHA384	Cipher suite TLS-RSA-WITH-AES-256-GCM-SHA384.		
	TLS-RSA-WITH-CAMELLIA-128-CBC-SHA	Cipher suite TLS-RSA-WITH-CAMELLIA-128-CBC-SHA.		
	TLS-RSA-WITH-CAMELLIA-256-CBC-SHA	Cipher suite TLS-RSA-WITH-CAMELLIA-256-CBC-SHA.		
TLS-RSA-WITH-CAMELLIA-128-CBC-SHA256	Cipher suite TLS-RSA-WITH-CAMELLIA-128-CBC-SHA256.			

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>TLS-RSA-WITH-CAMELLIA-256-CBC-SHA256</i>	Cipher suite TLS-RSA-WITH-CAMELLIA-256-CBC-SHA256.		
	<i>TLS-DHE-RSA-WITH-3DES-EDE-CBC-SHA</i>	Cipher suite TLS-DHE-RSA-WITH-3DES-EDE-CBC-SHA.		
	<i>TLS-DHE-RSA-WITH-CAMELLIA-128-CBC-SHA</i>	Cipher suite TLS-DHE-RSA-WITH-CAMELLIA-128-CBC-SHA.		
	<i>TLS-DHE-DSS-WITH-CAMELLIA-128-CBC-SHA</i>	Cipher suite TLS-DSS-RSA-WITH-CAMELLIA-128-CBC-SHA.		
	<i>TLS-DHE-RSA-WITH-CAMELLIA-256-CBC-SHA</i>	Cipher suite TLS-DHE-RSA-WITH-CAMELLIA-256-CBC-SHA.		
	<i>TLS-DHE-DSS-WITH-CAMELLIA-256-CBC-SHA</i>	Cipher suite TLS-DHE-DSS-WITH-CAMELLIA-256-CBC-SHA.		
	<i>TLS-DHE-RSA-WITH-CAMELLIA-128-CBC-SHA256</i>	Cipher suite TLS-DHE-RSA-WITH-CAMELLIA-128-CBC-SHA256.		
	<i>TLS-DHE-DSS-WITH-CAMELLIA-128-CBC-SHA256</i>	Cipher suite TLS-DHE-DSS-WITH-CAMELLIA-128-CBC-SHA256.		
	<i>TLS-DHE-RSA-WITH-CAMELLIA-256-CBC-SHA256</i>	Cipher suite TLS-DHE-RSA-WITH-CAMELLIA-256-CBC-SHA256.		

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>TLS-DHE-DSS-WITH-CAMELLIA-256-CBC-SHA256</i>	Cipher suite TLS-DHE-DSS-WITH-CAMELLIA-256-CBC-SHA256.		
	<i>TLS-DHE-RSA-WITH-SEED-CBC-SHA</i>	Cipher suite TLS-DHE-RSA-WITH-SEED-CBC-SHA.		
	<i>TLS-DHE-DSS-WITH-SEED-CBC-SHA</i>	Cipher suite TLS-DHE-DSS-WITH-SEED-CBC-SHA.		
	<i>TLS-DHE-RSA-WITH-ARIA-128-CBC-SHA256</i>	Cipher suite TLS-DHE-RSA-WITH-ARIA-128-CBC-SHA256.		
	<i>TLS-DHE-RSA-WITH-ARIA-256-CBC-SHA384</i>	Cipher suite TLS-DHE-RSA-WITH-ARIA-256-CBC-SHA384.		
	<i>TLS-DHE-DSS-WITH-ARIA-128-CBC-SHA256</i>	Cipher suite TLS-DHE-DSS-WITH-ARIA-128-CBC-SHA256.		
	<i>TLS-DHE-DSS-WITH-ARIA-256-CBC-SHA384</i>	Cipher suite TLS-DHE-DSS-WITH-ARIA-256-CBC-SHA384.		
	<i>TLS-RSA-WITH-SEED-CBC-SHA</i>	Cipher suite TLS-RSA-WITH-SEED-CBC-SHA.		
	<i>TLS-RSA-WITH-ARIA-128-CBC-SHA256</i>	Cipher suite TLS-RSA-WITH-ARIA-128-CBC-SHA256.		
	<i>TLS-RSA-WITH-ARIA-256-CBC-SHA384</i>	Cipher suite TLS-RSA-WITH-ARIA-256-CBC-SHA384.		

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>TLS-ECDHE-RSA-WITH-ARIA-128-CBC-SHA256</i>	Cipher suite TLS-ECDHE-RSA-WITH-ARIA-128-CBC-SHA256.		
	<i>TLS-ECDHE-RSA-WITH-ARIA-256-CBC-SHA384</i>	Cipher suite TLS-ECDHE-RSA-WITH-ARIA-256-CBC-SHA384.		
	<i>TLS-ECDHE-ECDSA-WITH-ARIA-128-CBC-SHA256</i>	Cipher suite TLS-ECDHE-ECDSA-WITH-ARIA-128-CBC_SHA256.		
	<i>TLS-ECDHE-ECDSA-WITH-ARIA-256-CBC-SHA384</i>	Cipher suite TLS-ECDHE-ECDSA-WITH-ARIA-256-CBC_SHA384.		
	<i>TLS-ECDHE-RSA-WITH-RC4-128-SHA</i>	Cipher suite TLS-ECDHE-RSA-WITH-RC4-128-SHA.		
	<i>TLS-ECDHE-RSA-WITH-3DES-EDE-CBC-SHA</i>	Cipher suite TLS-ECDHE-RSA-WITH-3DES-EDE-CBC-SHA.		
	<i>TLS-DHE-DSS-WITH-3DES-EDE-CBC-SHA</i>	Cipher suite TLS-DHE-DSS-WITH-3DES-EDE-CBC-SHA.		
	<i>TLS-RSA-WITH-3DES-EDE-CBC-SHA</i>	Cipher suite TLS-RSA-WITH-3DES-EDE-CBC-SHA.		
	<i>TLS-RSA-WITH-RC4-128-MD5</i>	Cipher suite TLS-RSA-WITH-RC4-128-MD5.		
	<i>TLS-RSA-WITH-RC4-128-SHA</i>	Cipher suite TLS-RSA-WITH-RC4-128-SHA.		
	<i>TLS-DHE-RSA-WITH-DES-CBC-SHA</i>	Cipher suite TLS-DHE-RSA-WITH-DES-CBC-SHA.		

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>TLS-DHE-DSS-WITH-DES-CBC-SHA</i>	Cipher suite TLS-DHE-DSS-WITH-DES-CBC-SHA.		
	<i>TLS-RSA-WITH-DES-CBC-SHA</i>	Cipher suite TLS-RSA-WITH-DES-CBC-SHA.		
priority	SSL/TLS cipher suites priority.	integer	Minimum value: 0 0 Maximum value: 4294967295	0
versions	SSL/TLS versions that the cipher suite can be used with.	option	-	ssl-3.0 tls-1.0 tls-1.1 tls-1.2 tls-1.3
	Option	Description		
	<i>ssl-3.0</i>	SSL 3.0.		
	<i>tls-1.0</i>	TLS 1.0.		
	<i>tls-1.1</i>	TLS 1.1.		
	<i>tls-1.2</i>	TLS 1.2.		
	<i>tls-1.3</i>	TLS 1.3.		

config ssl-server-cipher-suites

Parameter	Description	Type	Size	Default								
cipher	Cipher suite name.	option	-									
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>TLS-AES-128-GCM-SHA256</i></td><td>Cipher suite TLS-AES-128-GCM-SHA256.</td></tr><tr><td><i>TLS-AES-256-GCM-SHA384</i></td><td>Cipher suite TLS-AES-256-GCM-SHA384.</td></tr><tr><td><i>TLS-CHACHA20-POLY1305-SHA256</i></td><td>Cipher suite TLS-CHACHA20-POLY1305-SHA256.</td></tr></table>	Option	Description	<i>TLS-AES-128-GCM-SHA256</i>	Cipher suite TLS-AES-128-GCM-SHA256.	<i>TLS-AES-256-GCM-SHA384</i>	Cipher suite TLS-AES-256-GCM-SHA384.	<i>TLS-CHACHA20-POLY1305-SHA256</i>	Cipher suite TLS-CHACHA20-POLY1305-SHA256.			
Option	Description											
<i>TLS-AES-128-GCM-SHA256</i>	Cipher suite TLS-AES-128-GCM-SHA256.											
<i>TLS-AES-256-GCM-SHA384</i>	Cipher suite TLS-AES-256-GCM-SHA384.											
<i>TLS-CHACHA20-POLY1305-SHA256</i>	Cipher suite TLS-CHACHA20-POLY1305-SHA256.											

Parameter	Description	Type	Size	Default																						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>TLS-ECDHE-RSA-WITH-CHACHA20-POLY1305-SHA256</i></td><td>Cipher suite TLS-ECDHE-RSA-WITH-CHACHA20-POLY1305-SHA256.</td></tr><tr><td><i>TLS-ECDHE-ECDSA-WITH-CHACHA20-POLY1305-SHA256</i></td><td>Cipher suite TLS-ECDHE-ECDSA-WITH-CHACHA20-POLY1305-SHA256.</td></tr><tr><td><i>TLS-DHE-RSA-WITH-CHACHA20-POLY1305-SHA256</i></td><td>Cipher suite TLS-DHE-RSA-WITH-CHACHA20-POLY1305-SHA256.</td></tr><tr><td><i>TLS-DHE-RSA-WITH-AES-128-CBC-SHA</i></td><td>Cipher suite TLS-DHE-RSA-WITH-AES-128-CBC-SHA.</td></tr><tr><td><i>TLS-DHE-RSA-WITH-AES-256-CBC-SHA</i></td><td>Cipher suite TLS-DHE-RSA-WITH-AES-256-CBC-SHA.</td></tr><tr><td><i>TLS-DHE-RSA-WITH-AES-128-CBC-SHA256</i></td><td>Cipher suite TLS-DHE-RSA-WITH-AES-128-CBC-SHA256.</td></tr><tr><td><i>TLS-DHE-RSA-WITH-AES-128-GCM-SHA256</i></td><td>Cipher suite TLS-DHE-RSA-WITH-AES-128-GCM-SHA256.</td></tr><tr><td><i>TLS-DHE-RSA-WITH-AES-256-CBC-SHA256</i></td><td>Cipher suite TLS-DHE-RSA-WITH-AES-256-CBC-SHA256.</td></tr><tr><td><i>TLS-DHE-RSA-WITH-AES-256-GCM-SHA384</i></td><td>Cipher suite TLS-DHE-RSA-WITH-AES-256-GCM-SHA384.</td></tr><tr><td><i>TLS-DHE-DSS-WITH-AES-128-CBC-SHA</i></td><td>Cipher suite TLS-DHE-DSS-WITH-AES-128-CBC-SHA.</td></tr></table>	Option	Description	<i>TLS-ECDHE-RSA-WITH-CHACHA20-POLY1305-SHA256</i>	Cipher suite TLS-ECDHE-RSA-WITH-CHACHA20-POLY1305-SHA256.	<i>TLS-ECDHE-ECDSA-WITH-CHACHA20-POLY1305-SHA256</i>	Cipher suite TLS-ECDHE-ECDSA-WITH-CHACHA20-POLY1305-SHA256.	<i>TLS-DHE-RSA-WITH-CHACHA20-POLY1305-SHA256</i>	Cipher suite TLS-DHE-RSA-WITH-CHACHA20-POLY1305-SHA256.	<i>TLS-DHE-RSA-WITH-AES-128-CBC-SHA</i>	Cipher suite TLS-DHE-RSA-WITH-AES-128-CBC-SHA.	<i>TLS-DHE-RSA-WITH-AES-256-CBC-SHA</i>	Cipher suite TLS-DHE-RSA-WITH-AES-256-CBC-SHA.	<i>TLS-DHE-RSA-WITH-AES-128-CBC-SHA256</i>	Cipher suite TLS-DHE-RSA-WITH-AES-128-CBC-SHA256.	<i>TLS-DHE-RSA-WITH-AES-128-GCM-SHA256</i>	Cipher suite TLS-DHE-RSA-WITH-AES-128-GCM-SHA256.	<i>TLS-DHE-RSA-WITH-AES-256-CBC-SHA256</i>	Cipher suite TLS-DHE-RSA-WITH-AES-256-CBC-SHA256.	<i>TLS-DHE-RSA-WITH-AES-256-GCM-SHA384</i>	Cipher suite TLS-DHE-RSA-WITH-AES-256-GCM-SHA384.	<i>TLS-DHE-DSS-WITH-AES-128-CBC-SHA</i>	Cipher suite TLS-DHE-DSS-WITH-AES-128-CBC-SHA.			
Option	Description																									
<i>TLS-ECDHE-RSA-WITH-CHACHA20-POLY1305-SHA256</i>	Cipher suite TLS-ECDHE-RSA-WITH-CHACHA20-POLY1305-SHA256.																									
<i>TLS-ECDHE-ECDSA-WITH-CHACHA20-POLY1305-SHA256</i>	Cipher suite TLS-ECDHE-ECDSA-WITH-CHACHA20-POLY1305-SHA256.																									
<i>TLS-DHE-RSA-WITH-CHACHA20-POLY1305-SHA256</i>	Cipher suite TLS-DHE-RSA-WITH-CHACHA20-POLY1305-SHA256.																									
<i>TLS-DHE-RSA-WITH-AES-128-CBC-SHA</i>	Cipher suite TLS-DHE-RSA-WITH-AES-128-CBC-SHA.																									
<i>TLS-DHE-RSA-WITH-AES-256-CBC-SHA</i>	Cipher suite TLS-DHE-RSA-WITH-AES-256-CBC-SHA.																									
<i>TLS-DHE-RSA-WITH-AES-128-CBC-SHA256</i>	Cipher suite TLS-DHE-RSA-WITH-AES-128-CBC-SHA256.																									
<i>TLS-DHE-RSA-WITH-AES-128-GCM-SHA256</i>	Cipher suite TLS-DHE-RSA-WITH-AES-128-GCM-SHA256.																									
<i>TLS-DHE-RSA-WITH-AES-256-CBC-SHA256</i>	Cipher suite TLS-DHE-RSA-WITH-AES-256-CBC-SHA256.																									
<i>TLS-DHE-RSA-WITH-AES-256-GCM-SHA384</i>	Cipher suite TLS-DHE-RSA-WITH-AES-256-GCM-SHA384.																									
<i>TLS-DHE-DSS-WITH-AES-128-CBC-SHA</i>	Cipher suite TLS-DHE-DSS-WITH-AES-128-CBC-SHA.																									

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>TLS-DHE-DSS-WITH-AES-256-CBC-SHA</i>	Cipher suite TLS-DHE-DSS-WITH-AES-256-CBC-SHA.		
	<i>TLS-DHE-DSS-WITH-AES-128-CBC-SHA256</i>	Cipher suite TLS-DHE-DSS-WITH-AES-128-CBC-SHA256.		
	<i>TLS-DHE-DSS-WITH-AES-128-GCM-SHA256</i>	Cipher suite TLS-DHE-DSS-WITH-AES-128-GCM-SHA256.		
	<i>TLS-DHE-DSS-WITH-AES-256-CBC-SHA256</i>	Cipher suite TLS-DHE-DSS-WITH-AES-256-CBC-SHA256.		
	<i>TLS-DHE-DSS-WITH-AES-256-GCM-SHA384</i>	Cipher suite TLS-DHE-DSS-WITH-AES-256-GCM-SHA384.		
	<i>TLS-ECDHE-RSA-WITH-AES-128-CBC-SHA</i>	Cipher suite TLS-ECDHE-RSA-WITH-AES-128-CBC-SHA.		
	<i>TLS-ECDHE-RSA-WITH-AES-128-CBC-SHA256</i>	Cipher suite TLS-ECDHE-RSA-WITH-AES-128-CBC-SHA256.		
	<i>TLS-ECDHE-RSA-WITH-AES-128-GCM-SHA256</i>	Cipher suite TLS-ECDHE-RSA-WITH-AES-128-GCM-SHA256.		
	<i>TLS-ECDHE-RSA-WITH-AES-256-CBC-SHA</i>	Cipher suite TLS-ECDHE-RSA-WITH-AES-256-CBC-SHA.		
	<i>TLS-ECDHE-RSA-WITH-AES-256-CBC-SHA384</i>	Cipher suite TLS-ECDHE-RSA-WITH-AES-256-CBC-SHA384.		

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>TLS-ECDHE-RSA-WITH-AES-256-GCM-SHA384</i>	Cipher suite TLS-ECDHE-RSA-WITH-AES-256-GCM-SHA384.		
	<i>TLS-ECDHE-ECDSA-WITH-AES-128-CBC-SHA</i>	Cipher suite TLS-ECDHE-ECDSA-WITH-AES-128-CBC-SHA.		
	<i>TLS-ECDHE-ECDSA-WITH-AES-128-CBC-SHA256</i>	Cipher suite TLS-ECDHE-ECDSA-WITH-AES-128-CBC-SHA256.		
	<i>TLS-ECDHE-ECDSA-WITH-AES-128-GCM-SHA256</i>	Cipher suite TLS-ECDHE-ECDSA-WITH-AES-128-GCM-SHA256.		
	<i>TLS-ECDHE-ECDSA-WITH-AES-256-CBC-SHA</i>	Cipher suite TLS-ECDHE-ECDSA-WITH-AES-256-CBC-SHA.		
	<i>TLS-ECDHE-ECDSA-WITH-AES-256-CBC-SHA384</i>	Cipher suite TLS-ECDHE-ECDSA-WITH-AES-256-CBC-SHA384.		
	<i>TLS-ECDHE-ECDSA-WITH-AES-256-GCM-SHA384</i>	Cipher suite TLS-ECDHE-ECDSA-WITH-AES-256-GCM-SHA384.		
	<i>TLS-RSA-WITH-AES-128-CBC-SHA</i>	Cipher suite TLS-RSA-WITH-AES-128-CBC-SHA.		
	<i>TLS-RSA-WITH-AES-256-CBC-SHA</i>	Cipher suite TLS-RSA-WITH-AES-256-CBC-SHA.		
<i>TLS-RSA-WITH-AES-128-CBC-SHA256</i>	Cipher suite TLS-RSA-WITH-AES-128-CBC-SHA256.			

Parameter	Description	Type	Size	Default																						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>TLS-RSA-WITH-AES-128-GCM-SHA256</td><td>Cipher suite TLS-RSA-WITH-AES-128-GCM-SHA256.</td></tr><tr><td>TLS-RSA-WITH-AES-256-CBC-SHA256</td><td>Cipher suite TLS-RSA-WITH-AES-256-CBC-SHA256.</td></tr><tr><td>TLS-RSA-WITH-AES-256-GCM-SHA384</td><td>Cipher suite TLS-RSA-WITH-AES-256-GCM-SHA384.</td></tr><tr><td>TLS-RSA-WITH-CAMELLIA-128-CBC-SHA</td><td>Cipher suite TLS-RSA-WITH-CAMELLIA-128-CBC-SHA.</td></tr><tr><td>TLS-RSA-WITH-CAMELLIA-256-CBC-SHA</td><td>Cipher suite TLS-RSA-WITH-CAMELLIA-256-CBC-SHA.</td></tr><tr><td>TLS-RSA-WITH-CAMELLIA-128-CBC-SHA256</td><td>Cipher suite TLS-RSA-WITH-CAMELLIA-128-CBC-SHA256.</td></tr><tr><td>TLS-RSA-WITH-CAMELLIA-256-CBC-SHA256</td><td>Cipher suite TLS-RSA-WITH-CAMELLIA-256-CBC-SHA256.</td></tr><tr><td>TLS-DHE-RSA-WITH-3DES-EDE-CBC-SHA</td><td>Cipher suite TLS-DHE-RSA-WITH-3DES-EDE-CBC-SHA.</td></tr><tr><td>TLS-DHE-RSA-WITH-CAMELLIA-128-CBC-SHA</td><td>Cipher suite TLS-DHE-RSA-WITH-CAMELLIA-128-CBC-SHA.</td></tr><tr><td>TLS-DHE-DSS-WITH-CAMELLIA-128-CBC-SHA</td><td>Cipher suite TLS-DSS-RSA-WITH-CAMELLIA-128-CBC-SHA.</td></tr></table>	Option	Description	TLS-RSA-WITH-AES-128-GCM-SHA256	Cipher suite TLS-RSA-WITH-AES-128-GCM-SHA256.	TLS-RSA-WITH-AES-256-CBC-SHA256	Cipher suite TLS-RSA-WITH-AES-256-CBC-SHA256.	TLS-RSA-WITH-AES-256-GCM-SHA384	Cipher suite TLS-RSA-WITH-AES-256-GCM-SHA384.	TLS-RSA-WITH-CAMELLIA-128-CBC-SHA	Cipher suite TLS-RSA-WITH-CAMELLIA-128-CBC-SHA.	TLS-RSA-WITH-CAMELLIA-256-CBC-SHA	Cipher suite TLS-RSA-WITH-CAMELLIA-256-CBC-SHA.	TLS-RSA-WITH-CAMELLIA-128-CBC-SHA256	Cipher suite TLS-RSA-WITH-CAMELLIA-128-CBC-SHA256.	TLS-RSA-WITH-CAMELLIA-256-CBC-SHA256	Cipher suite TLS-RSA-WITH-CAMELLIA-256-CBC-SHA256.	TLS-DHE-RSA-WITH-3DES-EDE-CBC-SHA	Cipher suite TLS-DHE-RSA-WITH-3DES-EDE-CBC-SHA.	TLS-DHE-RSA-WITH-CAMELLIA-128-CBC-SHA	Cipher suite TLS-DHE-RSA-WITH-CAMELLIA-128-CBC-SHA.	TLS-DHE-DSS-WITH-CAMELLIA-128-CBC-SHA	Cipher suite TLS-DSS-RSA-WITH-CAMELLIA-128-CBC-SHA.			
Option	Description																									
TLS-RSA-WITH-AES-128-GCM-SHA256	Cipher suite TLS-RSA-WITH-AES-128-GCM-SHA256.																									
TLS-RSA-WITH-AES-256-CBC-SHA256	Cipher suite TLS-RSA-WITH-AES-256-CBC-SHA256.																									
TLS-RSA-WITH-AES-256-GCM-SHA384	Cipher suite TLS-RSA-WITH-AES-256-GCM-SHA384.																									
TLS-RSA-WITH-CAMELLIA-128-CBC-SHA	Cipher suite TLS-RSA-WITH-CAMELLIA-128-CBC-SHA.																									
TLS-RSA-WITH-CAMELLIA-256-CBC-SHA	Cipher suite TLS-RSA-WITH-CAMELLIA-256-CBC-SHA.																									
TLS-RSA-WITH-CAMELLIA-128-CBC-SHA256	Cipher suite TLS-RSA-WITH-CAMELLIA-128-CBC-SHA256.																									
TLS-RSA-WITH-CAMELLIA-256-CBC-SHA256	Cipher suite TLS-RSA-WITH-CAMELLIA-256-CBC-SHA256.																									
TLS-DHE-RSA-WITH-3DES-EDE-CBC-SHA	Cipher suite TLS-DHE-RSA-WITH-3DES-EDE-CBC-SHA.																									
TLS-DHE-RSA-WITH-CAMELLIA-128-CBC-SHA	Cipher suite TLS-DHE-RSA-WITH-CAMELLIA-128-CBC-SHA.																									
TLS-DHE-DSS-WITH-CAMELLIA-128-CBC-SHA	Cipher suite TLS-DSS-RSA-WITH-CAMELLIA-128-CBC-SHA.																									

Parameter	Description	Type	Size	Default
	Option	Description		
	TLS-DHE-RSA-WITH-CAMELLIA-256-CBC-SHA	Cipher suite TLS-DHE-RSA-WITH-CAMELLIA-256-CBC-SHA.		
	TLS-DHE-DSS-WITH-CAMELLIA-256-CBC-SHA	Cipher suite TLS-DHE-DSS-WITH-CAMELLIA-256-CBC-SHA.		
	TLS-DHE-RSA-WITH-CAMELLIA-128-CBC-SHA256	Cipher suite TLS-DHE-RSA-WITH-CAMELLIA-128-CBC-SHA256.		
	TLS-DHE-DSS-WITH-CAMELLIA-128-CBC-SHA256	Cipher suite TLS-DHE-DSS-WITH-CAMELLIA-128-CBC-SHA256.		
	TLS-DHE-RSA-WITH-CAMELLIA-256-CBC-SHA256	Cipher suite TLS-DHE-RSA-WITH-CAMELLIA-256-CBC-SHA256.		
	TLS-DHE-DSS-WITH-CAMELLIA-256-CBC-SHA256	Cipher suite TLS-DHE-DSS-WITH-CAMELLIA-256-CBC-SHA256.		
	TLS-DHE-RSA-WITH-SEED-CBC-SHA	Cipher suite TLS-DHE-RSA-WITH-SEED-CBC-SHA.		
	TLS-DHE-DSS-WITH-SEED-CBC-SHA	Cipher suite TLS-DHE-DSS-WITH-SEED-CBC-SHA.		
TLS-DHE-RSA-WITH-ARIA-128-CBC-SHA256	Cipher suite TLS-DHE-RSA-WITH-ARIA-128-CBC-SHA256.			

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>TLS-DHE-RSA-WITH-ARIA-256-CBC-SHA384</i>	Cipher suite TLS-DHE-RSA-WITH-ARIA-256-CBC-SHA384.		
	<i>TLS-DHE-DSS-WITH-ARIA-128-CBC-SHA256</i>	Cipher suite TLS-DHE-DSS-WITH-ARIA-128-CBC-SHA256.		
	<i>TLS-DHE-DSS-WITH-ARIA-256-CBC-SHA384</i>	Cipher suite TLS-DHE-DSS-WITH-ARIA-256-CBC-SHA384.		
	<i>TLS-RSA-WITH-SEED-CBC-SHA</i>	Cipher suite TLS-RSA-WITH-SEED-CBC-SHA.		
	<i>TLS-RSA-WITH-ARIA-128-CBC-SHA256</i>	Cipher suite TLS-RSA-WITH-ARIA-128-CBC-SHA256.		
	<i>TLS-RSA-WITH-ARIA-256-CBC-SHA384</i>	Cipher suite TLS-RSA-WITH-ARIA-256-CBC-SHA384.		
	<i>TLS-ECDHE-RSA-WITH-ARIA-128-CBC-SHA256</i>	Cipher suite TLS-ECDHE-RSA-WITH-ARIA-128-CBC-SHA256.		
	<i>TLS-ECDHE-RSA-WITH-ARIA-256-CBC-SHA384</i>	Cipher suite TLS-ECDHE-RSA-WITH-ARIA-256-CBC-SHA384.		
	<i>TLS-ECDHE-ECDSA-WITH-ARIA-128-CBC-SHA256</i>	Cipher suite TLS-ECDHE-ECDSA-WITH-ARIA-128-CBC_SHA256.		
	<i>TLS-ECDHE-ECDSA-WITH-ARIA-256-CBC-SHA384</i>	Cipher suite TLS-ECDHE-ECDSA-WITH-ARIA-256-CBC_SHA384.		

Parameter	Description	Type	Size	Default																				
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>TLS-ECDHE-RSA-WITH-RC4-128-SHA</i></td><td>Cipher suite TLS-ECDHE-RSA-WITH-RC4-128-SHA.</td></tr><tr><td><i>TLS-ECDHE-RSA-WITH-3DES-EDE-CBC-SHA</i></td><td>Cipher suite TLS-ECDHE-RSA-WITH-3DES-EDE-CBC-SHA.</td></tr><tr><td><i>TLS-DHE-DSS-WITH-3DES-EDE-CBC-SHA</i></td><td>Cipher suite TLS-DHE-DSS-WITH-3DES-EDE-CBC-SHA.</td></tr><tr><td><i>TLS-RSA-WITH-3DES-EDE-CBC-SHA</i></td><td>Cipher suite TLS-RSA-WITH-3DES-EDE-CBC-SHA.</td></tr><tr><td><i>TLS-RSA-WITH-RC4-128-MD5</i></td><td>Cipher suite TLS-RSA-WITH-RC4-128-MD5.</td></tr><tr><td><i>TLS-RSA-WITH-RC4-128-SHA</i></td><td>Cipher suite TLS-RSA-WITH-RC4-128-SHA.</td></tr><tr><td><i>TLS-DHE-RSA-WITH-DES-CBC-SHA</i></td><td>Cipher suite TLS-DHE-RSA-WITH-DES-CBC-SHA.</td></tr><tr><td><i>TLS-DHE-DSS-WITH-DES-CBC-SHA</i></td><td>Cipher suite TLS-DHE-DSS-WITH-DES-CBC-SHA.</td></tr><tr><td><i>TLS-RSA-WITH-DES-CBC-SHA</i></td><td>Cipher suite TLS-RSA-WITH-DES-CBC-SHA.</td></tr></table>	Option	Description	<i>TLS-ECDHE-RSA-WITH-RC4-128-SHA</i>	Cipher suite TLS-ECDHE-RSA-WITH-RC4-128-SHA.	<i>TLS-ECDHE-RSA-WITH-3DES-EDE-CBC-SHA</i>	Cipher suite TLS-ECDHE-RSA-WITH-3DES-EDE-CBC-SHA.	<i>TLS-DHE-DSS-WITH-3DES-EDE-CBC-SHA</i>	Cipher suite TLS-DHE-DSS-WITH-3DES-EDE-CBC-SHA.	<i>TLS-RSA-WITH-3DES-EDE-CBC-SHA</i>	Cipher suite TLS-RSA-WITH-3DES-EDE-CBC-SHA.	<i>TLS-RSA-WITH-RC4-128-MD5</i>	Cipher suite TLS-RSA-WITH-RC4-128-MD5.	<i>TLS-RSA-WITH-RC4-128-SHA</i>	Cipher suite TLS-RSA-WITH-RC4-128-SHA.	<i>TLS-DHE-RSA-WITH-DES-CBC-SHA</i>	Cipher suite TLS-DHE-RSA-WITH-DES-CBC-SHA.	<i>TLS-DHE-DSS-WITH-DES-CBC-SHA</i>	Cipher suite TLS-DHE-DSS-WITH-DES-CBC-SHA.	<i>TLS-RSA-WITH-DES-CBC-SHA</i>	Cipher suite TLS-RSA-WITH-DES-CBC-SHA.			
	Option	Description																						
	<i>TLS-ECDHE-RSA-WITH-RC4-128-SHA</i>	Cipher suite TLS-ECDHE-RSA-WITH-RC4-128-SHA.																						
	<i>TLS-ECDHE-RSA-WITH-3DES-EDE-CBC-SHA</i>	Cipher suite TLS-ECDHE-RSA-WITH-3DES-EDE-CBC-SHA.																						
	<i>TLS-DHE-DSS-WITH-3DES-EDE-CBC-SHA</i>	Cipher suite TLS-DHE-DSS-WITH-3DES-EDE-CBC-SHA.																						
	<i>TLS-RSA-WITH-3DES-EDE-CBC-SHA</i>	Cipher suite TLS-RSA-WITH-3DES-EDE-CBC-SHA.																						
	<i>TLS-RSA-WITH-RC4-128-MD5</i>	Cipher suite TLS-RSA-WITH-RC4-128-MD5.																						
	<i>TLS-RSA-WITH-RC4-128-SHA</i>	Cipher suite TLS-RSA-WITH-RC4-128-SHA.																						
	<i>TLS-DHE-RSA-WITH-DES-CBC-SHA</i>	Cipher suite TLS-DHE-RSA-WITH-DES-CBC-SHA.																						
<i>TLS-DHE-DSS-WITH-DES-CBC-SHA</i>	Cipher suite TLS-DHE-DSS-WITH-DES-CBC-SHA.																							
<i>TLS-RSA-WITH-DES-CBC-SHA</i>	Cipher suite TLS-RSA-WITH-DES-CBC-SHA.																							
priority	SSL/TLS cipher suites priority.	integer	Minimum value: 0 0 Maximum value: 4294967295																					
versions	SSL/TLS versions that the cipher suite can be used with.	option	-	ssl-3.0 tls-1.0 tls-1.1 tls-1.2 tls-1.3																				

Parameter	Description	Type	Size	Default
	Option	Description		
	ssl-3.0	SSL 3.0.		
	tls-1.0	TLS 1.0.		
	tls-1.1	TLS 1.1.		
	tls-1.2	TLS 1.2.		
	tls-1.3	TLS 1.3.		

config firewall vip6

Configure virtual IP for IPv6.

```
config firewall vip6
  Description: Configure virtual IP for IPv6.
  edit <name>
    set add-nat64-route [disable|enable]
    set color {integer}
    set comment {var-string}
    set embedded-ipv4-address [disable|enable]
    set extip {user}
    set extport {user}
    set http-cookie-age {integer}
    set http-cookie-domain {string}
    set http-cookie-domain-from-host [disable|enable]
    set http-cookie-generation {integer}
    set http-cookie-path {string}
    set http-cookie-share [disable|same-ip]
    set http-ip-header [enable|disable]
    set http-ip-header-name {string}
    set http-multiplex [enable|disable]
    set http-redirect [enable|disable]
    set https-cookie-secure [disable|enable]
    set id {integer}
    set ipv4-mappedip {user}
    set ipv4-mappedport {user}
    set ldb-method [static|round-robin|...]
    set mappedip {user}
    set mappedport {user}
    set max-embryonic-connections {integer}
    set monitor <name1>, <name2>, ...
    set nat-source-vip [disable|enable]
    set nat64 [disable|enable]
    set nat66 [disable|enable]
    set ndp-reply [disable|enable]
    set outlook-web-access [disable|enable]
```

```

set persistence [none|http-cookie|...]
set portforward [disable|enable]
set protocol [tcp|udp|...]
config realservers
    Description: Select the real servers that this server load balancing VIP will
distribute traffic to.
    edit <id>
        set client-ip {user}
        set healthcheck [disable|enable|...]
        set holddown-interval {integer}
        set http-host {string}
        set ip {user}
        set max-connections {integer}
        set monitor <name1>, <name2>, ...
        set port {integer}
        set status [active|standby|...]
        set translate-host [enable|disable]
        set weight {integer}
    next
end
set server-type [http|https|...]
set src-filter <range1>, <range2>, ...
set ssl-accept-ffdhe-groups [enable|disable]
set ssl-algorithm [high|medium|...]
set ssl-certificate {string}
config ssl-cipher-suites
    Description: SSL/TLS cipher suites acceptable from a client, ordered by priority.
    edit <priority>
        set cipher [TLS-AES-128-GCM-SHA256|TLS-AES-256-GCM-SHA384|...]
        set versions {option1}, {option2}, ...
    next
end
set ssl-client-fallback [disable|enable]
set ssl-client-rekey-count {integer}
set ssl-client-renegotiation [allow|deny|...]
set ssl-client-session-state-max {integer}
set ssl-client-session-state-timeout {integer}
set ssl-client-session-state-type [disable|time|...]
set ssl-dh-bits [768|1024|...]
set ssl-hpkip [disable|enable|...]
set ssl-hpkip-age {integer}
set ssl-hpkip-backup {string}
set ssl-hpkip-include-subdomains [disable|enable]
set ssl-hpkip-primary {string}
set ssl-hpkip-report-uri {var-string}
set ssl-hsts [disable|enable]
set ssl-hsts-age {integer}
set ssl-hsts-include-subdomains [disable|enable]
set ssl-http-location-conversion [enable|disable]
set ssl-http-match-host [enable|disable]
set ssl-max-version [ssl-3.0|tls-1.0|...]
set ssl-min-version [ssl-3.0|tls-1.0|...]

```

```

set ssl-mode [half|full]
set ssl-pfs [require|deny|...]
set ssl-send-empty-frags [enable|disable]
set ssl-server-algorithm [high|medium|...]
config ssl-server-cipher-suites
    Description: SSL/TLS cipher suites to offer to a server, ordered by priority.
    edit <priority>
        set cipher [TLS-AES-128-GCM-SHA256|TLS-AES-256-GCM-SHA384|...]
        set versions {option1}, {option2}, ...
    next
end
set ssl-server-max-version [ssl-3.0|tls-1.0|...]
set ssl-server-min-version [ssl-3.0|tls-1.0|...]
set ssl-server-renegotiation [enable|disable]
set ssl-server-session-state-max {integer}
set ssl-server-session-state-timeout {integer}
set ssl-server-session-state-type [disable|time|...]
set type [static-nat|server-load-balance|...]
set uuid {uuid}
set weblogic-server [disable|enable]
set websphere-server [disable|enable]
next
end

```

config firewall vip6

Parameter	Description	Type	Size	Default						
add-nat64-route	Enable/disable adding NAT64 route.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>disable</i></td><td>Disable adding NAT64 route.</td></tr><tr><td><i>enable</i></td><td>Enable adding NAT64 route.</td></tr></table>				Option	Description	<i>disable</i>	Disable adding NAT64 route.	<i>enable</i>	Enable adding NAT64 route.
	Option	Description								
	<i>disable</i>	Disable adding NAT64 route.								
<i>enable</i>	Enable adding NAT64 route.									
color	Color of icon on the GUI.	integer	Minimum value: 0 Maximum value: 32							
comment	Comment.	var-string	Maximum length: 255							
embedded-ipv4-address	Enable/disable use of the lower 32 bits of the external IPv6 address as mapped IPv4 address.	option	-	disable						

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>disable</i>	Disable use of the lower 32 bits of the external IPv6 address as mapped IPv4 address.		
	<i>enable</i>	Enable use of the lower 32 bits of the external IPv6 address as mapped IPv4 address.		
extip	IPv6 address or address range on the external interface that you want to map to an address or address range on the destination network.	user	Not Specified	
extport	Incoming port number range that you want to map to a port number range on the destination network.	user	Not Specified	
http-cookie-age	Time in minutes that client web browsers should keep a cookie. Default is 60 minutes. 0 = no time limit.	integer	Minimum value: 0 Maximum value: 525600	60
http-cookie-domain	Domain that HTTP cookie persistence should apply to.	string	Maximum length: 35	
http-cookie-domain-from-host	Enable/disable use of HTTP cookie domain from host field in HTTP.	option	-	disable
	Option	Description		
	<i>disable</i>	Disable use of HTTP cookie domain from host field in HTTP (use http-cooke-domain setting).		
	<i>enable</i>	Enable use of HTTP cookie domain from host field in HTTP.		
http-cookie-generation	Generation of HTTP cookie to be accepted. Changing invalidates all existing cookies.	integer	Minimum value: 0 Maximum value: 4294967295	0
http-cookie-path	Limit HTTP cookie persistence to the specified path.	string	Maximum length: 35	
http-cookie-share	Control sharing of cookies across virtual servers. Use of same-ip means a cookie from one virtual server can be used by another. Disable stops cookie sharing.	option	-	same-ip

Parameter	Description	Type	Size	Default						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>disable</i></td><td>Only allow HTTP cookie to match this virtual server.</td></tr><tr><td><i>same-ip</i></td><td>Allow HTTP cookie to match any virtual server with same IP.</td></tr></table>	Option	Description	<i>disable</i>	Only allow HTTP cookie to match this virtual server.	<i>same-ip</i>	Allow HTTP cookie to match any virtual server with same IP.			
	Option	Description								
	<i>disable</i>	Only allow HTTP cookie to match this virtual server.								
<i>same-ip</i>	Allow HTTP cookie to match any virtual server with same IP.									
http-ip-header	For HTTP multiplexing, enable to add the original client IP address in the XForwarded-For HTTP header.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable adding HTTP header.</td></tr><tr><td><i>disable</i></td><td>Disable adding HTTP header.</td></tr></table>	Option	Description	<i>enable</i>	Enable adding HTTP header.	<i>disable</i>	Disable adding HTTP header.			
	Option	Description								
	<i>enable</i>	Enable adding HTTP header.								
<i>disable</i>	Disable adding HTTP header.									
http-ip-header-name	For HTTP multiplexing, enter a custom HTTPS header name. The original client IP address is added to this header. If empty, X-Forwarded-For is used.	string	Maximum length: 35							
http-multiplex	Enable/disable HTTP multiplexing.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable HTTP session multiplexing.</td></tr><tr><td><i>disable</i></td><td>Disable HTTP session multiplexing.</td></tr></table>	Option	Description	<i>enable</i>	Enable HTTP session multiplexing.	<i>disable</i>	Disable HTTP session multiplexing.			
	Option	Description								
	<i>enable</i>	Enable HTTP session multiplexing.								
<i>disable</i>	Disable HTTP session multiplexing.									
http-redirect	Enable/disable redirection of HTTP to HTTPS.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable redirection of HTTP to HTTPS.</td></tr><tr><td><i>disable</i></td><td>Disable redirection of HTTP to HTTPS.</td></tr></table>	Option	Description	<i>enable</i>	Enable redirection of HTTP to HTTPS.	<i>disable</i>	Disable redirection of HTTP to HTTPS.			
	Option	Description								
	<i>enable</i>	Enable redirection of HTTP to HTTPS.								
<i>disable</i>	Disable redirection of HTTP to HTTPS.									
https-cookie-secure	Enable/disable verification that inserted HTTPS cookies are secure.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>disable</i></td><td>Do not mark cookie as secure, allow sharing between an HTTP and HTTPS connection.</td></tr><tr><td><i>enable</i></td><td>Mark inserted cookie as secure, cookie can only be used for HTTPS a connection.</td></tr></table>	Option	Description	<i>disable</i>	Do not mark cookie as secure, allow sharing between an HTTP and HTTPS connection.	<i>enable</i>	Mark inserted cookie as secure, cookie can only be used for HTTPS a connection.			
	Option	Description								
	<i>disable</i>	Do not mark cookie as secure, allow sharing between an HTTP and HTTPS connection.								
<i>enable</i>	Mark inserted cookie as secure, cookie can only be used for HTTPS a connection.									
id	Custom defined ID.	integer	Minimum value: 0 0 Maximum value: 65535							

Parameter	Description	Type	Size	Default																
ipv4-mappedip	Range of mapped IP addresses. Specify the start IP address followed by a space and the end IP address.	user	Not Specified																	
ipv4-mappedport	IPv4 port number range on the destination network to which the external port number range is mapped.	user	Not Specified																	
ldb-method	Method used to distribute sessions to real servers.	option	-	static																
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>static</i></td><td>Distribute sessions based on source IP.</td></tr><tr><td><i>round-robin</i></td><td>Distribute sessions based round robin order.</td></tr><tr><td><i>weighted</i></td><td>Distribute sessions based on weight.</td></tr><tr><td><i>least-session</i></td><td>Sends new sessions to the server with the lowest session count.</td></tr><tr><td><i>least-rtt</i></td><td>Distribute new sessions to the server with lowest Round-Trip-Time.</td></tr><tr><td><i>first-alive</i></td><td>Distribute sessions to the first server that is alive.</td></tr><tr><td><i>http-host</i></td><td>Distribute sessions to servers based on host field in HTTP header.</td></tr></table>				Option	Description	<i>static</i>	Distribute sessions based on source IP.	<i>round-robin</i>	Distribute sessions based round robin order.	<i>weighted</i>	Distribute sessions based on weight.	<i>least-session</i>	Sends new sessions to the server with the lowest session count.	<i>least-rtt</i>	Distribute new sessions to the server with lowest Round-Trip-Time.	<i>first-alive</i>	Distribute sessions to the first server that is alive.	<i>http-host</i>	Distribute sessions to servers based on host field in HTTP header.
Option	Description																			
<i>static</i>	Distribute sessions based on source IP.																			
<i>round-robin</i>	Distribute sessions based round robin order.																			
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<i>least-rtt</i>	Distribute new sessions to the server with lowest Round-Trip-Time.																			
<i>first-alive</i>	Distribute sessions to the first server that is alive.																			
<i>http-host</i>	Distribute sessions to servers based on host field in HTTP header.																			
mappedip	Mapped IPv6 address range in the format startIP-endIP.	user	Not Specified																	
mappedport	Port number range on the destination network to which the external port number range is mapped.	user	Not Specified																	
max-embryonic-connections	Maximum number of incomplete connections.	integer	Minimum value: 1000 0 Maximum value: 100000																	
monitor <name>	Name of the health check monitor to use when polling to determine a virtual server's connectivity status. Health monitor name.	string	Maximum length: 79																	
name	Virtual ip6 name.	string	Maximum length: 79																	
nat-source-vip	Enable to perform SNAT on traffic from mappedip to the extip for all egress interfaces.	option	-	disable																
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>disable</i></td><td>Disable nat-source-vip.</td></tr></table>				Option	Description	<i>disable</i>	Disable nat-source-vip.												
Option	Description																			
<i>disable</i>	Disable nat-source-vip.																			

Parameter	Description	Type	Size	Default						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Perform SNAT on traffic from mappedip to the extip for all egress interfaces.</td></tr></table>	Option	Description	<i>enable</i>	Perform SNAT on traffic from mappedip to the extip for all egress interfaces.					
	Option	Description								
	<i>enable</i>	Perform SNAT on traffic from mappedip to the extip for all egress interfaces.								
nat64	Enable/disable DNAT64.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>disable</i></td><td>Disable DNAT64.</td></tr><tr><td><i>enable</i></td><td>Enable DNAT64.</td></tr></table>	Option	Description	<i>disable</i>	Disable DNAT64.	<i>enable</i>	Enable DNAT64.			
	Option	Description								
	<i>disable</i>	Disable DNAT64.								
<i>enable</i>	Enable DNAT64.									
nat66	Enable/disable DNAT66.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>disable</i></td><td>Disable DNAT66.</td></tr><tr><td><i>enable</i></td><td>Enable DNAT66.</td></tr></table>	Option	Description	<i>disable</i>	Disable DNAT66.	<i>enable</i>	Enable DNAT66.			
	Option	Description								
	<i>disable</i>	Disable DNAT66.								
<i>enable</i>	Enable DNAT66.									
ndp-reply	Enable/disable this FortiGate unit's ability to respond to NDP requests for this virtual IP address (default = enable).	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>disable</i></td><td>Disable this FortiGate unit's ability to respond to NDP requests for this virtual IP address.</td></tr><tr><td><i>enable</i></td><td>Enable this FortiGate unit's ability to respond to NDP requests for this virtual IP address.</td></tr></table>	Option	Description	<i>disable</i>	Disable this FortiGate unit's ability to respond to NDP requests for this virtual IP address.	<i>enable</i>	Enable this FortiGate unit's ability to respond to NDP requests for this virtual IP address.			
	Option	Description								
	<i>disable</i>	Disable this FortiGate unit's ability to respond to NDP requests for this virtual IP address.								
<i>enable</i>	Enable this FortiGate unit's ability to respond to NDP requests for this virtual IP address.									
outlook-web-access	Enable to add the Front-End-Https header for Microsoft Outlook Web Access.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>disable</i></td><td>Disable Outlook Web Access support.</td></tr><tr><td><i>enable</i></td><td>Enable Outlook Web Access support.</td></tr></table>	Option	Description	<i>disable</i>	Disable Outlook Web Access support.	<i>enable</i>	Enable Outlook Web Access support.			
	Option	Description								
	<i>disable</i>	Disable Outlook Web Access support.								
<i>enable</i>	Enable Outlook Web Access support.									
persistence	Configure how to make sure that clients connect to the same server every time they make a request that is part of the same session.	option	-	none						

Parameter	Description	Type	Size	Default																				
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>none</i></td><td>None.</td></tr><tr><td><i>http-cookie</i></td><td>HTTP cookie.</td></tr><tr><td><i>ssl-session-id</i></td><td>SSL session ID.</td></tr></table>	Option	Description	<i>none</i>	None.	<i>http-cookie</i>	HTTP cookie.	<i>ssl-session-id</i>	SSL session ID.															
	Option	Description																						
	<i>none</i>	None.																						
	<i>http-cookie</i>	HTTP cookie.																						
<i>ssl-session-id</i>	SSL session ID.																							
portforward	Enable port forwarding.	option	-	disable																				
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>disable</i></td><td>Disable port forward.</td></tr><tr><td><i>enable</i></td><td>Enable/disable port forwarding.</td></tr></table>	Option	Description	<i>disable</i>	Disable port forward.	<i>enable</i>	Enable/disable port forwarding.																	
	Option	Description																						
	<i>disable</i>	Disable port forward.																						
<i>enable</i>	Enable/disable port forwarding.																							
protocol	Protocol to use when forwarding packets.	option	-	tcp																				
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>tcp</i></td><td>TCP.</td></tr><tr><td><i>udp</i></td><td>UDP.</td></tr><tr><td><i>sctp</i></td><td>SCTP.</td></tr></table>	Option	Description	<i>tcp</i>	TCP.	<i>udp</i>	UDP.	<i>sctp</i>	SCTP.															
	Option	Description																						
	<i>tcp</i>	TCP.																						
	<i>udp</i>	UDP.																						
<i>sctp</i>	SCTP.																							
server-type	Protocol to be load balanced by the virtual server (also called the server load balance virtual IP).	option	-																					
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>http</i></td><td>HTTP.</td></tr><tr><td><i>https</i></td><td>HTTPS.</td></tr><tr><td><i>imaps</i></td><td>IMAPS.</td></tr><tr><td><i>pop3s</i></td><td>POP3S.</td></tr><tr><td><i>smtps</i></td><td>SMTPS.</td></tr><tr><td><i>ssl</i></td><td>SSL.</td></tr><tr><td><i>tcp</i></td><td>TCP.</td></tr><tr><td><i>udp</i></td><td>UDP.</td></tr><tr><td><i>ip</i></td><td>IP.</td></tr></table>	Option	Description	<i>http</i>	HTTP.	<i>https</i>	HTTPS.	<i>imaps</i>	IMAPS.	<i>pop3s</i>	POP3S.	<i>smtps</i>	SMTPS.	<i>ssl</i>	SSL.	<i>tcp</i>	TCP.	<i>udp</i>	UDP.	<i>ip</i>	IP.			
	Option	Description																						
	<i>http</i>	HTTP.																						
	<i>https</i>	HTTPS.																						
	<i>imaps</i>	IMAPS.																						
	<i>pop3s</i>	POP3S.																						
	<i>smtps</i>	SMTPS.																						
	<i>ssl</i>	SSL.																						
	<i>tcp</i>	TCP.																						
	<i>udp</i>	UDP.																						
<i>ip</i>	IP.																							
src-filter <range>	Source IP6 filter (x:x:x:x:x:x/x). Separate addresses with spaces. Source-filter range.	string	Maximum length: 79																					

Parameter	Description	Type	Size	Default										
ssl-accept-ffdhe-groups	Enable/disable FFDHE cipher suite for SSL key exchange.	option	-	enable										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Accept FFDHE groups.</td></tr><tr><td><i>disable</i></td><td>Do not accept FFDHE groups.</td></tr></table>	Option	Description	<i>enable</i>	Accept FFDHE groups.	<i>disable</i>	Do not accept FFDHE groups.							
Option	Description													
<i>enable</i>	Accept FFDHE groups.													
<i>disable</i>	Do not accept FFDHE groups.													
ssl-algorithm	Permitted encryption algorithms for SSL sessions according to encryption strength.	option	-	high										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>high</i></td><td>Use AES.</td></tr><tr><td><i>medium</i></td><td>Use AES, 3DES, or RC4.</td></tr><tr><td><i>low</i></td><td>Use AES, 3DES, RC4, or DES.</td></tr><tr><td><i>custom</i></td><td>Use config ssl-cipher-suites to select the cipher suites that are allowed.</td></tr></table>	Option	Description	<i>high</i>	Use AES.	<i>medium</i>	Use AES, 3DES, or RC4.	<i>low</i>	Use AES, 3DES, RC4, or DES.	<i>custom</i>	Use config ssl-cipher-suites to select the cipher suites that are allowed.			
Option	Description													
<i>high</i>	Use AES.													
<i>medium</i>	Use AES, 3DES, or RC4.													
<i>low</i>	Use AES, 3DES, RC4, or DES.													
<i>custom</i>	Use config ssl-cipher-suites to select the cipher suites that are allowed.													
ssl-certificate	The name of the certificate to use for SSL handshake.	string	Maximum length: 35											
ssl-client-fallback	Enable/disable support for preventing Downgrade Attacks on client connections (RFC 7507).	option	-	enable										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>disable</i></td><td>Disable.</td></tr><tr><td><i>enable</i></td><td>Enable.</td></tr></table>	Option	Description	<i>disable</i>	Disable.	<i>enable</i>	Enable.							
Option	Description													
<i>disable</i>	Disable.													
<i>enable</i>	Enable.													
ssl-client-rekey-count	Maximum length of data in MB before triggering a client rekey (0 = disable).	integer	Minimum value: 0 200 Maximum value: 1048576											
ssl-client-renegotiation	Allow, deny, or require secure renegotiation of client sessions to comply with RFC 5746.	option	-	secure										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>allow</i></td><td>Allow a SSL client to renegotiate.</td></tr><tr><td><i>deny</i></td><td>Abort any SSL connection that attempts to renegotiate.</td></tr><tr><td><i>secure</i></td><td>Reject any SSL connection that does not offer a RFC 5746 Secure Renegotiation Indication.</td></tr></table>	Option	Description	<i>allow</i>	Allow a SSL client to renegotiate.	<i>deny</i>	Abort any SSL connection that attempts to renegotiate.	<i>secure</i>	Reject any SSL connection that does not offer a RFC 5746 Secure Renegotiation Indication.					
Option	Description													
<i>allow</i>	Allow a SSL client to renegotiate.													
<i>deny</i>	Abort any SSL connection that attempts to renegotiate.													
<i>secure</i>	Reject any SSL connection that does not offer a RFC 5746 Secure Renegotiation Indication.													

Parameter	Description	Type	Size	Default														
ssl-client-session-state-max	Maximum number of client to FortiGate SSL session states to keep.	integer	Minimum value: 1 Maximum value: 10000	1000														
ssl-client-session-state-timeout	Number of minutes to keep client to FortiGate SSL session state.	integer	Minimum value: 1 Maximum value: 14400	30														
ssl-client-session-state-type	How to expire SSL sessions for the segment of the SSL connection between the client and the FortiGate.	option	-	both														
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Do not keep session states.</td></tr><tr><td>time</td><td>Expire session states after this many minutes.</td></tr><tr><td>count</td><td>Expire session states when this maximum is reached.</td></tr><tr><td>both</td><td>Expire session states based on time or count, whichever occurs first.</td></tr></table>				Option	Description	disable	Do not keep session states.	time	Expire session states after this many minutes.	count	Expire session states when this maximum is reached.	both	Expire session states based on time or count, whichever occurs first.				
Option	Description																	
disable	Do not keep session states.																	
time	Expire session states after this many minutes.																	
count	Expire session states when this maximum is reached.																	
both	Expire session states based on time or count, whichever occurs first.																	
ssl-dh-bits	Number of bits to use in the Diffie-Hellman exchange for RSA encryption of SSL sessions.	option	-	2048														
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>768</td><td>768-bit Diffie-Hellman prime.</td></tr><tr><td>1024</td><td>1024-bit Diffie-Hellman prime.</td></tr><tr><td>1536</td><td>1536-bit Diffie-Hellman prime.</td></tr><tr><td>2048</td><td>2048-bit Diffie-Hellman prime.</td></tr><tr><td>3072</td><td>3072-bit Diffie-Hellman prime.</td></tr><tr><td>4096</td><td>4096-bit Diffie-Hellman prime.</td></tr></table>				Option	Description	768	768-bit Diffie-Hellman prime.	1024	1024-bit Diffie-Hellman prime.	1536	1536-bit Diffie-Hellman prime.	2048	2048-bit Diffie-Hellman prime.	3072	3072-bit Diffie-Hellman prime.	4096	4096-bit Diffie-Hellman prime.
Option	Description																	
768	768-bit Diffie-Hellman prime.																	
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2048	2048-bit Diffie-Hellman prime.																	
3072	3072-bit Diffie-Hellman prime.																	
4096	4096-bit Diffie-Hellman prime.																	
ssl-hpkp	Enable/disable including HPKP header in response.	option	-	disable														
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Do not add a HPKP header to each HTTP response.</td></tr><tr><td>enable</td><td>Add a HPKP header to each a HTTP response.</td></tr><tr><td>report-only</td><td>Add a HPKP Report-Only header to each HTTP response.</td></tr></table>				Option	Description	disable	Do not add a HPKP header to each HTTP response.	enable	Add a HPKP header to each a HTTP response.	report-only	Add a HPKP Report-Only header to each HTTP response.						
Option	Description																	
disable	Do not add a HPKP header to each HTTP response.																	
enable	Add a HPKP header to each a HTTP response.																	
report-only	Add a HPKP Report-Only header to each HTTP response.																	
ssl-hpkp-age	Number of minutes the web browser should keep HPKP.	integer	Minimum value: 60 Maximum value: 157680000	5184000														

Parameter	Description	Type	Size	Default						
ssl-hpkp-backup	Certificate to generate backup HPKP pin from.	string	Maximum length: 79							
ssl-hpkp-include-subdomains	Indicate that HPKP header applies to all subdomains.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>HPKP header does not apply to subdomains.</td></tr><tr><td>enable</td><td>HPKP header applies to subdomains.</td></tr></table>	Option	Description	disable	HPKP header does not apply to subdomains.	enable	HPKP header applies to subdomains.			
Option	Description									
disable	HPKP header does not apply to subdomains.									
enable	HPKP header applies to subdomains.									
ssl-hpkp-primary	Certificate to generate primary HPKP pin from.	string	Maximum length: 79							
ssl-hpkp-report-uri	URL to report HPKP violations to.	var-string	Maximum length: 255							
ssl-hsts	Enable/disable including HSTS header in response.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Do not add a HSTS header to each a HTTP response.</td></tr><tr><td>enable</td><td>Add a HSTS header to each HTTP response.</td></tr></table>	Option	Description	disable	Do not add a HSTS header to each a HTTP response.	enable	Add a HSTS header to each HTTP response.			
Option	Description									
disable	Do not add a HSTS header to each a HTTP response.									
enable	Add a HSTS header to each HTTP response.									
ssl-hsts-age	Number of seconds the client should honor the HSTS setting.	integer	Minimum value: 60 Maximum value: 157680000	5184000						
ssl-hsts-include-subdomains	Indicate that HSTS header applies to all subdomains.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>HSTS header does not apply to subdomains.</td></tr><tr><td>enable</td><td>HSTS header applies to subdomains.</td></tr></table>	Option	Description	disable	HSTS header does not apply to subdomains.	enable	HSTS header applies to subdomains.			
Option	Description									
disable	HSTS header does not apply to subdomains.									
enable	HSTS header applies to subdomains.									
ssl-http-location-conversion	Enable to replace HTTP with HTTPS in the reply's Location HTTP header field.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable HTTP location conversion.</td></tr><tr><td>disable</td><td>Disable HTTP location conversion.</td></tr></table>	Option	Description	enable	Enable HTTP location conversion.	disable	Disable HTTP location conversion.			
Option	Description									
enable	Enable HTTP location conversion.									
disable	Disable HTTP location conversion.									

Parameter	Description	Type	Size	Default												
ssl-http-match-host	Enable/disable HTTP host matching for location conversion.	option	-	enable												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Match HTTP host in response header.</td></tr><tr><td><i>disable</i></td><td>Do not match HTTP host.</td></tr></table>	Option	Description	<i>enable</i>	Match HTTP host in response header.	<i>disable</i>	Do not match HTTP host.									
Option	Description															
<i>enable</i>	Match HTTP host in response header.															
<i>disable</i>	Do not match HTTP host.															
ssl-max-version	Highest SSL/TLS version acceptable from a client.	option	-	tls-1.3												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>ssl-3.0</i></td><td>SSL 3.0.</td></tr><tr><td><i>tls-1.0</i></td><td>TLS 1.0.</td></tr><tr><td><i>tls-1.1</i></td><td>TLS 1.1.</td></tr><tr><td><i>tls-1.2</i></td><td>TLS 1.2.</td></tr><tr><td><i>tls-1.3</i></td><td>TLS 1.3.</td></tr></table>	Option	Description	<i>ssl-3.0</i>	SSL 3.0.	<i>tls-1.0</i>	TLS 1.0.	<i>tls-1.1</i>	TLS 1.1.	<i>tls-1.2</i>	TLS 1.2.	<i>tls-1.3</i>	TLS 1.3.			
Option	Description															
<i>ssl-3.0</i>	SSL 3.0.															
<i>tls-1.0</i>	TLS 1.0.															
<i>tls-1.1</i>	TLS 1.1.															
<i>tls-1.2</i>	TLS 1.2.															
<i>tls-1.3</i>	TLS 1.3.															
ssl-min-version	Lowest SSL/TLS version acceptable from a client.	option	-	tls-1.1												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>ssl-3.0</i></td><td>SSL 3.0.</td></tr><tr><td><i>tls-1.0</i></td><td>TLS 1.0.</td></tr><tr><td><i>tls-1.1</i></td><td>TLS 1.1.</td></tr><tr><td><i>tls-1.2</i></td><td>TLS 1.2.</td></tr><tr><td><i>tls-1.3</i></td><td>TLS 1.3.</td></tr></table>	Option	Description	<i>ssl-3.0</i>	SSL 3.0.	<i>tls-1.0</i>	TLS 1.0.	<i>tls-1.1</i>	TLS 1.1.	<i>tls-1.2</i>	TLS 1.2.	<i>tls-1.3</i>	TLS 1.3.			
Option	Description															
<i>ssl-3.0</i>	SSL 3.0.															
<i>tls-1.0</i>	TLS 1.0.															
<i>tls-1.1</i>	TLS 1.1.															
<i>tls-1.2</i>	TLS 1.2.															
<i>tls-1.3</i>	TLS 1.3.															
ssl-mode	Apply SSL offloading between the client and the FortiGate (half) or from the client to the FortiGate and from the FortiGate to the server (full).	option	-	half												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>half</i></td><td>Client to FortiGate SSL.</td></tr><tr><td><i>full</i></td><td>Client to FortiGate and FortiGate to Server SSL.</td></tr></table>	Option	Description	<i>half</i>	Client to FortiGate SSL.	<i>full</i>	Client to FortiGate and FortiGate to Server SSL.									
Option	Description															
<i>half</i>	Client to FortiGate SSL.															
<i>full</i>	Client to FortiGate and FortiGate to Server SSL.															
ssl-pfs	Select the cipher suites that can be used for SSL perfect forward secrecy (PFS). Applies to both client and server sessions.	option	-	require												

Parameter	Description	Type	Size	Default												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>require</i></td><td>Allow only Diffie-Hellman cipher-suites, so PFS is applied.</td></tr><tr><td><i>deny</i></td><td>Allow only non-Diffie-Hellman cipher-suites, so PFS is not applied.</td></tr><tr><td><i>allow</i></td><td>Allow use of any cipher suite so PFS may or may not be used depending on the cipher suite selected.</td></tr></table>	Option	Description	<i>require</i>	Allow only Diffie-Hellman cipher-suites, so PFS is applied.	<i>deny</i>	Allow only non-Diffie-Hellman cipher-suites, so PFS is not applied.	<i>allow</i>	Allow use of any cipher suite so PFS may or may not be used depending on the cipher suite selected.							
	Option	Description														
	<i>require</i>	Allow only Diffie-Hellman cipher-suites, so PFS is applied.														
	<i>deny</i>	Allow only non-Diffie-Hellman cipher-suites, so PFS is not applied.														
<i>allow</i>	Allow use of any cipher suite so PFS may or may not be used depending on the cipher suite selected.															
ssl-send-empty-frags	Enable/disable sending empty fragments to avoid CBC IV attacks (SSL 3.0 & TLS 1.0 only). May need to be disabled for compatibility with older systems.	option	-	enable												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Send empty fragments.</td></tr><tr><td><i>disable</i></td><td>Do not send empty fragments.</td></tr></table>	Option	Description	<i>enable</i>	Send empty fragments.	<i>disable</i>	Do not send empty fragments.									
	Option	Description														
	<i>enable</i>	Send empty fragments.														
<i>disable</i>	Do not send empty fragments.															
ssl-server-algorithm	Permitted encryption algorithms for the server side of SSL full mode sessions according to encryption strength.	option	-	client												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>high</i></td><td>Use AES.</td></tr><tr><td><i>medium</i></td><td>Use AES, 3DES, or RC4.</td></tr><tr><td><i>low</i></td><td>Use AES, 3DES, RC4, or DES.</td></tr><tr><td><i>custom</i></td><td>Use config ssl-server-cipher-suites to select the cipher suites that are allowed.</td></tr><tr><td><i>client</i></td><td>Use the same encryption algorithms for client and server sessions.</td></tr></table>	Option	Description	<i>high</i>	Use AES.	<i>medium</i>	Use AES, 3DES, or RC4.	<i>low</i>	Use AES, 3DES, RC4, or DES.	<i>custom</i>	Use config ssl-server-cipher-suites to select the cipher suites that are allowed.	<i>client</i>	Use the same encryption algorithms for client and server sessions.			
	Option	Description														
	<i>high</i>	Use AES.														
	<i>medium</i>	Use AES, 3DES, or RC4.														
	<i>low</i>	Use AES, 3DES, RC4, or DES.														
	<i>custom</i>	Use config ssl-server-cipher-suites to select the cipher suites that are allowed.														
<i>client</i>	Use the same encryption algorithms for client and server sessions.															
ssl-server-max-version	Highest SSL/TLS version acceptable from a server. Use the client setting by default.	option	-	client												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>ssl-3.0</i></td><td>SSL 3.0.</td></tr><tr><td><i>tls-1.0</i></td><td>TLS 1.0.</td></tr><tr><td><i>tls-1.1</i></td><td>TLS 1.1.</td></tr><tr><td><i>tls-1.2</i></td><td>TLS 1.2.</td></tr><tr><td><i>tls-1.3</i></td><td>TLS 1.3.</td></tr></table>	Option	Description	<i>ssl-3.0</i>	SSL 3.0.	<i>tls-1.0</i>	TLS 1.0.	<i>tls-1.1</i>	TLS 1.1.	<i>tls-1.2</i>	TLS 1.2.	<i>tls-1.3</i>	TLS 1.3.			
	Option	Description														
	<i>ssl-3.0</i>	SSL 3.0.														
	<i>tls-1.0</i>	TLS 1.0.														
	<i>tls-1.1</i>	TLS 1.1.														
	<i>tls-1.2</i>	TLS 1.2.														
<i>tls-1.3</i>	TLS 1.3.															

Parameter	Description	Type	Size	Default														
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>client</td><td>Use same value as client configuration.</td></tr></table>	Option	Description	client	Use same value as client configuration.													
Option	Description																	
client	Use same value as client configuration.																	
ssl-server-min-version	Lowest SSL/TLS version acceptable from a server. Use the client setting by default.	option	-	client														
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>ssl-3.0</td><td>SSL 3.0.</td></tr><tr><td>tls-1.0</td><td>TLS 1.0.</td></tr><tr><td>tls-1.1</td><td>TLS 1.1.</td></tr><tr><td>tls-1.2</td><td>TLS 1.2.</td></tr><tr><td>tls-1.3</td><td>TLS 1.3.</td></tr><tr><td>client</td><td>Use same value as client configuration.</td></tr></table>	Option	Description	ssl-3.0	SSL 3.0.	tls-1.0	TLS 1.0.	tls-1.1	TLS 1.1.	tls-1.2	TLS 1.2.	tls-1.3	TLS 1.3.	client	Use same value as client configuration.			
Option	Description																	
ssl-3.0	SSL 3.0.																	
tls-1.0	TLS 1.0.																	
tls-1.1	TLS 1.1.																	
tls-1.2	TLS 1.2.																	
tls-1.3	TLS 1.3.																	
client	Use same value as client configuration.																	
ssl-server-renegotiation	Enable/disable secure renegotiation to comply with RFC 5746.	option	-	enable														
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable secure renegotiation.</td></tr><tr><td>disable</td><td>Disable secure renegotiation.</td></tr></table>	Option	Description	enable	Enable secure renegotiation.	disable	Disable secure renegotiation.											
Option	Description																	
enable	Enable secure renegotiation.																	
disable	Disable secure renegotiation.																	
ssl-server-session-state-max	Maximum number of FortiGate to Server SSL session states to keep.	integer	Minimum value: 100 1 Maximum value: 10000															
ssl-server-session-state-timeout	Number of minutes to keep FortiGate to Server SSL session state.	integer	Minimum value: 60 1 Maximum value: 14400															
ssl-server-session-state-type	How to expire SSL sessions for the segment of the SSL connection between the server and the FortiGate.	option	-	both														
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Do not keep session states.</td></tr><tr><td>time</td><td>Expire session states after this many minutes.</td></tr><tr><td>count</td><td>Expire session states when this maximum is reached.</td></tr><tr><td>both</td><td>Expire session states based on time or count, whichever occurs first.</td></tr></table>	Option	Description	disable	Do not keep session states.	time	Expire session states after this many minutes.	count	Expire session states when this maximum is reached.	both	Expire session states based on time or count, whichever occurs first.							
Option	Description																	
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count	Expire session states when this maximum is reached.																	
both	Expire session states based on time or count, whichever occurs first.																	

Parameter	Description	Type	Size	Default
type	Configure a static NAT server load balance VIP or access proxy.	option	-	static-nat
	Option	Description		
	<i>static-nat</i>	Static NAT.		
	<i>server-load-balance</i>	Server load balance.		
	<i>access-proxy</i>	Access proxy.		
uuid	Universally Unique Identifier (UUID; automatically assigned but can be manually reset).	uuid	Not Specified	00000000-0000-0000-0000-000000000000
weblogic-server	Enable to add an HTTP header to indicate SSL offloading for a WebLogic server.	option	-	disable
	Option	Description		
	<i>disable</i>	Do not add HTTP header indicating SSL offload for WebLogic server.		
	<i>enable</i>	Add HTTP header indicating SSL offload for WebLogic server.		
websphere-server	Enable to add an HTTP header to indicate SSL offloading for a WebSphere server.	option	-	disable
	Option	Description		
	<i>disable</i>	Do not add HTTP header indicating SSL offload for WebSphere server.		
	<i>enable</i>	Add HTTP header indicating SSL offload for WebSphere server.		

config realservers

Parameter	Description	Type	Size	Default
client-ip	Only clients in this IP range can connect to this real server.	user	Not Specified	
healthcheck	Enable to check the responsiveness of the real server before forwarding traffic.	option	-	vip
	Option	Description		
	<i>disable</i>	Disable per server health check.		
	<i>enable</i>	Enable per server health check.		
	<i>vip</i>	Use health check defined in VIP.		

Parameter	Description	Type	Size	Default								
holddown-interval	Time in seconds that the system waits before re-activating a previously down active server in the active-standby mode. This is to prevent any flapping issues.	integer	Minimum value: 30 Maximum value: 65535	300								
http-host	HTTP server domain name in HTTP header.	string	Maximum length: 63									
id	Real server ID.	integer	Minimum value: 0 Maximum value: 4294967295	0								
ip	IP address of the real server.	user	Not Specified									
max-connections	Max number of active connections that can be directed to the real server. When reached, sessions are sent to other real servers.	integer	Minimum value: 0 Maximum value: 2147483647	0								
monitor <name>	Name of the health check monitor to use when polling to determine a virtual server's connectivity status. Health monitor name.	string	Maximum length: 79									
port	Port for communicating with the real server. Required if port forwarding is enabled.	integer	Minimum value: 1 Maximum value: 65535	0								
status	Set the status of the real server to active so that it can accept traffic, or on standby or disabled so no traffic is sent.	option	-	active								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>active</td><td>Server status active.</td></tr><tr><td>standby</td><td>Server status standby.</td></tr><tr><td>disable</td><td>Server status disable.</td></tr></table>				Option	Description	active	Server status active.	standby	Server status standby.	disable	Server status disable.
Option	Description											
active	Server status active.											
standby	Server status standby.											
disable	Server status disable.											
translate-host	Enable/disable translation of hostname/IP from virtual server to real server.	option	-	enable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable virtual hostname/IP translation.</td></tr><tr><td>disable</td><td>Disable virtual hostname/IP translation.</td></tr></table>				Option	Description	enable	Enable virtual hostname/IP translation.	disable	Disable virtual hostname/IP translation.		
Option	Description											
enable	Enable virtual hostname/IP translation.											
disable	Disable virtual hostname/IP translation.											
weight	Weight of the real server. If weighted load balancing is enabled, the server with the highest weight gets more connections.	integer	Minimum value: 1 Maximum value: 255	1								

config ssl-cipher-suites

Parameter	Description	Type	Size	Default																						
cipher	Cipher suite name.	option	-																							
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>TLS-AES-128-GCM-SHA256</td><td>Cipher suite TLS-AES-128-GCM-SHA256.</td></tr><tr><td>TLS-AES-256-GCM-SHA384</td><td>Cipher suite TLS-AES-256-GCM-SHA384.</td></tr><tr><td>TLS-CHACHA20-POLY1305-SHA256</td><td>Cipher suite TLS-CHACHA20-POLY1305-SHA256.</td></tr><tr><td>TLS-ECDHE-RSA-WITH-CHACHA20-POLY1305-SHA256</td><td>Cipher suite TLS-ECDHE-RSA-WITH-CHACHA20-POLY1305-SHA256.</td></tr><tr><td>TLS-ECDHE-ECDSA-WITH-CHACHA20-POLY1305-SHA256</td><td>Cipher suite TLS-ECDHE-ECDSA-WITH-CHACHA20-POLY1305-SHA256.</td></tr><tr><td>TLS-DHE-RSA-WITH-CHACHA20-POLY1305-SHA256</td><td>Cipher suite TLS-DHE-RSA-WITH-CHACHA20-POLY1305-SHA256.</td></tr><tr><td>TLS-DHE-RSA-WITH-AES-128-CBC-SHA</td><td>Cipher suite TLS-DHE-RSA-WITH-AES-128-CBC-SHA.</td></tr><tr><td>TLS-DHE-RSA-WITH-AES-256-CBC-SHA</td><td>Cipher suite TLS-DHE-RSA-WITH-AES-256-CBC-SHA.</td></tr><tr><td>TLS-DHE-RSA-WITH-AES-128-CBC-SHA256</td><td>Cipher suite TLS-DHE-RSA-WITH-AES-128-CBC-SHA256.</td></tr><tr><td>TLS-DHE-RSA-WITH-AES-128-GCM-SHA256</td><td>Cipher suite TLS-DHE-RSA-WITH-AES-128-GCM-SHA256.</td></tr></table>	Option	Description	TLS-AES-128-GCM-SHA256	Cipher suite TLS-AES-128-GCM-SHA256.	TLS-AES-256-GCM-SHA384	Cipher suite TLS-AES-256-GCM-SHA384.	TLS-CHACHA20-POLY1305-SHA256	Cipher suite TLS-CHACHA20-POLY1305-SHA256.	TLS-ECDHE-RSA-WITH-CHACHA20-POLY1305-SHA256	Cipher suite TLS-ECDHE-RSA-WITH-CHACHA20-POLY1305-SHA256.	TLS-ECDHE-ECDSA-WITH-CHACHA20-POLY1305-SHA256	Cipher suite TLS-ECDHE-ECDSA-WITH-CHACHA20-POLY1305-SHA256.	TLS-DHE-RSA-WITH-CHACHA20-POLY1305-SHA256	Cipher suite TLS-DHE-RSA-WITH-CHACHA20-POLY1305-SHA256.	TLS-DHE-RSA-WITH-AES-128-CBC-SHA	Cipher suite TLS-DHE-RSA-WITH-AES-128-CBC-SHA.	TLS-DHE-RSA-WITH-AES-256-CBC-SHA	Cipher suite TLS-DHE-RSA-WITH-AES-256-CBC-SHA.	TLS-DHE-RSA-WITH-AES-128-CBC-SHA256	Cipher suite TLS-DHE-RSA-WITH-AES-128-CBC-SHA256.	TLS-DHE-RSA-WITH-AES-128-GCM-SHA256	Cipher suite TLS-DHE-RSA-WITH-AES-128-GCM-SHA256.			
Option	Description																									
TLS-AES-128-GCM-SHA256	Cipher suite TLS-AES-128-GCM-SHA256.																									
TLS-AES-256-GCM-SHA384	Cipher suite TLS-AES-256-GCM-SHA384.																									
TLS-CHACHA20-POLY1305-SHA256	Cipher suite TLS-CHACHA20-POLY1305-SHA256.																									
TLS-ECDHE-RSA-WITH-CHACHA20-POLY1305-SHA256	Cipher suite TLS-ECDHE-RSA-WITH-CHACHA20-POLY1305-SHA256.																									
TLS-ECDHE-ECDSA-WITH-CHACHA20-POLY1305-SHA256	Cipher suite TLS-ECDHE-ECDSA-WITH-CHACHA20-POLY1305-SHA256.																									
TLS-DHE-RSA-WITH-CHACHA20-POLY1305-SHA256	Cipher suite TLS-DHE-RSA-WITH-CHACHA20-POLY1305-SHA256.																									
TLS-DHE-RSA-WITH-AES-128-CBC-SHA	Cipher suite TLS-DHE-RSA-WITH-AES-128-CBC-SHA.																									
TLS-DHE-RSA-WITH-AES-256-CBC-SHA	Cipher suite TLS-DHE-RSA-WITH-AES-256-CBC-SHA.																									
TLS-DHE-RSA-WITH-AES-128-CBC-SHA256	Cipher suite TLS-DHE-RSA-WITH-AES-128-CBC-SHA256.																									
TLS-DHE-RSA-WITH-AES-128-GCM-SHA256	Cipher suite TLS-DHE-RSA-WITH-AES-128-GCM-SHA256.																									

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>TLS-DHE-RSA-WITH-AES-256-CBC-SHA256</i>	Cipher suite TLS-DHE-RSA-WITH-AES-256-CBC-SHA256.		
	<i>TLS-DHE-RSA-WITH-AES-256-GCM-SHA384</i>	Cipher suite TLS-DHE-RSA-WITH-AES-256-GCM-SHA384.		
	<i>TLS-DHE-DSS-WITH-AES-128-CBC-SHA</i>	Cipher suite TLS-DHE-DSS-WITH-AES-128-CBC-SHA.		
	<i>TLS-DHE-DSS-WITH-AES-256-CBC-SHA</i>	Cipher suite TLS-DHE-DSS-WITH-AES-256-CBC-SHA.		
	<i>TLS-DHE-DSS-WITH-AES-128-CBC-SHA256</i>	Cipher suite TLS-DHE-DSS-WITH-AES-128-CBC-SHA256.		
	<i>TLS-DHE-DSS-WITH-AES-128-GCM-SHA256</i>	Cipher suite TLS-DHE-DSS-WITH-AES-128-GCM-SHA256.		
	<i>TLS-DHE-DSS-WITH-AES-256-CBC-SHA256</i>	Cipher suite TLS-DHE-DSS-WITH-AES-256-CBC-SHA256.		
	<i>TLS-DHE-DSS-WITH-AES-256-GCM-SHA384</i>	Cipher suite TLS-DHE-DSS-WITH-AES-256-GCM-SHA384.		
	<i>TLS-ECDHE-RSA-WITH-AES-128-CBC-SHA</i>	Cipher suite TLS-ECDHE-RSA-WITH-AES-128-CBC-SHA.		
	<i>TLS-ECDHE-RSA-WITH-AES-128-CBC-SHA256</i>	Cipher suite TLS-ECDHE-RSA-WITH-AES-128-CBC-SHA256.		

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>TLS-ECDHE-RSA-WITH-AES-128-GCM-SHA256</i>	Cipher suite TLS-ECDHE-RSA-WITH-AES-128-GCM-SHA256.		
	<i>TLS-ECDHE-RSA-WITH-AES-256-CBC-SHA</i>	Cipher suite TLS-ECDHE-RSA-WITH-AES-256-CBC-SHA.		
	<i>TLS-ECDHE-RSA-WITH-AES-256-CBC-SHA384</i>	Cipher suite TLS-ECDHE-RSA-WITH-AES-256-CBC-SHA384.		
	<i>TLS-ECDHE-RSA-WITH-AES-256-GCM-SHA384</i>	Cipher suite TLS-ECDHE-RSA-WITH-AES-256-GCM-SHA384.		
	<i>TLS-ECDHE-ECDSA-WITH-AES-128-CBC-SHA</i>	Cipher suite TLS-ECDHE-ECDSA-WITH-AES-128-CBC-SHA.		
	<i>TLS-ECDHE-ECDSA-WITH-AES-128-CBC-SHA256</i>	Cipher suite TLS-ECDHE-ECDSA-WITH-AES-128-CBC-SHA256.		
	<i>TLS-ECDHE-ECDSA-WITH-AES-128-GCM-SHA256</i>	Cipher suite TLS-ECDHE-ECDSA-WITH-AES-128-GCM-SHA256.		
	<i>TLS-ECDHE-ECDSA-WITH-AES-256-CBC-SHA</i>	Cipher suite TLS-ECDHE-ECDSA-WITH-AES-256-CBC-SHA.		
	<i>TLS-ECDHE-ECDSA-WITH-AES-256-CBC-SHA384</i>	Cipher suite TLS-ECDHE-ECDSA-WITH-AES-256-CBC-SHA384.		

Parameter	Description	Type	Size	Default
	Option	Description		
	TLS-ECDHE-ECDSA-WITH-AES-256-GCM-SHA384	Cipher suite TLS-ECDHE-ECDSA-WITH-AES-256-GCM-SHA384.		
	TLS-RSA-WITH-AES-128-CBC-SHA	Cipher suite TLS-RSA-WITH-AES-128-CBC-SHA.		
	TLS-RSA-WITH-AES-256-CBC-SHA	Cipher suite TLS-RSA-WITH-AES-256-CBC-SHA.		
	TLS-RSA-WITH-AES-128-CBC-SHA256	Cipher suite TLS-RSA-WITH-AES-128-CBC-SHA256.		
	TLS-RSA-WITH-AES-128-GCM-SHA256	Cipher suite TLS-RSA-WITH-AES-128-GCM-SHA256.		
	TLS-RSA-WITH-AES-256-CBC-SHA256	Cipher suite TLS-RSA-WITH-AES-256-CBC-SHA256.		
	TLS-RSA-WITH-AES-256-GCM-SHA384	Cipher suite TLS-RSA-WITH-AES-256-GCM-SHA384.		
	TLS-RSA-WITH-CAMELLIA-128-CBC-SHA	Cipher suite TLS-RSA-WITH-CAMELLIA-128-CBC-SHA.		
	TLS-RSA-WITH-CAMELLIA-256-CBC-SHA	Cipher suite TLS-RSA-WITH-CAMELLIA-256-CBC-SHA.		
TLS-RSA-WITH-CAMELLIA-128-CBC-SHA256	Cipher suite TLS-RSA-WITH-CAMELLIA-128-CBC-SHA256.			

Parameter	Description	Type	Size	Default																				
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>TLS-RSA-WITH-CAMELLIA-256-CBC-SHA256</td><td>Cipher suite TLS-RSA-WITH-CAMELLIA-256-CBC-SHA256.</td></tr><tr><td>TLS-DHE-RSA-WITH-3DES-EDE-CBC-SHA</td><td>Cipher suite TLS-DHE-RSA-WITH-3DES-EDE-CBC-SHA.</td></tr><tr><td>TLS-DHE-RSA-WITH-CAMELLIA-128-CBC-SHA</td><td>Cipher suite TLS-DHE-RSA-WITH-CAMELLIA-128-CBC-SHA.</td></tr><tr><td>TLS-DHE-DSS-WITH-CAMELLIA-128-CBC-SHA</td><td>Cipher suite TLS-DSS-RSA-WITH-CAMELLIA-128-CBC-SHA.</td></tr><tr><td>TLS-DHE-RSA-WITH-CAMELLIA-256-CBC-SHA</td><td>Cipher suite TLS-DHE-RSA-WITH-CAMELLIA-256-CBC-SHA.</td></tr><tr><td>TLS-DHE-DSS-WITH-CAMELLIA-256-CBC-SHA</td><td>Cipher suite TLS-DHE-DSS-WITH-CAMELLIA-256-CBC-SHA.</td></tr><tr><td>TLS-DHE-RSA-WITH-CAMELLIA-128-CBC-SHA256</td><td>Cipher suite TLS-DHE-RSA-WITH-CAMELLIA-128-CBC-SHA256.</td></tr><tr><td>TLS-DHE-DSS-WITH-CAMELLIA-128-CBC-SHA256</td><td>Cipher suite TLS-DHE-DSS-WITH-CAMELLIA-128-CBC-SHA256.</td></tr><tr><td>TLS-DHE-RSA-WITH-CAMELLIA-256-CBC-SHA256</td><td>Cipher suite TLS-DHE-RSA-WITH-CAMELLIA-256-CBC-SHA256.</td></tr></table>	Option	Description	TLS-RSA-WITH-CAMELLIA-256-CBC-SHA256	Cipher suite TLS-RSA-WITH-CAMELLIA-256-CBC-SHA256.	TLS-DHE-RSA-WITH-3DES-EDE-CBC-SHA	Cipher suite TLS-DHE-RSA-WITH-3DES-EDE-CBC-SHA.	TLS-DHE-RSA-WITH-CAMELLIA-128-CBC-SHA	Cipher suite TLS-DHE-RSA-WITH-CAMELLIA-128-CBC-SHA.	TLS-DHE-DSS-WITH-CAMELLIA-128-CBC-SHA	Cipher suite TLS-DSS-RSA-WITH-CAMELLIA-128-CBC-SHA.	TLS-DHE-RSA-WITH-CAMELLIA-256-CBC-SHA	Cipher suite TLS-DHE-RSA-WITH-CAMELLIA-256-CBC-SHA.	TLS-DHE-DSS-WITH-CAMELLIA-256-CBC-SHA	Cipher suite TLS-DHE-DSS-WITH-CAMELLIA-256-CBC-SHA.	TLS-DHE-RSA-WITH-CAMELLIA-128-CBC-SHA256	Cipher suite TLS-DHE-RSA-WITH-CAMELLIA-128-CBC-SHA256.	TLS-DHE-DSS-WITH-CAMELLIA-128-CBC-SHA256	Cipher suite TLS-DHE-DSS-WITH-CAMELLIA-128-CBC-SHA256.	TLS-DHE-RSA-WITH-CAMELLIA-256-CBC-SHA256	Cipher suite TLS-DHE-RSA-WITH-CAMELLIA-256-CBC-SHA256.			
Option	Description																							
TLS-RSA-WITH-CAMELLIA-256-CBC-SHA256	Cipher suite TLS-RSA-WITH-CAMELLIA-256-CBC-SHA256.																							
TLS-DHE-RSA-WITH-3DES-EDE-CBC-SHA	Cipher suite TLS-DHE-RSA-WITH-3DES-EDE-CBC-SHA.																							
TLS-DHE-RSA-WITH-CAMELLIA-128-CBC-SHA	Cipher suite TLS-DHE-RSA-WITH-CAMELLIA-128-CBC-SHA.																							
TLS-DHE-DSS-WITH-CAMELLIA-128-CBC-SHA	Cipher suite TLS-DSS-RSA-WITH-CAMELLIA-128-CBC-SHA.																							
TLS-DHE-RSA-WITH-CAMELLIA-256-CBC-SHA	Cipher suite TLS-DHE-RSA-WITH-CAMELLIA-256-CBC-SHA.																							
TLS-DHE-DSS-WITH-CAMELLIA-256-CBC-SHA	Cipher suite TLS-DHE-DSS-WITH-CAMELLIA-256-CBC-SHA.																							
TLS-DHE-RSA-WITH-CAMELLIA-128-CBC-SHA256	Cipher suite TLS-DHE-RSA-WITH-CAMELLIA-128-CBC-SHA256.																							
TLS-DHE-DSS-WITH-CAMELLIA-128-CBC-SHA256	Cipher suite TLS-DHE-DSS-WITH-CAMELLIA-128-CBC-SHA256.																							
TLS-DHE-RSA-WITH-CAMELLIA-256-CBC-SHA256	Cipher suite TLS-DHE-RSA-WITH-CAMELLIA-256-CBC-SHA256.																							

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>TLS-DHE-DSS-WITH-CAMELLIA-256-CBC-SHA256</i>	Cipher suite TLS-DHE-DSS-WITH-CAMELLIA-256-CBC-SHA256.		
	<i>TLS-DHE-RSA-WITH-SEED-CBC-SHA</i>	Cipher suite TLS-DHE-RSA-WITH-SEED-CBC-SHA.		
	<i>TLS-DHE-DSS-WITH-SEED-CBC-SHA</i>	Cipher suite TLS-DHE-DSS-WITH-SEED-CBC-SHA.		
	<i>TLS-DHE-RSA-WITH-ARIA-128-CBC-SHA256</i>	Cipher suite TLS-DHE-RSA-WITH-ARIA-128-CBC-SHA256.		
	<i>TLS-DHE-RSA-WITH-ARIA-256-CBC-SHA384</i>	Cipher suite TLS-DHE-RSA-WITH-ARIA-256-CBC-SHA384.		
	<i>TLS-DHE-DSS-WITH-ARIA-128-CBC-SHA256</i>	Cipher suite TLS-DHE-DSS-WITH-ARIA-128-CBC-SHA256.		
	<i>TLS-DHE-DSS-WITH-ARIA-256-CBC-SHA384</i>	Cipher suite TLS-DHE-DSS-WITH-ARIA-256-CBC-SHA384.		
	<i>TLS-RSA-WITH-SEED-CBC-SHA</i>	Cipher suite TLS-RSA-WITH-SEED-CBC-SHA.		
	<i>TLS-RSA-WITH-ARIA-128-CBC-SHA256</i>	Cipher suite TLS-RSA-WITH-ARIA-128-CBC-SHA256.		
	<i>TLS-RSA-WITH-ARIA-256-CBC-SHA384</i>	Cipher suite TLS-RSA-WITH-ARIA-256-CBC-SHA384.		

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>TLS-ECDHE-RSA-WITH-ARIA-128-CBC-SHA256</i>	Cipher suite TLS-ECDHE-RSA-WITH-ARIA-128-CBC-SHA256.		
	<i>TLS-ECDHE-RSA-WITH-ARIA-256-CBC-SHA384</i>	Cipher suite TLS-ECDHE-RSA-WITH-ARIA-256-CBC-SHA384.		
	<i>TLS-ECDHE-ECDSA-WITH-ARIA-128-CBC-SHA256</i>	Cipher suite TLS-ECDHE-ECDSA-WITH-ARIA-128-CBC_SHA256.		
	<i>TLS-ECDHE-ECDSA-WITH-ARIA-256-CBC-SHA384</i>	Cipher suite TLS-ECDHE-ECDSA-WITH-ARIA-256-CBC_SHA384.		
	<i>TLS-ECDHE-RSA-WITH-RC4-128-SHA</i>	Cipher suite TLS-ECDHE-RSA-WITH-RC4-128-SHA.		
	<i>TLS-ECDHE-RSA-WITH-3DES-EDE-CBC-SHA</i>	Cipher suite TLS-ECDHE-RSA-WITH-3DES-EDE-CBC-SHA.		
	<i>TLS-DHE-DSS-WITH-3DES-EDE-CBC-SHA</i>	Cipher suite TLS-DHE-DSS-WITH-3DES-EDE-CBC-SHA.		
	<i>TLS-RSA-WITH-3DES-EDE-CBC-SHA</i>	Cipher suite TLS-RSA-WITH-3DES-EDE-CBC-SHA.		
	<i>TLS-RSA-WITH-RC4-128-MD5</i>	Cipher suite TLS-RSA-WITH-RC4-128-MD5.		
	<i>TLS-RSA-WITH-RC4-128-SHA</i>	Cipher suite TLS-RSA-WITH-RC4-128-SHA.		
	<i>TLS-DHE-RSA-WITH-DES-CBC-SHA</i>	Cipher suite TLS-DHE-RSA-WITH-DES-CBC-SHA.		

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>TLS-DHE-DSS-WITH-DES-CBC-SHA</i>	Cipher suite TLS-DHE-DSS-WITH-DES-CBC-SHA.		
	<i>TLS-RSA-WITH-DES-CBC-SHA</i>	Cipher suite TLS-RSA-WITH-DES-CBC-SHA.		
priority	SSL/TLS cipher suites priority.	integer	Minimum value: 0 0 Maximum value: 4294967295	0
versions	SSL/TLS versions that the cipher suite can be used with.	option	-	ssl-3.0 tls-1.0 tls-1.1 tls-1.2 tls-1.3
	Option	Description		
	<i>ssl-3.0</i>	SSL 3.0.		
	<i>tls-1.0</i>	TLS 1.0.		
	<i>tls-1.1</i>	TLS 1.1.		
	<i>tls-1.2</i>	TLS 1.2.		
	<i>tls-1.3</i>	TLS 1.3.		

config ssl-server-cipher-suites

Parameter	Description	Type	Size	Default								
cipher	Cipher suite name.	option	-									
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>TLS-AES-128-GCM-SHA256</i></td><td>Cipher suite TLS-AES-128-GCM-SHA256.</td></tr><tr><td><i>TLS-AES-256-GCM-SHA384</i></td><td>Cipher suite TLS-AES-256-GCM-SHA384.</td></tr><tr><td><i>TLS-CHACHA20-POLY1305-SHA256</i></td><td>Cipher suite TLS-CHACHA20-POLY1305-SHA256.</td></tr></table>	Option	Description	<i>TLS-AES-128-GCM-SHA256</i>	Cipher suite TLS-AES-128-GCM-SHA256.	<i>TLS-AES-256-GCM-SHA384</i>	Cipher suite TLS-AES-256-GCM-SHA384.	<i>TLS-CHACHA20-POLY1305-SHA256</i>	Cipher suite TLS-CHACHA20-POLY1305-SHA256.			
Option	Description											
<i>TLS-AES-128-GCM-SHA256</i>	Cipher suite TLS-AES-128-GCM-SHA256.											
<i>TLS-AES-256-GCM-SHA384</i>	Cipher suite TLS-AES-256-GCM-SHA384.											
<i>TLS-CHACHA20-POLY1305-SHA256</i>	Cipher suite TLS-CHACHA20-POLY1305-SHA256.											

Parameter	Description	Type	Size	Default																						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>TLS-ECDHE-RSA-WITH-CHACHA20-POLY1305-SHA256</i></td><td>Cipher suite TLS-ECDHE-RSA-WITH-CHACHA20-POLY1305-SHA256.</td></tr><tr><td><i>TLS-ECDHE-ECDSA-WITH-CHACHA20-POLY1305-SHA256</i></td><td>Cipher suite TLS-ECDHE-ECDSA-WITH-CHACHA20-POLY1305-SHA256.</td></tr><tr><td><i>TLS-DHE-RSA-WITH-CHACHA20-POLY1305-SHA256</i></td><td>Cipher suite TLS-DHE-RSA-WITH-CHACHA20-POLY1305-SHA256.</td></tr><tr><td><i>TLS-DHE-RSA-WITH-AES-128-CBC-SHA</i></td><td>Cipher suite TLS-DHE-RSA-WITH-AES-128-CBC-SHA.</td></tr><tr><td><i>TLS-DHE-RSA-WITH-AES-256-CBC-SHA</i></td><td>Cipher suite TLS-DHE-RSA-WITH-AES-256-CBC-SHA.</td></tr><tr><td><i>TLS-DHE-RSA-WITH-AES-128-CBC-SHA256</i></td><td>Cipher suite TLS-DHE-RSA-WITH-AES-128-CBC-SHA256.</td></tr><tr><td><i>TLS-DHE-RSA-WITH-AES-128-GCM-SHA256</i></td><td>Cipher suite TLS-DHE-RSA-WITH-AES-128-GCM-SHA256.</td></tr><tr><td><i>TLS-DHE-RSA-WITH-AES-256-CBC-SHA256</i></td><td>Cipher suite TLS-DHE-RSA-WITH-AES-256-CBC-SHA256.</td></tr><tr><td><i>TLS-DHE-RSA-WITH-AES-256-GCM-SHA384</i></td><td>Cipher suite TLS-DHE-RSA-WITH-AES-256-GCM-SHA384.</td></tr><tr><td><i>TLS-DHE-DSS-WITH-AES-128-CBC-SHA</i></td><td>Cipher suite TLS-DHE-DSS-WITH-AES-128-CBC-SHA.</td></tr></table>	Option	Description	<i>TLS-ECDHE-RSA-WITH-CHACHA20-POLY1305-SHA256</i>	Cipher suite TLS-ECDHE-RSA-WITH-CHACHA20-POLY1305-SHA256.	<i>TLS-ECDHE-ECDSA-WITH-CHACHA20-POLY1305-SHA256</i>	Cipher suite TLS-ECDHE-ECDSA-WITH-CHACHA20-POLY1305-SHA256.	<i>TLS-DHE-RSA-WITH-CHACHA20-POLY1305-SHA256</i>	Cipher suite TLS-DHE-RSA-WITH-CHACHA20-POLY1305-SHA256.	<i>TLS-DHE-RSA-WITH-AES-128-CBC-SHA</i>	Cipher suite TLS-DHE-RSA-WITH-AES-128-CBC-SHA.	<i>TLS-DHE-RSA-WITH-AES-256-CBC-SHA</i>	Cipher suite TLS-DHE-RSA-WITH-AES-256-CBC-SHA.	<i>TLS-DHE-RSA-WITH-AES-128-CBC-SHA256</i>	Cipher suite TLS-DHE-RSA-WITH-AES-128-CBC-SHA256.	<i>TLS-DHE-RSA-WITH-AES-128-GCM-SHA256</i>	Cipher suite TLS-DHE-RSA-WITH-AES-128-GCM-SHA256.	<i>TLS-DHE-RSA-WITH-AES-256-CBC-SHA256</i>	Cipher suite TLS-DHE-RSA-WITH-AES-256-CBC-SHA256.	<i>TLS-DHE-RSA-WITH-AES-256-GCM-SHA384</i>	Cipher suite TLS-DHE-RSA-WITH-AES-256-GCM-SHA384.	<i>TLS-DHE-DSS-WITH-AES-128-CBC-SHA</i>	Cipher suite TLS-DHE-DSS-WITH-AES-128-CBC-SHA.			
Option	Description																									
<i>TLS-ECDHE-RSA-WITH-CHACHA20-POLY1305-SHA256</i>	Cipher suite TLS-ECDHE-RSA-WITH-CHACHA20-POLY1305-SHA256.																									
<i>TLS-ECDHE-ECDSA-WITH-CHACHA20-POLY1305-SHA256</i>	Cipher suite TLS-ECDHE-ECDSA-WITH-CHACHA20-POLY1305-SHA256.																									
<i>TLS-DHE-RSA-WITH-CHACHA20-POLY1305-SHA256</i>	Cipher suite TLS-DHE-RSA-WITH-CHACHA20-POLY1305-SHA256.																									
<i>TLS-DHE-RSA-WITH-AES-128-CBC-SHA</i>	Cipher suite TLS-DHE-RSA-WITH-AES-128-CBC-SHA.																									
<i>TLS-DHE-RSA-WITH-AES-256-CBC-SHA</i>	Cipher suite TLS-DHE-RSA-WITH-AES-256-CBC-SHA.																									
<i>TLS-DHE-RSA-WITH-AES-128-CBC-SHA256</i>	Cipher suite TLS-DHE-RSA-WITH-AES-128-CBC-SHA256.																									
<i>TLS-DHE-RSA-WITH-AES-128-GCM-SHA256</i>	Cipher suite TLS-DHE-RSA-WITH-AES-128-GCM-SHA256.																									
<i>TLS-DHE-RSA-WITH-AES-256-CBC-SHA256</i>	Cipher suite TLS-DHE-RSA-WITH-AES-256-CBC-SHA256.																									
<i>TLS-DHE-RSA-WITH-AES-256-GCM-SHA384</i>	Cipher suite TLS-DHE-RSA-WITH-AES-256-GCM-SHA384.																									
<i>TLS-DHE-DSS-WITH-AES-128-CBC-SHA</i>	Cipher suite TLS-DHE-DSS-WITH-AES-128-CBC-SHA.																									

Parameter	Description	Type	Size	Default																						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>TLS-DHE-DSS-WITH-AES-256-CBC-SHA</i></td><td>Cipher suite TLS-DHE-DSS-WITH-AES-256-CBC-SHA.</td></tr><tr><td><i>TLS-DHE-DSS-WITH-AES-128-CBC-SHA256</i></td><td>Cipher suite TLS-DHE-DSS-WITH-AES-128-CBC-SHA256.</td></tr><tr><td><i>TLS-DHE-DSS-WITH-AES-128-GCM-SHA256</i></td><td>Cipher suite TLS-DHE-DSS-WITH-AES-128-GCM-SHA256.</td></tr><tr><td><i>TLS-DHE-DSS-WITH-AES-256-CBC-SHA256</i></td><td>Cipher suite TLS-DHE-DSS-WITH-AES-256-CBC-SHA256.</td></tr><tr><td><i>TLS-DHE-DSS-WITH-AES-256-GCM-SHA384</i></td><td>Cipher suite TLS-DHE-DSS-WITH-AES-256-GCM-SHA384.</td></tr><tr><td><i>TLS-ECDHE-RSA-WITH-AES-128-CBC-SHA</i></td><td>Cipher suite TLS-ECDHE-RSA-WITH-AES-128-CBC-SHA.</td></tr><tr><td><i>TLS-ECDHE-RSA-WITH-AES-128-CBC-SHA256</i></td><td>Cipher suite TLS-ECDHE-RSA-WITH-AES-128-CBC-SHA256.</td></tr><tr><td><i>TLS-ECDHE-RSA-WITH-AES-128-GCM-SHA256</i></td><td>Cipher suite TLS-ECDHE-RSA-WITH-AES-128-GCM-SHA256.</td></tr><tr><td><i>TLS-ECDHE-RSA-WITH-AES-256-CBC-SHA</i></td><td>Cipher suite TLS-ECDHE-RSA-WITH-AES-256-CBC-SHA.</td></tr><tr><td><i>TLS-ECDHE-RSA-WITH-AES-256-CBC-SHA384</i></td><td>Cipher suite TLS-ECDHE-RSA-WITH-AES-256-CBC-SHA384.</td></tr></table>	Option	Description	<i>TLS-DHE-DSS-WITH-AES-256-CBC-SHA</i>	Cipher suite TLS-DHE-DSS-WITH-AES-256-CBC-SHA.	<i>TLS-DHE-DSS-WITH-AES-128-CBC-SHA256</i>	Cipher suite TLS-DHE-DSS-WITH-AES-128-CBC-SHA256.	<i>TLS-DHE-DSS-WITH-AES-128-GCM-SHA256</i>	Cipher suite TLS-DHE-DSS-WITH-AES-128-GCM-SHA256.	<i>TLS-DHE-DSS-WITH-AES-256-CBC-SHA256</i>	Cipher suite TLS-DHE-DSS-WITH-AES-256-CBC-SHA256.	<i>TLS-DHE-DSS-WITH-AES-256-GCM-SHA384</i>	Cipher suite TLS-DHE-DSS-WITH-AES-256-GCM-SHA384.	<i>TLS-ECDHE-RSA-WITH-AES-128-CBC-SHA</i>	Cipher suite TLS-ECDHE-RSA-WITH-AES-128-CBC-SHA.	<i>TLS-ECDHE-RSA-WITH-AES-128-CBC-SHA256</i>	Cipher suite TLS-ECDHE-RSA-WITH-AES-128-CBC-SHA256.	<i>TLS-ECDHE-RSA-WITH-AES-128-GCM-SHA256</i>	Cipher suite TLS-ECDHE-RSA-WITH-AES-128-GCM-SHA256.	<i>TLS-ECDHE-RSA-WITH-AES-256-CBC-SHA</i>	Cipher suite TLS-ECDHE-RSA-WITH-AES-256-CBC-SHA.	<i>TLS-ECDHE-RSA-WITH-AES-256-CBC-SHA384</i>	Cipher suite TLS-ECDHE-RSA-WITH-AES-256-CBC-SHA384.			
Option	Description																									
<i>TLS-DHE-DSS-WITH-AES-256-CBC-SHA</i>	Cipher suite TLS-DHE-DSS-WITH-AES-256-CBC-SHA.																									
<i>TLS-DHE-DSS-WITH-AES-128-CBC-SHA256</i>	Cipher suite TLS-DHE-DSS-WITH-AES-128-CBC-SHA256.																									
<i>TLS-DHE-DSS-WITH-AES-128-GCM-SHA256</i>	Cipher suite TLS-DHE-DSS-WITH-AES-128-GCM-SHA256.																									
<i>TLS-DHE-DSS-WITH-AES-256-CBC-SHA256</i>	Cipher suite TLS-DHE-DSS-WITH-AES-256-CBC-SHA256.																									
<i>TLS-DHE-DSS-WITH-AES-256-GCM-SHA384</i>	Cipher suite TLS-DHE-DSS-WITH-AES-256-GCM-SHA384.																									
<i>TLS-ECDHE-RSA-WITH-AES-128-CBC-SHA</i>	Cipher suite TLS-ECDHE-RSA-WITH-AES-128-CBC-SHA.																									
<i>TLS-ECDHE-RSA-WITH-AES-128-CBC-SHA256</i>	Cipher suite TLS-ECDHE-RSA-WITH-AES-128-CBC-SHA256.																									
<i>TLS-ECDHE-RSA-WITH-AES-128-GCM-SHA256</i>	Cipher suite TLS-ECDHE-RSA-WITH-AES-128-GCM-SHA256.																									
<i>TLS-ECDHE-RSA-WITH-AES-256-CBC-SHA</i>	Cipher suite TLS-ECDHE-RSA-WITH-AES-256-CBC-SHA.																									
<i>TLS-ECDHE-RSA-WITH-AES-256-CBC-SHA384</i>	Cipher suite TLS-ECDHE-RSA-WITH-AES-256-CBC-SHA384.																									

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>TLS-ECDHE-RSA-WITH-AES-256-GCM-SHA384</i>	Cipher suite TLS-ECDHE-RSA-WITH-AES-256-GCM-SHA384.		
	<i>TLS-ECDHE-ECDSA-WITH-AES-128-CBC-SHA</i>	Cipher suite TLS-ECDHE-ECDSA-WITH-AES-128-CBC-SHA.		
	<i>TLS-ECDHE-ECDSA-WITH-AES-128-CBC-SHA256</i>	Cipher suite TLS-ECDHE-ECDSA-WITH-AES-128-CBC-SHA256.		
	<i>TLS-ECDHE-ECDSA-WITH-AES-128-GCM-SHA256</i>	Cipher suite TLS-ECDHE-ECDSA-WITH-AES-128-GCM-SHA256.		
	<i>TLS-ECDHE-ECDSA-WITH-AES-256-CBC-SHA</i>	Cipher suite TLS-ECDHE-ECDSA-WITH-AES-256-CBC-SHA.		
	<i>TLS-ECDHE-ECDSA-WITH-AES-256-CBC-SHA384</i>	Cipher suite TLS-ECDHE-ECDSA-WITH-AES-256-CBC-SHA384.		
	<i>TLS-ECDHE-ECDSA-WITH-AES-256-GCM-SHA384</i>	Cipher suite TLS-ECDHE-ECDSA-WITH-AES-256-GCM-SHA384.		
	<i>TLS-RSA-WITH-AES-128-CBC-SHA</i>	Cipher suite TLS-RSA-WITH-AES-128-CBC-SHA.		
	<i>TLS-RSA-WITH-AES-256-CBC-SHA</i>	Cipher suite TLS-RSA-WITH-AES-256-CBC-SHA.		
<i>TLS-RSA-WITH-AES-128-CBC-SHA256</i>	Cipher suite TLS-RSA-WITH-AES-128-CBC-SHA256.			

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>TLS-RSA-WITH-AES-128-GCM-SHA256</i>	Cipher suite TLS-RSA-WITH-AES-128-GCM-SHA256.		
	<i>TLS-RSA-WITH-AES-256-CBC-SHA256</i>	Cipher suite TLS-RSA-WITH-AES-256-CBC-SHA256.		
	<i>TLS-RSA-WITH-AES-256-GCM-SHA384</i>	Cipher suite TLS-RSA-WITH-AES-256-GCM-SHA384.		
	<i>TLS-RSA-WITH-CAMELLIA-128-CBC-SHA</i>	Cipher suite TLS-RSA-WITH-CAMELLIA-128-CBC-SHA.		
	<i>TLS-RSA-WITH-CAMELLIA-256-CBC-SHA</i>	Cipher suite TLS-RSA-WITH-CAMELLIA-256-CBC-SHA.		
	<i>TLS-RSA-WITH-CAMELLIA-128-CBC-SHA256</i>	Cipher suite TLS-RSA-WITH-CAMELLIA-128-CBC-SHA256.		
	<i>TLS-RSA-WITH-CAMELLIA-256-CBC-SHA256</i>	Cipher suite TLS-RSA-WITH-CAMELLIA-256-CBC-SHA256.		
	<i>TLS-DHE-RSA-WITH-3DES-EDE-CBC-SHA</i>	Cipher suite TLS-DHE-RSA-WITH-3DES-EDE-CBC-SHA.		
	<i>TLS-DHE-RSA-WITH-CAMELLIA-128-CBC-SHA</i>	Cipher suite TLS-DHE-RSA-WITH-CAMELLIA-128-CBC-SHA.		
	<i>TLS-DHE-DSS-WITH-CAMELLIA-128-CBC-SHA</i>	Cipher suite TLS-DSS-RSA-WITH-CAMELLIA-128-CBC-SHA.		

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>TLS-DHE-RSA-WITH-CAMELLIA-256-CBC-SHA</i>	Cipher suite TLS-DHE-RSA-WITH-CAMELLIA-256-CBC-SHA.		
	<i>TLS-DHE-DSS-WITH-CAMELLIA-256-CBC-SHA</i>	Cipher suite TLS-DHE-DSS-WITH-CAMELLIA-256-CBC-SHA.		
	<i>TLS-DHE-RSA-WITH-CAMELLIA-128-CBC-SHA256</i>	Cipher suite TLS-DHE-RSA-WITH-CAMELLIA-128-CBC-SHA256.		
	<i>TLS-DHE-DSS-WITH-CAMELLIA-128-CBC-SHA256</i>	Cipher suite TLS-DHE-DSS-WITH-CAMELLIA-128-CBC-SHA256.		
	<i>TLS-DHE-RSA-WITH-CAMELLIA-256-CBC-SHA256</i>	Cipher suite TLS-DHE-RSA-WITH-CAMELLIA-256-CBC-SHA256.		
	<i>TLS-DHE-DSS-WITH-CAMELLIA-256-CBC-SHA256</i>	Cipher suite TLS-DHE-DSS-WITH-CAMELLIA-256-CBC-SHA256.		
	<i>TLS-DHE-RSA-WITH-SEED-CBC-SHA</i>	Cipher suite TLS-DHE-RSA-WITH-SEED-CBC-SHA.		
	<i>TLS-DHE-DSS-WITH-SEED-CBC-SHA</i>	Cipher suite TLS-DHE-DSS-WITH-SEED-CBC-SHA.		
	<i>TLS-DHE-RSA-WITH-ARIA-128-CBC-SHA256</i>	Cipher suite TLS-DHE-RSA-WITH-ARIA-128-CBC-SHA256.		

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>TLS-DHE-RSA-WITH-ARIA-256-CBC-SHA384</i>	Cipher suite TLS-DHE-RSA-WITH-ARIA-256-CBC-SHA384.		
	<i>TLS-DHE-DSS-WITH-ARIA-128-CBC-SHA256</i>	Cipher suite TLS-DHE-DSS-WITH-ARIA-128-CBC-SHA256.		
	<i>TLS-DHE-DSS-WITH-ARIA-256-CBC-SHA384</i>	Cipher suite TLS-DHE-DSS-WITH-ARIA-256-CBC-SHA384.		
	<i>TLS-RSA-WITH-SEED-CBC-SHA</i>	Cipher suite TLS-RSA-WITH-SEED-CBC-SHA.		
	<i>TLS-RSA-WITH-ARIA-128-CBC-SHA256</i>	Cipher suite TLS-RSA-WITH-ARIA-128-CBC-SHA256.		
	<i>TLS-RSA-WITH-ARIA-256-CBC-SHA384</i>	Cipher suite TLS-RSA-WITH-ARIA-256-CBC-SHA384.		
	<i>TLS-ECDHE-RSA-WITH-ARIA-128-CBC-SHA256</i>	Cipher suite TLS-ECDHE-RSA-WITH-ARIA-128-CBC-SHA256.		
	<i>TLS-ECDHE-RSA-WITH-ARIA-256-CBC-SHA384</i>	Cipher suite TLS-ECDHE-RSA-WITH-ARIA-256-CBC-SHA384.		
	<i>TLS-ECDHE-ECDSA-WITH-ARIA-128-CBC-SHA256</i>	Cipher suite TLS-ECDHE-ECDSA-WITH-ARIA-128-CBC_SHA256.		
	<i>TLS-ECDHE-ECDSA-WITH-ARIA-256-CBC-SHA384</i>	Cipher suite TLS-ECDHE-ECDSA-WITH-ARIA-256-CBC_SHA384.		

Parameter	Description	Type	Size	Default																				
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>TLS-ECDHE-RSA-WITH-RC4-128-SHA</i></td><td>Cipher suite TLS-ECDHE-RSA-WITH-RC4-128-SHA.</td></tr><tr><td><i>TLS-ECDHE-RSA-WITH-3DES-EDE-CBC-SHA</i></td><td>Cipher suite TLS-ECDHE-RSA-WITH-3DES-EDE-CBC-SHA.</td></tr><tr><td><i>TLS-DHE-DSS-WITH-3DES-EDE-CBC-SHA</i></td><td>Cipher suite TLS-DHE-DSS-WITH-3DES-EDE-CBC-SHA.</td></tr><tr><td><i>TLS-RSA-WITH-3DES-EDE-CBC-SHA</i></td><td>Cipher suite TLS-RSA-WITH-3DES-EDE-CBC-SHA.</td></tr><tr><td><i>TLS-RSA-WITH-RC4-128-MD5</i></td><td>Cipher suite TLS-RSA-WITH-RC4-128-MD5.</td></tr><tr><td><i>TLS-RSA-WITH-RC4-128-SHA</i></td><td>Cipher suite TLS-RSA-WITH-RC4-128-SHA.</td></tr><tr><td><i>TLS-DHE-RSA-WITH-DES-CBC-SHA</i></td><td>Cipher suite TLS-DHE-RSA-WITH-DES-CBC-SHA.</td></tr><tr><td><i>TLS-DHE-DSS-WITH-DES-CBC-SHA</i></td><td>Cipher suite TLS-DHE-DSS-WITH-DES-CBC-SHA.</td></tr><tr><td><i>TLS-RSA-WITH-DES-CBC-SHA</i></td><td>Cipher suite TLS-RSA-WITH-DES-CBC-SHA.</td></tr></table>	Option	Description	<i>TLS-ECDHE-RSA-WITH-RC4-128-SHA</i>	Cipher suite TLS-ECDHE-RSA-WITH-RC4-128-SHA.	<i>TLS-ECDHE-RSA-WITH-3DES-EDE-CBC-SHA</i>	Cipher suite TLS-ECDHE-RSA-WITH-3DES-EDE-CBC-SHA.	<i>TLS-DHE-DSS-WITH-3DES-EDE-CBC-SHA</i>	Cipher suite TLS-DHE-DSS-WITH-3DES-EDE-CBC-SHA.	<i>TLS-RSA-WITH-3DES-EDE-CBC-SHA</i>	Cipher suite TLS-RSA-WITH-3DES-EDE-CBC-SHA.	<i>TLS-RSA-WITH-RC4-128-MD5</i>	Cipher suite TLS-RSA-WITH-RC4-128-MD5.	<i>TLS-RSA-WITH-RC4-128-SHA</i>	Cipher suite TLS-RSA-WITH-RC4-128-SHA.	<i>TLS-DHE-RSA-WITH-DES-CBC-SHA</i>	Cipher suite TLS-DHE-RSA-WITH-DES-CBC-SHA.	<i>TLS-DHE-DSS-WITH-DES-CBC-SHA</i>	Cipher suite TLS-DHE-DSS-WITH-DES-CBC-SHA.	<i>TLS-RSA-WITH-DES-CBC-SHA</i>	Cipher suite TLS-RSA-WITH-DES-CBC-SHA.			
	Option	Description																						
	<i>TLS-ECDHE-RSA-WITH-RC4-128-SHA</i>	Cipher suite TLS-ECDHE-RSA-WITH-RC4-128-SHA.																						
	<i>TLS-ECDHE-RSA-WITH-3DES-EDE-CBC-SHA</i>	Cipher suite TLS-ECDHE-RSA-WITH-3DES-EDE-CBC-SHA.																						
	<i>TLS-DHE-DSS-WITH-3DES-EDE-CBC-SHA</i>	Cipher suite TLS-DHE-DSS-WITH-3DES-EDE-CBC-SHA.																						
	<i>TLS-RSA-WITH-3DES-EDE-CBC-SHA</i>	Cipher suite TLS-RSA-WITH-3DES-EDE-CBC-SHA.																						
	<i>TLS-RSA-WITH-RC4-128-MD5</i>	Cipher suite TLS-RSA-WITH-RC4-128-MD5.																						
	<i>TLS-RSA-WITH-RC4-128-SHA</i>	Cipher suite TLS-RSA-WITH-RC4-128-SHA.																						
	<i>TLS-DHE-RSA-WITH-DES-CBC-SHA</i>	Cipher suite TLS-DHE-RSA-WITH-DES-CBC-SHA.																						
	<i>TLS-DHE-DSS-WITH-DES-CBC-SHA</i>	Cipher suite TLS-DHE-DSS-WITH-DES-CBC-SHA.																						
<i>TLS-RSA-WITH-DES-CBC-SHA</i>	Cipher suite TLS-RSA-WITH-DES-CBC-SHA.																							
priority	SSL/TLS cipher suites priority.	integer	Minimum value: 0 0 Maximum value: 4294967295																					
versions	SSL/TLS versions that the cipher suite can be used with.	option	-	ssl-3.0 tls-1.0 tls-1.1 tls-1.2 tls-1.3																				

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>ssl-3.0</i>	SSL 3.0.		
	<i>tls-1.0</i>	TLS 1.0.		
	<i>tls-1.1</i>	TLS 1.1.		
	<i>tls-1.2</i>	TLS 1.2.		
	<i>tls-1.3</i>	TLS 1.3.		

config firewall vipgrp

Configure IPv4 virtual IP groups.

```
config firewall vipgrp
  Description: Configure IPv4 virtual IP groups.
  edit <name>
    set color {integer}
    set comments {var-string}
    set interface {string}
    set member <name1>, <name2>, ...
    set uuid {uuid}
  next
end
```

config firewall vipgrp

Parameter	Description	Type	Size	Default
color	Integer value to determine the color of the icon in the GUI (range 1 to 32, default = 0, which sets the value to 1).	integer	Minimum value: 0 Maximum value: 32	0
comments	Comment.	var-string	Maximum length: 255	
interface	Interface.	string	Maximum length: 35	
member <name>	Member VIP objects of the group (Separate multiple objects with a space). VIP name.	string	Maximum length: 79	
name	VIP group name.	string	Maximum length: 79	

Parameter	Description	Type	Size	Default
uuid	Universally Unique Identifier (UUID; automatically assigned but can be manually reset).	uuid	Not Specified	00000000-0000-0000-0000-000000000000

config firewall vipgrp6

Configure IPv6 virtual IP groups.

```
config firewall vipgrp6
  Description: Configure IPv6 virtual IP groups.
  edit <name>
    set color {integer}
    set comments {var-string}
    set member <name1>, <name2>, ...
    set uuid {uuid}
  next
end
```

config firewall vipgrp6

Parameter	Description	Type	Size	Default
color	Integer value to determine the color of the icon in the GUI (range 1 to 32, default = 0, which sets the value to 1).	integer	Minimum value: 0 Maximum value: 32	0
comments	Comment.	var-string	Maximum length: 255	
member <name>	Member VIP objects of the group (Separate multiple objects with a space). IPv6 VIP name.	string	Maximum length: 79	
name	IPv6 VIP group name.	string	Maximum length: 79	
uuid	Universally Unique Identifier (UUID; automatically assigned but can be manually reset).	uuid	Not Specified	00000000-0000-0000-0000-000000000000

config firewall wildcard-fqdn custom

Config global/VDOM Wildcard FQDN address.

```

config firewall wildcard-fqdn custom
  Description: Config global/VDOM Wildcard FQDN address.
  edit <name>
    set color {integer}
    set comment {var-string}
    set uuid {uuid}
    set wildcard-fqdn {string}
  next
end

```

config firewall wildcard-fqdn custom

Parameter	Description	Type	Size	Default
color	GUI icon color.	integer	Minimum value: 0 Maximum value: 32	0
comment	Comment.	var-string	Maximum length: 255	
name	Address name.	string	Maximum length: 79	
uuid	Universally Unique Identifier (UUID; automatically assigned but can be manually reset).	uuid	Not Specified	00000000-0000-0000-0000-000000000000
wildcard-fqdn	Wildcard FQDN.	string	Maximum length: 255	

config firewall wildcard-fqdn group

Config global Wildcard FQDN address groups.

```

config firewall wildcard-fqdn group
  Description: Config global Wildcard FQDN address groups.
  edit <name>
    set color {integer}
    set comment {var-string}
    set member <name1>, <name2>, ...
    set uuid {uuid}
  next
end

```

config firewall wildcard-fqdn group

Parameter	Description	Type	Size	Default
color	GUI icon color.	integer	Minimum value: 0 Maximum value: 32	0
comment	Comment.	var-string	Maximum length: 255	
member <name>	Address group members. Address name.	string	Maximum length: 79	
name	Address group name.	string	Maximum length: 79	
uuid	Universally Unique Identifier (UUID; automatically assigned but can be manually reset).	uuid	Not Specified	00000000-0000-0000-0000-000000000000

ftp-proxy

This section includes syntax for the following commands:

- [config ftp-proxy explicit on page 632](#)

config ftp-proxy explicit

Configure explicit FTP proxy settings.

```
config ftp-proxy explicit
    Description: Configure explicit FTP proxy settings.
    set incoming-ip {ipv4-address-any}
    set incoming-port {user}
    set outgoing-ip {ipv4-address-any}
    set sec-default-action [accept|deny]
    set ssl [enable|disable]
    set ssl-algorithm [high|medium|...]
    set ssl-cert {string}
    set ssl-dh-bits [768|1024|...]
    set status [enable|disable]
end
```

config ftp-proxy explicit

Parameter	Description	Type	Size	Default
incoming-ip	Accept incoming FTP requests from this IP address. An interface must have this IP address.	ipv4-address-any	Not Specified	0.0.0.0
incoming-port	Accept incoming FTP requests on one or more ports.	user	Not Specified	
outgoing-ip	Outgoing FTP requests will leave from this IP address. An interface must have this IP address.	ipv4-address-any	Not Specified	
sec-default-action	Accept or deny explicit FTP proxy sessions when no FTP proxy firewall policy exists.	option	-	deny

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>accept</i>	Accept requests. All explicit FTP proxy traffic is accepted whether there is an explicit FTP proxy policy or not		
	<i>deny</i>	Deny requests unless there is a matching explicit FTP proxy policy.		
ssl	Enable/disable the explicit FTPS proxy.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable the explicit FTPS proxy.		
	<i>disable</i>	Disable the explicit FTPS proxy.		
ssl-algorithm	Relative strength of encryption algorithms accepted in negotiation.	option	-	high
	Option	Description		
	<i>high</i>	High encryption. Allow only AES and ChaCha		
	<i>medium</i>	Medium encryption. Allow AES, ChaCha, 3DES, and RC4.		
	<i>low</i>	Low encryption. Allow AES, ChaCha, 3DES, RC4, and DES.		
ssl-cert	Name of certificate for SSL connections to this server (default = "Fortinet_CA_SSL").	string	Maximum length: 35	Fortinet_CA_SSL
ssl-dh-bits	Bit-size of Diffie-Hellman (DH) prime used in DHE-RSA negotiation (default = 2048).	option	-	2048
	Option	Description		
	<i>768</i>	768-bit Diffie-Hellman prime.		
	<i>1024</i>	1024-bit Diffie-Hellman prime.		
	<i>1536</i>	1536-bit Diffie-Hellman prime.		
	<i>2048</i>	2048-bit Diffie-Hellman prime.		
status	Enable/disable the explicit FTP proxy.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable the explicit FTP proxy.		
	<i>disable</i>	Disable the explicit FTP proxy.		

icap

This section includes syntax for the following commands:

- [config icap profile on page 634](#)
- [config icap server-group on page 642](#)
- [config icap server on page 641](#)

config icap profile

Configure ICAP profiles.

```
config icap profile
  Description: Configure ICAP profiles.
  edit <name>
    set 204-response [disable|enable]
    set 204-size-limit {integer}
    set chunk-encap [disable|enable]
    set comment {var-string}
    set extension-feature {option1}, {option2}, ...
    set file-transfer {option1}, {option2}, ...
    set file-transfer-failure [error|bypass]
    set file-transfer-path {string}
    set file-transfer-server {string}
    set icap-block-log [disable|enable]
  config icap-headers
    Description: Configure ICAP forwarded request headers.
    edit <id>
      set base64-encoding [disable|enable]
      set content {string}
      set name {string}
    next
  end
  set methods {option1}, {option2}, ...
  set preview [disable|enable]
  set preview-data-length {integer}
  set replacemsg-group {string}
  set request [disable|enable]
  set request-failure [error|bypass]
  set request-path {string}
  set request-server {string}
  set respmod-default-action [forward|bypass]
  config respmod-forward-rules
    Description: ICAP response mode forward rules.
    edit <name>
      set action [forward|bypass]
```

```

        config header-group
            Description: HTTP header group.
            edit <id>
                set case-sensitivity [disable|enable]
                set header {string}
                set header-name {string}
            next
        end
        set host {string}
        set http-resp-status-code <code1>, <code2>, ...
    next
end
set response [disable|enable]
set response-failure [error|bypass]
set response-path {string}
set response-req-hdr [disable|enable]
set response-server {string}
set scan-progress-interval {integer}
set streaming-content-bypass [disable|enable]
set timeout {integer}
next
end

```

config icap profile

Parameter	Description	Type	Size	Default						
204-response	Enable/disable allowance of 204 response from ICAP server.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>disable</i></td><td>Disable allowance of 204 response from ICAP server.</td></tr><tr><td><i>enable</i></td><td>Enable allowance of 204 response from ICAP server.</td></tr></table>	Option	Description	<i>disable</i>	Disable allowance of 204 response from ICAP server.	<i>enable</i>	Enable allowance of 204 response from ICAP server.			
Option	Description									
<i>disable</i>	Disable allowance of 204 response from ICAP server.									
<i>enable</i>	Enable allowance of 204 response from ICAP server.									
204-size-limit	204 response size limit to be saved by ICAP client in megabytes (1 - 10, default = 1 MB).	integer	Minimum value: 1 Maximum value: 10	1						
chunk-encap	Enable/disable chunked encapsulation (default = disable).	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>disable</i></td><td>Do not encapsulate chunked data.</td></tr><tr><td><i>enable</i></td><td>Encapsulate chunked data into a new chunk.</td></tr></table>	Option	Description	<i>disable</i>	Do not encapsulate chunked data.	<i>enable</i>	Encapsulate chunked data into a new chunk.			
Option	Description									
<i>disable</i>	Do not encapsulate chunked data.									
<i>enable</i>	Encapsulate chunked data into a new chunk.									

Parameter	Description	Type	Size	Default						
comment	Comment.	var-string	Maximum length: 255							
extension-feature	Enable/disable ICAP extension features.	option	-							
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>scan-progress</i></td><td>Support X-Scan-Progress-Interval ICAP header.</td></tr></table>	Option	Description	<i>scan-progress</i>	Support X-Scan-Progress-Interval ICAP header.					
Option	Description									
<i>scan-progress</i>	Support X-Scan-Progress-Interval ICAP header.									
file-transfer	Configure the file transfer protocols to pass transferred files to an ICAP server as REQMOD.	option	-							
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>ssh</i></td><td>Forward file transfer with SSH protocol to ICAP server for further processing.</td></tr><tr><td><i>ftp</i></td><td>Forward file transfer with FTP protocol to ICAP server for further processing.</td></tr></table>	Option	Description	<i>ssh</i>	Forward file transfer with SSH protocol to ICAP server for further processing.	<i>ftp</i>	Forward file transfer with FTP protocol to ICAP server for further processing.			
Option	Description									
<i>ssh</i>	Forward file transfer with SSH protocol to ICAP server for further processing.									
<i>ftp</i>	Forward file transfer with FTP protocol to ICAP server for further processing.									
file-transfer-failure	Action to take if the ICAP server cannot be contacted when processing a file transfer.	option	-	error						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>error</i></td><td>Error.</td></tr><tr><td><i>bypass</i></td><td>Bypass.</td></tr></table>	Option	Description	<i>error</i>	Error.	<i>bypass</i>	Bypass.			
Option	Description									
<i>error</i>	Error.									
<i>bypass</i>	Bypass.									
file-transfer-path	Path component of the ICAP URI that identifies the file transfer processing service.	string	Maximum length: 127							
file-transfer-server	ICAP server to use for a file transfer.	string	Maximum length: 63							
icap-block-log	Enable/disable UTM log when infection found (default = disable).	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>disable</i></td><td>Disable UTM log when infection found.</td></tr><tr><td><i>enable</i></td><td>Enable UTM log when infection found.</td></tr></table>	Option	Description	<i>disable</i>	Disable UTM log when infection found.	<i>enable</i>	Enable UTM log when infection found.			
Option	Description									
<i>disable</i>	Disable UTM log when infection found.									
<i>enable</i>	Enable UTM log when infection found.									
methods	The allowed HTTP methods that will be sent to ICAP server for further processing.	option	-	delete get head options post put trace connect other						

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>delete</i>	Forward HTTP request or response with DELETE method to ICAP server for further processing.		
	<i>get</i>	Forward HTTP request or response with GET method to ICAP server for further processing.		
	<i>head</i>	Forward HTTP request or response with HEAD method to ICAP server for further processing.		
	<i>options</i>	Forward HTTP request or response with OPTIONS method to ICAP server for further processing.		
	<i>post</i>	Forward HTTP request or response with POST method to ICAP server for further processing.		
	<i>put</i>	Forward HTTP request or response with PUT method to ICAP server for further processing.		
	<i>trace</i>	Forward HTTP request or response with TRACE method to ICAP server for further processing.		
	<i>connect</i>	Forward HTTP request or response with CONNECT method to ICAP server for further processing.		
	<i>other</i>	Forward HTTP request or response with All other methods to ICAP server for further processing.		
name	ICAP profile name.	string	Maximum length: 35	
preview	Enable/disable preview of data to ICAP server.	option	-	disable
	Option	Description		
	<i>disable</i>	Disable preview of data to ICAP server.		
	<i>enable</i>	Enable preview of data to ICAP server.		
preview-data-length	Preview data length to be sent to ICAP server.	integer	Minimum value: 0 Maximum value: 4096	0
replacemsg-group	Replacement message group.	string	Maximum length: 35	
request	Enable/disable whether an HTTP request is passed to an ICAP server.	option	-	disable

Parameter	Description	Type	Size	Default
	Option Description			
	<i>disable</i>	Disable HTTP request passing to ICAP server.		
	<i>enable</i>	Enable HTTP request passing to ICAP server.		
request-failure	Action to take if the ICAP server cannot be contacted when processing an HTTP request.	option	-	error
	Option Description			
	<i>error</i>	Error.		
	<i>bypass</i>	Bypass.		
request-path	Path component of the ICAP URI that identifies the HTTP request processing service.	string	Maximum length: 127	
request-server	ICAP server to use for an HTTP request.	string	Maximum length: 63	
respmod-default-action	Default action to ICAP response modification (respmod) processing.	option	-	forward
	Option Description			
	<i>forward</i>	Forward response to ICAP server unless a rule specifies not to.		
	<i>bypass</i>	Don't forward request to ICAP server unless a rule specifies to forward the request.		
response	Enable/disable whether an HTTP response is passed to an ICAP server.	option	-	disable
	Option Description			
	<i>disable</i>	Disable HTTP response passing to ICAP server.		
	<i>enable</i>	Enable HTTP response passing to ICAP server.		
response-failure	Action to take if the ICAP server cannot be contacted when processing an HTTP response.	option	-	error
	Option Description			
	<i>error</i>	Error.		
	<i>bypass</i>	Bypass.		
response-path	Path component of the ICAP URI that identifies the HTTP response processing service.	string	Maximum length: 127	

Parameter	Description	Type	Size	Default						
response-req-hdr	Enable/disable addition of req-hdr for ICAP response modification (respmod) processing.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Do not add req-hdr for response modification (respmod) processing.</td></tr><tr><td>enable</td><td>Add req-hdr for response modification (respmod) processing.</td></tr></table>	Option	Description	disable	Do not add req-hdr for response modification (respmod) processing.	enable	Add req-hdr for response modification (respmod) processing.			
Option	Description									
disable	Do not add req-hdr for response modification (respmod) processing.									
enable	Add req-hdr for response modification (respmod) processing.									
response-server	ICAP server to use for an HTTP response.	string	Maximum length: 63							
scan-progress-interval	Scan progress interval value.	integer	Minimum value: 5 Maximum value: 30	10						
streaming-content-bypass	Enable/disable bypassing of ICAP server for streaming content.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Disable bypassing of ICAP server for streaming content.</td></tr><tr><td>enable</td><td>Enable bypassing of ICAP server for streaming content.</td></tr></table>	Option	Description	disable	Disable bypassing of ICAP server for streaming content.	enable	Enable bypassing of ICAP server for streaming content.			
Option	Description									
disable	Disable bypassing of ICAP server for streaming content.									
enable	Enable bypassing of ICAP server for streaming content.									
timeout	Time (in seconds) that ICAP client waits for the response from ICAP server.	integer	Minimum value: 30 Maximum value: 3600	30						

config icap-headers

Parameter	Description	Type	Size	Default
base64-encoding	Enable/disable use of base64 encoding of HTTP content.	option	-	disable
	Option	Description		
	disable	Disable use of base64 encoding of HTTP content.		
	enable	Enable use of base64 encoding of HTTP content.		
content	HTTP header content.	string	Maximum length: 255	

Parameter	Description	Type	Size	Default
id	HTTP forwarded header ID.	integer	Minimum value: 0 Maximum value: 4294967295	0
name	HTTP forwarded header name.	string	Maximum length: 79	

config respmod-forward-rules

Parameter	Description	Type	Size	Default
action	Action to be taken for ICAP server.	option	-	forward
	Option	Description		
	<i>forward</i>	Forward request to ICAP server when this rule is matched.		
	<i>bypass</i>	Don't forward request to ICAP server when this rule is matched.		
host	Address object for the host.	string	Maximum length: 79	
http-resp-status-code <code>	HTTP response status code. HTTP response status code.	integer	Minimum value: 100 Maximum value: 599	
name	Address name.	string	Maximum length: 63	

config header-group

Parameter	Description	Type	Size	Default						
case-sensitivity	Enable/disable case sensitivity when matching header.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>disable</i></td><td>Ignore case when matching header.</td></tr><tr><td><i>enable</i></td><td>Do not ignore case when matching header.</td></tr></table>				Option	Description	<i>disable</i>	Ignore case when matching header.	<i>enable</i>	Do not ignore case when matching header.
Option	Description									
<i>disable</i>	Ignore case when matching header.									
<i>enable</i>	Do not ignore case when matching header.									
header	HTTP header regular expression.	string	Maximum length: 255							
header-name	HTTP header.	string	Maximum length: 79							

Parameter	Description	Type	Size	Default
id	ID.	integer	Minimum value: 0 Maximum value: 4294967295	0

config icap server

Configure ICAP servers.

```

config icap server
  Description: Configure ICAP servers.
  edit <name>
    set addr-type [ip4|ip6|...]
    set fqdn {string}
    set healthcheck [disable|enable]
    set healthcheck-service {string}
    set ip-address {ipv4-address-any}
    set ip6-address {ipv6-address}
    set max-connections {integer}
    set port {integer}
    set secure [disable|enable]
    set ssl-cert {string}
  next
end

```

config icap server

Parameter	Description	Type	Size	Default
addr-type	Address type of the remote ICAP server: IPv4, IPv6 or FQDN.	option	-	ip4
	Option	Description		
	<i>ip4</i>	Use an IPv4 address for the remote ICAP server.		
	<i>ip6</i>	Use an IPv6 address for the remote ICAP server.		
	<i>fqdn</i>	Use the FQDN for the forwarding proxy server.		
fqdn	ICAP remote server Fully Qualified Domain Name (FQDN).	string	Maximum length: 255	
healthcheck	Enable/disable ICAP remote server health checking. Attempts to connect to the remote ICAP server to verify that the server is operating normally.	option	-	disable

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>disable</i>	Disable health checking.		
	<i>enable</i>	Enable health checking.		
healthcheck-service	ICAP Service name to use for health checks.	string	Maximum length: 127	
ip-address	IPv4 address of the ICAP server.	ipv4-address-any	Not Specified	0.0.0.0
ip6-address	IPv6 address of the ICAP server.	ipv6-address	Not Specified	::
max-connections	Maximum number of concurrent connections to ICAP server (unlimited = 0, default = 100). Must not be less than wad-worker-count.	integer	Minimum value: 0 Maximum value: 4294967295	100
name	Server name.	string	Maximum length: 63	
port	ICAP server port.	integer	Minimum value: 1 Maximum value: 65535	1344
secure	Enable/disable secure connection to ICAP server.	option	-	disable
	Option	Description		
	<i>disable</i>	Disable connection to secure ICAP server.		
	<i>enable</i>	Enable connection to secure ICAP server.		
ssl-cert	CA certificate name.	string	Maximum length: 79	

config icap server-group

Configure an ICAP server group consisting of multiple forward servers. Supports failover and load balancing.

```

config icap server-group
    Description: Configure an ICAP server group consisting of multiple forward servers. Supports failover and load balancing.
    edit <name>
        set ldb-method [weighted|least-session|...]
        config server-list
            Description: Add ICAP servers to a list to form a server group. Optionally assign

```

```

weights to each server.
    edit <name>
        set weight {integer}
    next
end
next
end

```

config icap server-group

Parameter	Description	Type	Size	Default
ldb-method	Load balance method.	option	-	weighted
	Option	Description		
	<i>weighted</i>	Load balance traffic to forward servers based on assigned weights.		
	<i>least-session</i>	Send new sessions to the server with lowest session count.		
	<i>active-passive</i>	Send new sessions to active server with high weight.		
name	Configure an ICAP server group consisting one or multiple forward servers. Supports failover and load balancing.	string	Maximum length: 63	

config server-list

Parameter	Description	Type	Size	Default
name	ICAP server name.	string	Maximum length: 63	
weight	Optionally assign a weight of the forwarding server for weighted load balancing (1 - 100, default = 10).	integer	Minimum value: 1 Maximum value: 100	10

ips

This section includes syntax for the following commands:

- [config ips custom on page 644](#)
- [config ips decoder on page 646](#)
- [config ips global on page 646](#)
- [config ips rule-settings on page 652](#)
- [config ips rule on page 650](#)
- [config ips sensor on page 653](#)
- [config ips settings on page 658](#)
- [config ips view-map on page 659](#)

config ips custom

Configure IPS custom signature.

```
config ips custom
  Description: Configure IPS custom signature.
  edit <tag>
    set action [pass|block]
    set application {user}
    set comment {string}
    set location {user}
    set log [disable|enable]
    set log-packet [disable|enable]
    set os {user}
    set protocol {user}
    set rule-id {integer}
    set severity {user}
    set signature {var-string}
    set status [disable|enable]
  next
end
```

config ips custom

Parameter	Description	Type	Size	Default
action	Default action (pass or block) for this signature.	option	-	pass

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>pass</i>	Pass or allow matching traffic.		
	<i>block</i>	Block or drop matching traffic.		
application	Applications to be protected. Blank for all applications.	user	Not Specified	
comment	Comment.	string	Maximum length: 63	
location	Protect client or server traffic.	user	Not Specified	
log	Enable/disable logging.	option	-	enable
	Option	Description		
	<i>disable</i>	Disable logging.		
	<i>enable</i>	Enable logging.		
log-packet	Enable/disable packet logging.	option	-	disable
	Option	Description		
	<i>disable</i>	Disable packet logging.		
	<i>enable</i>	Enable packet logging.		
os	Operating system(s) that the signature protects. Blank for all operating systems.	user	Not Specified	
protocol	Protocol(s) that the signature scans. Blank for all protocols.	user	Not Specified	
rule-id	Signature ID. Read-only.	integer	Minimum value: 0 Maximum value: 4294967295	
severity	Relative severity of the signature, from info to critical. Log messages generated by the signature include the severity.	user	Not Specified	
signature	Custom signature enclosed in single quotes.	var-string	Maximum length: 4095	
status	Enable/disable this signature.	option	-	enable
	Option	Description		
	<i>disable</i>	Disable status.		

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>enable</i>	Enable status.		
tag	Signature tag.	string	Maximum length: 63	

config ips decoder

Configure IPS decoder. Read-only.

```

config ips decoder
  Description: Configure IPS decoder. Read-only.
  edit <name>
    config parameter
      Description: IPS group parameters. Read-only.
      edit <name>
        set value {string}
      next
    end
  next
end

```

config ips decoder

Parameter	Description	Type	Size	Default
name	Decoder name.	string	Maximum length: 63	

config parameter

Parameter	Description	Type	Size	Default
name	Parameter name.	string	Maximum length: 31	
value	Parameter value.	string	Maximum length: 199	

config ips global

Configure IPS global parameter.

```

config ips global
    Description: Configure IPS global parameter.
    set anomaly-mode [periodical|continuous]
    set cp-accel-mode [none|basic|...]
    set database [regular|extended]
    set deep-app-insp-db-limit {integer}
    set deep-app-insp-timeout {integer}
    set engine-count {integer}
    set exclude-signatures [none|industrial]
    set fail-open [enable|disable]
    set ips-reserve-cpu [disable|enable]
    set ngfw-max-scan-range {integer}
    set np-accel-mode [none|basic]
    set packet-log-queue-depth {integer}
    set session-limit-mode [accurate|heuristic]
    set socket-size {integer}
    set sync-session-ttl [enable|disable]
    config tls-active-probe
        Description: TLS active probe configuration.
        set interface {string}
        set interface-select-method [auto|sdwan|...]
        set source-ip {ipv4-address}
        set source-ip6 {ipv6-address}
        set vdom {string}
    end
    set traffic-submit [enable|disable]
end

```

config ips global

Parameter	Description	Type	Size	Default						
anomaly-mode	Global blocking mode for rate-based anomalies.	option	-	continuous						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>periodical</i></td><td>After an anomaly is detected, allow the number of packets per second according to the anomaly configuration.</td></tr><tr><td><i>continuous</i></td><td>Block packets once an anomaly is detected. Overrides individual anomaly settings.</td></tr></table>				Option	Description	<i>periodical</i>	After an anomaly is detected, allow the number of packets per second according to the anomaly configuration.	<i>continuous</i>	Block packets once an anomaly is detected. Overrides individual anomaly settings.
Option	Description									
<i>periodical</i>	After an anomaly is detected, allow the number of packets per second according to the anomaly configuration.									
<i>continuous</i>	Block packets once an anomaly is detected. Overrides individual anomaly settings.									
cp-accel-mode *	IPS Pattern matching acceleration/offloading to CPx processors.	option	-	advanced						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>none</i></td><td>CPx acceleration/offloading disabled.</td></tr></table>				Option	Description	<i>none</i>	CPx acceleration/offloading disabled.		
Option	Description									
<i>none</i>	CPx acceleration/offloading disabled.									

Parameter	Description	Type	Size	Default						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>basic</i></td><td>Offload basic pattern matching to CPx processors.</td></tr><tr><td><i>advanced</i></td><td>Offload more types of pattern matching resulting in higher throughput than basic mode. Requires two CP8s or one CP9.</td></tr></table>	Option	Description	<i>basic</i>	Offload basic pattern matching to CPx processors.	<i>advanced</i>	Offload more types of pattern matching resulting in higher throughput than basic mode. Requires two CP8s or one CP9.			
Option	Description									
<i>basic</i>	Offload basic pattern matching to CPx processors.									
<i>advanced</i>	Offload more types of pattern matching resulting in higher throughput than basic mode. Requires two CP8s or one CP9.									
database	Regular or extended IPS database. Regular protects against the latest common and in-the-wild attacks. Extended includes protection from legacy attacks.	option	-	extended **						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>regular</i></td><td>IPS regular database package.</td></tr><tr><td><i>extended</i></td><td>IPS extended database package.</td></tr></table>	Option	Description	<i>regular</i>	IPS regular database package.	<i>extended</i>	IPS extended database package.			
Option	Description									
<i>regular</i>	IPS regular database package.									
<i>extended</i>	IPS extended database package.									
deep-app-insp-db-limit	Limit on number of entries in deep application inspection database (1 - 2147483647, use recommended setting = 0).	integer	Minimum value: 0 0 Maximum value: 2147483647							
deep-app-insp-timeout	Timeout for Deep application inspection (1 - 2147483647 sec., 0 = use recommended setting).	integer	Minimum value: 0 0 Maximum value: 2147483647							
engine-count	Number of IPS engines running. If set to the default value of 0, FortiOS sets the number to optimize performance depending on the number of CPU cores.	integer	Minimum value: 0 0 Maximum value: 255							
exclude-signatures	Excluded signatures.	option	-	industrial						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>none</i></td><td>No signatures excluded.</td></tr><tr><td><i>industrial</i></td><td>Exclude industrial signatures.</td></tr></table>	Option	Description	<i>none</i>	No signatures excluded.	<i>industrial</i>	Exclude industrial signatures.			
Option	Description									
<i>none</i>	No signatures excluded.									
<i>industrial</i>	Exclude industrial signatures.									
fail-open	Enable to allow traffic if the IPS buffer is full. Default is disable and IPS traffic is blocked when the IPS buffer is full.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable IPS fail open.</td></tr><tr><td><i>disable</i></td><td>Disable IPS fail open.</td></tr></table>	Option	Description	<i>enable</i>	Enable IPS fail open.	<i>disable</i>	Disable IPS fail open.			
Option	Description									
<i>enable</i>	Enable IPS fail open.									
<i>disable</i>	Disable IPS fail open.									

Parameter	Description	Type	Size	Default						
ips-reserve-cpu *	Enable/disable IPS daemon's use of CPUs other than CPU 0.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Disable IPS daemon's use of CPUs other than CPU 0 (all daemons run on all CPUs).</td></tr><tr><td>enable</td><td>Enable IPS daemon's use of CPUs other than CPU 0.</td></tr></table>	Option	Description	disable	Disable IPS daemon's use of CPUs other than CPU 0 (all daemons run on all CPUs).	enable	Enable IPS daemon's use of CPUs other than CPU 0.			
Option	Description									
disable	Disable IPS daemon's use of CPUs other than CPU 0 (all daemons run on all CPUs).									
enable	Enable IPS daemon's use of CPUs other than CPU 0.									
ngfw-max-scan-range	NGFW policy-mode app detection threshold.	integer	Minimum value: 0 Maximum value: 4294967295	4096						
np-accel-mode *	Acceleration mode for IPS processing by NPx processors.	option	-	basic						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>none</td><td>NPx acceleration disabled.</td></tr><tr><td>basic</td><td>NPx acceleration enabled.</td></tr></table>	Option	Description	none	NPx acceleration disabled.	basic	NPx acceleration enabled.			
Option	Description									
none	NPx acceleration disabled.									
basic	NPx acceleration enabled.									
packet-log-queue-depth	Packet/pcap log queue depth per IPS engine.	integer	Minimum value: 128 Maximum value: 4096	128						
session-limit-mode	Method of counting concurrent sessions used by session limit anomalies. Choose between greater accuracy (accurate) or improved performance (heuristics).	option	-	heuristic						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>accurate</td><td>Accurately count concurrent sessions, demands more resources.</td></tr><tr><td>heuristic</td><td>Use heuristics to estimate the number of concurrent sessions. Acceptable in most cases.</td></tr></table>	Option	Description	accurate	Accurately count concurrent sessions, demands more resources.	heuristic	Use heuristics to estimate the number of concurrent sessions. Acceptable in most cases.			
Option	Description									
accurate	Accurately count concurrent sessions, demands more resources.									
heuristic	Use heuristics to estimate the number of concurrent sessions. Acceptable in most cases.									
socket-size	IPS socket buffer size. Max and default value depend on available memory. Can be changed to tune performance.	integer	Minimum value: 0 Maximum value: 256 **	128 **						
sync-session-ttl	Enable/disable use of kernel session TTL for IPS sessions.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable use of kernel session TTL for IPS sessions.</td></tr><tr><td>disable</td><td>Disable use of kernel session TTL for IPS sessions.</td></tr></table>	Option	Description	enable	Enable use of kernel session TTL for IPS sessions.	disable	Disable use of kernel session TTL for IPS sessions.			
Option	Description									
enable	Enable use of kernel session TTL for IPS sessions.									
disable	Disable use of kernel session TTL for IPS sessions.									

Parameter	Description	Type	Size	Default
traffic-submit	Enable/disable submitting attack data found by this FortiGate to FortiGuard.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable traffic submit.		
	<i>disable</i>	Disable traffic submit.		

* This parameter may not exist in some models.

** Values may differ between models.

config tls-active-probe

Parameter	Description	Type	Size	Default
interface	Specify outgoing interface to reach server.	string	Maximum length: 15	
interface-select-method	Specify how to select outgoing interface to reach server.	option	-	auto
	Option	Description		
	<i>auto</i>	Set outgoing interface automatically.		
	<i>sdwan</i>	Set outgoing interface by SD-WAN or policy routing rules.		
	<i>specify</i>	Set outgoing interface manually.		
source-ip	Source IP address used for TLS active probe.	ipv4-address	Not Specified	0.0.0.0
source-ip6	Source IPv6 address used for TLS active probe.	ipv6-address	Not Specified	::
vdom	Virtual domain name for TLS active probe.	string	Maximum length: 31	

config ips rule

Configure IPS rules. Read-only.

```
config ips rule
  Description: Configure IPS rules. Read-only.
  edit <name>
    set action [pass|block]
    set application {user}
```

```

set date {integer}
set group {string}
set location {user}
set log [disable|enable]
set log-packet [disable|enable]
config metadata
    Description: Meta data. Read-only.
    edit <id>
        set metaid {integer}
        set valueid {integer}
    next
end
set os {user}
set rev {integer}
set rule-id {integer}
set service {user}
set severity {user}
next
end

```

config ips rule

Parameter	Description	Type	Size	Default						
action	Action. Read-only.	option	-	pass						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>pass</td><td>Pass or allow matching traffic.</td></tr><tr><td>block</td><td>Block or drop matching traffic.</td></tr></table>	Option	Description	pass	Pass or allow matching traffic.	block	Block or drop matching traffic.			
	Option	Description								
	pass	Pass or allow matching traffic.								
block	Block or drop matching traffic.									
application	Vulnerable applications. Read-only.	user	Not Specified							
date	Date. Read-only.	integer	Minimum value: 0 0 Maximum value: 4294967295							
group	Group. Read-only.	string	Maximum length: 63							
location	Vulnerable location. Read-only.	user	Not Specified							
log	Enable/disable logging. Read-only.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Disable logging.</td></tr><tr><td>enable</td><td>Enable logging.</td></tr></table>	Option	Description	disable	Disable logging.	enable	Enable logging.			
	Option	Description								
	disable	Disable logging.								
enable	Enable logging.									
log-packet	Enable/disable packet logging. Read-only.	option	-	disable						

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>disable</i>	Disable packet logging.		
	<i>enable</i>	Enable packet logging.		
name	Rule name.	string	Maximum length: 63	
os	Vulnerable operation systems. Read-only.	user	Not Specified	
rev	Revision. Read-only.	integer	Minimum value: 0 0 Maximum value: 4294967295	
rule-id	Rule ID. Read-only.	integer	Minimum value: 0 0 Maximum value: 4294967295	
service	Vulnerable service. Read-only.	user	Not Specified	
severity	Severity. Read-only.	user	Not Specified	

config metadata

Parameter	Description	Type	Size	Default
id	ID. Read-only.	integer	Minimum value: 0 0 Maximum value: 4294967295	
metaid	Meta ID. Read-only.	integer	Minimum value: 0 0 Maximum value: 4294967295	
valueid	Value ID. Read-only.	integer	Minimum value: 0 0 Maximum value: 4294967295	

config ips rule-settings

Configure IPS rule setting. Read-only.

```

config ips rule-settings
    Description: Configure IPS rule setting. Read-only.
    edit <id>
        next
    end

```

config ips rule-settings

Parameter	Description	Type	Size	Default
id	Rule ID.	integer	Minimum value: 0 0 Maximum value: 4294967295	

config ips sensor

Configure IPS sensor.

```

config ips sensor
    Description: Configure IPS sensor.
    edit <name>
        set block-malicious-url [disable|enable]
        set comment {var-string}
        config entries
            Description: IPS sensor filter.
            edit <id>
                set action [pass|block|...]
                set application {user}
                set cve <cve-entry1>, <cve-entry2>, ...
                set default-action [all|pass|...]
                set default-status [all|enable|...]
                config exempt-ip
                    Description: Traffic from selected source or destination IP addresses is
                    exempt from this signature.
                    edit <id>
                        set dst-ip {ipv4-classnet}
                        set src-ip {ipv4-classnet}
                    next
                end
                set last-modified {user}
                set location {user}
                set log [disable|enable]
                set log-attack-context [disable|enable]
                set log-packet [disable|enable]
                set os {user}
                set protocol {user}
                set quarantine [none|attacker]
            end
        end
    end

```

```

        set quarantine-expiry {user}
        set quarantine-log [disable|enable]
        set rate-count {integer}
        set rate-duration {integer}
        set rate-mode [periodical|continuous]
        set rate-track [none|src-ip|...]
        set rule <id1>, <id2>, ...
        set severity {user}
        set status [disable|enable|...]
        set vuln-type <id1>, <id2>, ...
    next
end
set extended-log [enable|disable]
set replacemsg-group {string}
set scan-botnet-connections [disable|block|...]
next
end

```

config ips sensor

Parameter	Description	Type	Size	Default						
block-malicious-url	Enable/disable malicious URL blocking.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Disable malicious URL blocking.</td></tr><tr><td>enable</td><td>Enable malicious URL blocking.</td></tr></table>	Option	Description	disable	Disable malicious URL blocking.	enable	Enable malicious URL blocking.			
Option	Description									
disable	Disable malicious URL blocking.									
enable	Enable malicious URL blocking.									
comment	Comment.	var-string	Maximum length: 255							
extended-log	Enable/disable extended logging.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable setting.</td></tr><tr><td>disable</td><td>Disable setting.</td></tr></table>	Option	Description	enable	Enable setting.	disable	Disable setting.			
Option	Description									
enable	Enable setting.									
disable	Disable setting.									
name	Sensor name.	string	Maximum length: 35							
replacemsg-group	Replacement message group.	string	Maximum length: 35							
scan-botnet-connections	Block or monitor connections to Botnet servers, or disable Botnet scanning.	option	-	disable						

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>disable</i>	Do not scan connections to botnet servers.		
	<i>block</i>	Block connections to botnet servers.		
	<i>monitor</i>	Log connections to botnet servers.		

config entries

Parameter	Description	Type	Size	Default
action	Action taken with traffic in which signatures are detected.	option	-	default
	Option	Description		
	<i>pass</i>	Pass or allow matching traffic.		
	<i>block</i>	Block or drop matching traffic.		
	<i>reset</i>	Reset sessions for matching traffic.		
	<i>default</i>	Pass or drop matching traffic, depending on the default action of the signature.		
application	Operating systems to be protected. Use all for every application and other for unlisted application.	user	Not Specified	all
cve <cve-entry>	List of CVE IDs of the signatures to add to the sensor. CVE IDs or CVE wildcards.	string	Maximum length: 19	
default-action	Signature default action filter.	option	-	all
	Option	Description		
	<i>all</i>	Selects signatures with any default action.		
	<i>pass</i>	Selects signatures with default action 'pass'.		
	<i>block</i>	Selects signatures with default action 'block'.		
default-status	Signature default status filter.	option	-	all
	Option	Description		
	<i>all</i>	Selects signatures with any default status.		

Parameter	Description	Type	Size	Default						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Selects signatures enabled by default.</td></tr><tr><td><i>disable</i></td><td>Selects signatures disabled by default.</td></tr></table>	Option	Description	<i>enable</i>	Selects signatures enabled by default.	<i>disable</i>	Selects signatures disabled by default.			
	Option	Description								
	<i>enable</i>	Selects signatures enabled by default.								
<i>disable</i>	Selects signatures disabled by default.									
id	Rule ID in IPS database (0 - 4294967295).	integer	Minimum value: 0 0 Maximum value: 4294967295							
last-modified	Filter by signature last modified date. Formats: before <date>, after <date>, between <start-date> <end-date>.	user	Not Specified							
location	Protect client or server traffic.	user	Not Specified	all						
log	Enable/disable logging of signatures included in filter.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>disable</i></td><td>Disable logging of selected rules.</td></tr><tr><td><i>enable</i></td><td>Enable logging of selected rules.</td></tr></table>	Option	Description	<i>disable</i>	Disable logging of selected rules.	<i>enable</i>	Enable logging of selected rules.			
	Option	Description								
	<i>disable</i>	Disable logging of selected rules.								
<i>enable</i>	Enable logging of selected rules.									
log-attack-context	Enable/disable logging of attack context: URL buffer, header buffer, body buffer, packet buffer.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>disable</i></td><td>Disable logging of detailed attack context.</td></tr><tr><td><i>enable</i></td><td>Enable logging of detailed attack context.</td></tr></table>	Option	Description	<i>disable</i>	Disable logging of detailed attack context.	<i>enable</i>	Enable logging of detailed attack context.			
	Option	Description								
	<i>disable</i>	Disable logging of detailed attack context.								
<i>enable</i>	Enable logging of detailed attack context.									
log-packet	Enable/disable packet logging. Enable to save the packet that triggers the filter. You can download the packets in pcap format for diagnostic use.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>disable</i></td><td>Disable packet logging of selected rules.</td></tr><tr><td><i>enable</i></td><td>Enable packet logging of selected rules.</td></tr></table>	Option	Description	<i>disable</i>	Disable packet logging of selected rules.	<i>enable</i>	Enable packet logging of selected rules.			
	Option	Description								
	<i>disable</i>	Disable packet logging of selected rules.								
<i>enable</i>	Enable packet logging of selected rules.									
os	Operating systems to be protected. Use all for every operating system and other for unlisted operating systems.	user	Not Specified	all						

Parameter	Description	Type	Size	Default
protocol	Protocols to be examined. Use all for every protocol and other for unlisted protocols.	user	Not Specified	all
quarantine	Quarantine method.	option	-	none
	Option	Description		
	<i>none</i>	Quarantine is disabled.		
	<i>attacker</i>	Block all traffic sent from attacker's IP address. The attacker's IP address is also added to the banned user list. The target's address is not affected.		
quarantine-expiry	Duration of quarantine. (Format ####d##h##m, minimum 1m, maximum 364d23h59m, default = 5m). Requires quarantine set to attacker.	user	Not Specified	5m
quarantine-log	Enable/disable quarantine logging.	option	-	enable
	Option	Description		
	<i>disable</i>	Disable quarantine logging.		
	<i>enable</i>	Enable quarantine logging.		
rate-count	Count of the rate.	integer	Minimum value: 0 0 Maximum value: 65535	0
rate-duration	Duration (sec) of the rate.	integer	Minimum value: 60 1 Maximum value: 65535	60
rate-mode	Rate limit mode.	option	-	continuous
	Option	Description		
	<i>periodical</i>	Allow configured number of packets every rate-duration.		
	<i>continuous</i>	Block packets once the rate is reached.		
rate-track	Track the packet protocol field.	option	-	none
	Option	Description		
	<i>none</i>	none		
	<i>src-ip</i>	Source IP.		
	<i>dest-ip</i>	Destination IP.		

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>dhcp-client-mac</i>	DHCP client.		
	<i>dns-domain</i>	DNS domain.		
rule <id>	Identifies the predefined or custom IPS signatures to add to the sensor. Rule IPS.	integer	Minimum value: 0 Maximum value: 4294967295	
severity	Relative severity of the signature, from info to critical. Log messages generated by the signature include the severity.	user	Not Specified	all
status	Status of the signatures included in filter. Only those filters with a status to enable are used.	option	-	default
	Option	Description		
	<i>disable</i>	Disable status of selected rules.		
	<i>enable</i>	Enable status of selected rules.		
	<i>default</i>	Default.		
vuln-type <id>	List of signature vulnerability types to filter by. Vulnerability type ID.	integer	Minimum value: 0 Maximum value: 4294967295	

config exempt-ip

Parameter	Description	Type	Size	Default
dst-ip	Destination IP address and netmask (applies to packet matching the signature).	ipv4-classnet	Not Specified	0.0.0.0 0.0.0.0
id	Exempt IP ID.	integer	Minimum value: 0 Maximum value: 4294967295	0
src-ip	Source IP address and netmask (applies to packet matching the signature).	ipv4-classnet	Not Specified	0.0.0.0 0.0.0.0

config ips settings

Configure IPS VDOM parameter.

```

config ips settings
    Description: Configure IPS VDOM parameter.
    set ips-packet-quota {integer}
    set packet-log-history {integer}
    set packet-log-memory {integer}
    set packet-log-post-attack {integer}
end

```

config ips settings

Parameter	Description	Type	Size	Default
ips-packet-quota	Maximum amount of disk space in MB for logged packets when logging to disk. Range depends on disk size.	integer	Minimum value: 0 Maximum value: 4294967295	0
packet-log-history	Number of packets to capture before and including the one in which the IPS signature is detected (1 - 255).	integer	Minimum value: 1 Maximum value: 255	1
packet-log-memory	Maximum memory can be used by packet log (64 - 8192 kB).	integer	Minimum value: 64 Maximum value: 8192	256
packet-log-post-attack	Number of packets to log after the IPS signature is detected (0 - 255).	integer	Minimum value: 0 Maximum value: 255	0

config ips view-map

Configure IPS view-map. Read-only.

```

config ips view-map
    Description: Configure IPS view-map. Read-only.
    edit <id>
        set id-policy-id {integer}
        set policy-id {integer}
        set vdom-id {integer}
        set which [firewall|interface|...]
    next
end

```

config ips view-map

Parameter	Description	Type	Size	Default
id	View ID. Read-only.	integer	Minimum value: 0 0 Maximum value: 4294967295	0
id-policy-id	ID-based policy ID. Read-only.	integer	Minimum value: 0 0 Maximum value: 4294967295	0
policy-id	Policy ID. Read-only.	integer	Minimum value: 0 0 Maximum value: 4294967295	0
vdom-id	VDOM ID. Read-only.	integer	Minimum value: 0 0 Maximum value: 4294967295	0
which	Policy. Read-only.	option	-	firewall
	Option	Description		
	firewall	Firewall policy.		
	interface	Interface policy.		
	interface6	Interface policy6.		
	sniffer	Sniffer policy.		
	sniffer6	Sniffer policy6.		
	explicit	explicit proxy policy.		

log

This section includes syntax for the following commands:

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- [config log azure-security-center2 setting on page 673](#)
- [config log azure-security-center filter on page 663](#)
- [config log azure-security-center setting on page 667](#)
- [config log custom-field on page 674](#)
- [config log disk filter on page 675](#)
- [config log disk setting on page 678](#)
- [config log eventfilter on page 684](#)
- [config log fortianalyzer-cloud filter on page 735](#)
- [config log fortianalyzer-cloud override-filter on page 738](#)
- [config log fortianalyzer-cloud override-setting on page 742](#)
- [config log fortianalyzer-cloud setting on page 742](#)
- [config log fortianalyzer2 filter on page 703](#)
- [config log fortianalyzer2 override-filter on page 706](#)
- [config log fortianalyzer2 override-setting on page 710](#)
- [config log fortianalyzer2 setting on page 714](#)
- [config log fortianalyzer3 filter on page 719](#)
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 - [config log syslogd3 setting on page 811](#)
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 - [config log tacacs+accounting3 filter on page 833](#)
 - [config log tacacs+accounting3 setting on page 834](#)
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config log azure-security-center filter



This command is available for model(s): FortiGate-VM64 Azure.

It is not available for: FortiGate 1000D, FortiGate 1000F, FortiGate 1001F, FortiGate 100EF, FortiGate 100E, FortiGate 100F, FortiGate 101F, FortiGate 1100E, FortiGate 1101E, FortiGate 140E-POE, FortiGate 140E, FortiGate 1500DT, FortiGate 1500D, FortiGate 1800F, FortiGate 1801F, FortiGate 2000E, FortiGate 200E, FortiGate 200F, FortiGate 201E, FortiGate 201F, FortiGate 2201E, FortiGate 2500E, FortiGate 2600F, FortiGate 2601F, FortiGate 3000D, FortiGate 3000F, FortiGate 3001F, FortiGate 300E, FortiGate 301E, FortiGate 3100D, FortiGate 3200D, FortiGate 3200F, FortiGate 3201F, FortiGate 3300E, FortiGate 3301E, FortiGate 3400E, FortiGate 3401E, FortiGate 3501F, FortiGate 3600E, FortiGate 3601E, FortiGate 3700D, FortiGate 3700F, FortiGate 3701F, FortiGate 3960E, FortiGate 3980E, FortiGate 400E Bypass, FortiGate 400E, FortiGate 400F, FortiGate 401E, FortiGate 401F, FortiGate 40F 3G4G, FortiGate 4200F, FortiGate 4201F, FortiGate 4400F, FortiGate 4401F, FortiGate 5001E1, FortiGate 5001E, FortiGate 500E, FortiGate 501E, FortiGate 600E, FortiGate 601E, FortiGate 60E-POE, FortiGate 60E, FortiGate 60F, FortiGate 61E, FortiGate 70F, FortiGate 71F, FortiGate 800D, FortiGate 80E-POE, FortiGate 80E, FortiGate 80F Bypass, FortiGate 80F DSL, FortiGate 80F-POE, FortiGate 80F, FortiGate 81E-POE, FortiGate 81E, FortiGate 81F-POE, FortiGate 81F, FortiGate 900D, FortiGate 90E, FortiGate 91E, FortiGate-VM64 Aliyun, FortiGate-VM64 AWS, FortiGate-VM64 GCP, FortiGate-VM64 OPC, FortiGate-VM64, FortiGateRugged 60F 3G4G, FortiGateRugged 60F, FortiGateRugged 70F 3G4G, FortiGateRugged 70F, FortiWiFi 40F 3G4G, FortiWiFi 40F, FortiWiFi 60E, FortiWiFi 60F, FortiWiFi 61E, FortiWiFi 61F, FortiWiFi 80F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G-POE, FortiWiFi 81F 2R-POE, FortiWiFi 81F 2R.

Filters for Azure Security Center.

```
config log azure-security-center filter
  Description: Filters for Azure Security Center.
  set anomaly [enable|disable]
  set forward-traffic [enable|disable]
  config free-style
    Description: Free style filters.
    edit <id>
      set category [traffic|event|...]
      set filter {string}
      set filter-type [include|exclude]
    next
  end
  set gtp [enable|disable]
  set local-traffic [enable|disable]
  set multicast-traffic [enable|disable]
  set severity [emergency|alert|...]
  set sniffer-traffic [enable|disable]
  set voip [enable|disable]
  set ztna-traffic [enable|disable]
end
```

config log azure-security-center filter

Parameter	Description	Type	Size	Default								
anomaly	Enable/disable anomaly logging.	option	-	enable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable anomaly logging.</td></tr><tr><td><i>disable</i></td><td>Disable anomaly logging.</td></tr></table>	Option	Description	<i>enable</i>	Enable anomaly logging.	<i>disable</i>	Disable anomaly logging.					
Option	Description											
<i>enable</i>	Enable anomaly logging.											
<i>disable</i>	Disable anomaly logging.											
forward-traffic	Enable/disable forward traffic logging.	option	-	enable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable forward traffic logging.</td></tr><tr><td><i>disable</i></td><td>Disable forward traffic logging.</td></tr></table>	Option	Description	<i>enable</i>	Enable forward traffic logging.	<i>disable</i>	Disable forward traffic logging.					
Option	Description											
<i>enable</i>	Enable forward traffic logging.											
<i>disable</i>	Disable forward traffic logging.											
gtp	Enable/disable GTP messages logging.	option	-	enable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable GTP messages logging.</td></tr><tr><td><i>disable</i></td><td>Disable GTP messages logging.</td></tr></table>	Option	Description	<i>enable</i>	Enable GTP messages logging.	<i>disable</i>	Disable GTP messages logging.					
Option	Description											
<i>enable</i>	Enable GTP messages logging.											
<i>disable</i>	Disable GTP messages logging.											
local-traffic	Enable/disable local in or out traffic logging.	option	-	enable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable local in or out traffic logging.</td></tr><tr><td><i>disable</i></td><td>Disable local in or out traffic logging.</td></tr></table>	Option	Description	<i>enable</i>	Enable local in or out traffic logging.	<i>disable</i>	Disable local in or out traffic logging.					
Option	Description											
<i>enable</i>	Enable local in or out traffic logging.											
<i>disable</i>	Disable local in or out traffic logging.											
multicast-traffic	Enable/disable multicast traffic logging.	option	-	enable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable multicast traffic logging.</td></tr><tr><td><i>disable</i></td><td>Disable multicast traffic logging.</td></tr></table>	Option	Description	<i>enable</i>	Enable multicast traffic logging.	<i>disable</i>	Disable multicast traffic logging.					
Option	Description											
<i>enable</i>	Enable multicast traffic logging.											
<i>disable</i>	Disable multicast traffic logging.											
severity	Lowest severity level to log.	option	-	information								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>emergency</i></td><td>Emergency level.</td></tr><tr><td><i>alert</i></td><td>Alert level.</td></tr><tr><td><i>critical</i></td><td>Critical level.</td></tr></table>	Option	Description	<i>emergency</i>	Emergency level.	<i>alert</i>	Alert level.	<i>critical</i>	Critical level.			
Option	Description											
<i>emergency</i>	Emergency level.											
<i>alert</i>	Alert level.											
<i>critical</i>	Critical level.											

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>error</i>	Error level.		
	<i>warning</i>	Warning level.		
	<i>notification</i>	Notification level.		
	<i>information</i>	Information level.		
	<i>debug</i>	Debug level.		
sniffer-traffic	Enable/disable sniffer traffic logging.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable sniffer traffic logging.		
	<i>disable</i>	Disable sniffer traffic logging.		
voip	Enable/disable VoIP logging.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable VoIP logging.		
	<i>disable</i>	Disable VoIP logging.		
ztna-traffic	Enable/disable ztna traffic logging.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable ztna traffic logging.		
	<i>disable</i>	Disable ztna traffic logging.		

config free-style

Parameter	Description	Type	Size	Default
category	Log category.	option	-	traffic
	Option	Description		
	<i>traffic</i>	Traffic log.		
	<i>event</i>	Event log.		
	<i>virus</i>	Antivirus log.		
	<i>webfilter</i>	Web filter log.		
	<i>attack</i>	Attack log.		

Parameter	Description	Type	Size	Default																										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>spam</i></td><td>Antispam log.</td></tr><tr><td><i>anomaly</i></td><td>Anomaly log.</td></tr><tr><td><i>voip</i></td><td>VoIP log.</td></tr><tr><td><i>dlp</i></td><td>DLP log.</td></tr><tr><td><i>app-ctrl</i></td><td>Application control log.</td></tr><tr><td><i>waf</i></td><td>Web application firewall log.</td></tr><tr><td><i>gtp</i></td><td>GTP log.</td></tr><tr><td><i>dns</i></td><td>DNS detail log.</td></tr><tr><td><i>ssh</i></td><td>SSH log.</td></tr><tr><td><i>ssl</i></td><td>SSL log.</td></tr><tr><td><i>file-filter</i></td><td>File filter log.</td></tr><tr><td><i>icap</i></td><td>ICAP log.</td></tr></table>	Option	Description	<i>spam</i>	Antispam log.	<i>anomaly</i>	Anomaly log.	<i>voip</i>	VoIP log.	<i>dlp</i>	DLP log.	<i>app-ctrl</i>	Application control log.	<i>waf</i>	Web application firewall log.	<i>gtp</i>	GTP log.	<i>dns</i>	DNS detail log.	<i>ssh</i>	SSH log.	<i>ssl</i>	SSL log.	<i>file-filter</i>	File filter log.	<i>icap</i>	ICAP log.			
	Option	Description																												
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	<i>file-filter</i>	File filter log.																												
<i>icap</i>	ICAP log.																													
filter	Free style filter string.	string	Maximum length: 1023																											
filter-type	Include/exclude logs that match the filter.	option	-	include																										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>include</i></td><td>Include logs that match the filter.</td></tr><tr><td><i>exclude</i></td><td>Exclude logs that match the filter.</td></tr></table>	Option	Description	<i>include</i>	Include logs that match the filter.	<i>exclude</i>	Exclude logs that match the filter.																							
	Option	Description																												
	<i>include</i>	Include logs that match the filter.																												
<i>exclude</i>	Exclude logs that match the filter.																													
id	Entry ID.	integer	Minimum value: 0 0 Maximum value: 4294967295																											

config log azure-security-center setting



This command is available for model(s): FortiGate-VM64 Azure.

It is not available for: FortiGate 1000D, FortiGate 1000F, FortiGate 1001F, FortiGate 100EF, FortiGate 100E, FortiGate 100F, FortiGate 101F, FortiGate 1100E, FortiGate 1101E, FortiGate 140E-POE, FortiGate 140E, FortiGate 1500DT, FortiGate 1500D, FortiGate 1800F, FortiGate 1801F, FortiGate 2000E, FortiGate 200E, FortiGate 200F, FortiGate 201E, FortiGate 201F, FortiGate 2201E, FortiGate 2500E, FortiGate 2600F, FortiGate 2601F, FortiGate 3000D, FortiGate 3000F, FortiGate 3001F, FortiGate 300E, FortiGate 301E, FortiGate 3100D, FortiGate 3200D, FortiGate 3200F, FortiGate 3201F, FortiGate 3300E, FortiGate 3301E, FortiGate 3400E, FortiGate 3401E, FortiGate 3501F, FortiGate 3600E, FortiGate 3601E, FortiGate 3700D, FortiGate 3700F, FortiGate 3701F, FortiGate 3960E, FortiGate 3980E, FortiGate 400E Bypass, FortiGate 400E, FortiGate 400F, FortiGate 401E, FortiGate 401F, FortiGate 40F 3G4G, FortiGate 4200F, FortiGate 4201F, FortiGate 4400F, FortiGate 4401F, FortiGate 5001E1, FortiGate 5001E, FortiGate 500E, FortiGate 501E, FortiGate 600E, FortiGate 601E, FortiGate 60E-POE, FortiGate 60E, FortiGate 60F, FortiGate 61E, FortiGate 70F, FortiGate 71F, FortiGate 800D, FortiGate 80E-POE, FortiGate 80E, FortiGate 80F Bypass, FortiGate 80F DSL, FortiGate 80F-POE, FortiGate 80F, FortiGate 81E-POE, FortiGate 81E, FortiGate 81F-POE, FortiGate 81F, FortiGate 900D, FortiGate 90E, FortiGate 91E, FortiGate-VM64 Aliyun, FortiGate-VM64 AWS, FortiGate-VM64 GCP, FortiGate-VM64 OPC, FortiGate-VM64, FortiGateRugged 60F 3G4G, FortiGateRugged 60F, FortiGateRugged 70F 3G4G, FortiGateRugged 70F, FortiWiFi 40F 3G4G, FortiWiFi 40F, FortiWiFi 60E, FortiWiFi 60F, FortiWiFi 61E, FortiWiFi 61F, FortiWiFi 80F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G-POE, FortiWiFi 81F 2R-POE, FortiWiFi 81F 2R.

Settings for Azure Security Center.

```
config log azure-security-center setting
  Description: Settings for Azure Security Center.
  set appliance-id {string}
  config custom-field-name
    Description: Custom field name for CEF format logging.
    edit <id>
      set custom {string}
      set name {string}
    next
  end
  set eventhub-name {string}
  set policy-name {string}
  set policy-saskey {string}
  set servicebus-namespace {string}
  set status [enable|disable]
end
```

config log azure-security-center setting

Parameter	Description	Type	Size	Default
appliance-id	Appliance ID.	string	Maximum length: 128	
eventhub-name	Event hub name.	string	Maximum length: 128	
policy-name	Policy name.	string	Maximum length: 128	
policy-saskey	Policy saskey.	string	Maximum length: 128	
servicebus-namespace	Service bus namespace.	string	Maximum length: 128	
status	Enable Azure Security Center logging.	option	-	disable
		Option	Description	
		<i>enable</i>	Enable setting.	
		<i>disable</i>	Disable setting.	

config custom-field-name

Parameter	Description	Type	Size	Default
custom	Field custom name [A-Za-z0-9_].	string	Maximum length: 35	
id	Entry ID.	integer	Minimum value: 0 Maximum value: 255	0
name	Field name [A-Za-z0-9_].	string	Maximum length: 35	

config log azure-security-center2 filter



This command is available for model(s): FortiGate-VM64 Azure.

It is not available for: FortiGate 1000D, FortiGate 1000F, FortiGate 1001F, FortiGate 100EF, FortiGate 100E, FortiGate 100F, FortiGate 101F, FortiGate 1100E, FortiGate 1101E, FortiGate 140E-POE, FortiGate 140E, FortiGate 1500DT, FortiGate 1500D, FortiGate 1800F, FortiGate 1801F, FortiGate 2000E, FortiGate 200E, FortiGate 200F, FortiGate 201E, FortiGate 201F, FortiGate 2201E, FortiGate 2500E, FortiGate 2600F, FortiGate 2601F, FortiGate 3000D, FortiGate 3000F, FortiGate 3001F, FortiGate 300E, FortiGate 301E, FortiGate 3100D, FortiGate 3200D, FortiGate 3200F, FortiGate 3201F, FortiGate 3300E, FortiGate 3301E, FortiGate 3400E, FortiGate 3401E, FortiGate 3501F, FortiGate 3600E, FortiGate 3601E, FortiGate 3700D, FortiGate 3700F, FortiGate 3701F, FortiGate 3960E, FortiGate 3980E, FortiGate 400E Bypass, FortiGate 400E, FortiGate 400F, FortiGate 401E, FortiGate 401F, FortiGate 40F 3G4G, FortiGate 4200F, FortiGate 4201F, FortiGate 4400F, FortiGate 4401F, FortiGate 5001E1, FortiGate 5001E, FortiGate 500E, FortiGate 501E, FortiGate 600E, FortiGate 601E, FortiGate 60E-POE, FortiGate 60E, FortiGate 60F, FortiGate 61E, FortiGate 70F, FortiGate 71F, FortiGate 800D, FortiGate 80E-POE, FortiGate 80E, FortiGate 80F Bypass, FortiGate 80F DSL, FortiGate 80F-POE, FortiGate 80F, FortiGate 81E-POE, FortiGate 81E, FortiGate 81F-POE, FortiGate 81F, FortiGate 900D, FortiGate 90E, FortiGate 91E, FortiGate-VM64 Aliyun, FortiGate-VM64 AWS, FortiGate-VM64 GCP, FortiGate-VM64 OPC, FortiGate-VM64, FortiGateRugged 60F 3G4G, FortiGateRugged 60F, FortiGateRugged 70F 3G4G, FortiGateRugged 70F, FortiWiFi 40F 3G4G, FortiWiFi 40F, FortiWiFi 60E, FortiWiFi 60F, FortiWiFi 61E, FortiWiFi 61F, FortiWiFi 80F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G-POE, FortiWiFi 81F 2R-POE, FortiWiFi 81F 2R.

Filters for Azure Security Center.

```
config log azure-security-center2 filter
  Description: Filters for Azure Security Center.
  set anomaly [enable|disable]
  set forward-traffic [enable|disable]
  config free-style
    Description: Free style filters.
    edit <id>
      set category [traffic|event|...]
      set filter {string}
      set filter-type [include|exclude]
    next
  end
  set gtp [enable|disable]
  set local-traffic [enable|disable]
  set multicast-traffic [enable|disable]
  set severity [emergency|alert|...]
  set sniffer-traffic [enable|disable]
  set voip [enable|disable]
  set ztna-traffic [enable|disable]
end
```

config log azure-security-center2 filter

Parameter	Description	Type	Size	Default								
anomaly	Enable/disable anomaly logging.	option	-	enable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable anomaly logging.</td></tr><tr><td><i>disable</i></td><td>Disable anomaly logging.</td></tr></table>	Option	Description	<i>enable</i>	Enable anomaly logging.	<i>disable</i>	Disable anomaly logging.					
Option	Description											
<i>enable</i>	Enable anomaly logging.											
<i>disable</i>	Disable anomaly logging.											
forward-traffic	Enable/disable forward traffic logging.	option	-	enable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable forward traffic logging.</td></tr><tr><td><i>disable</i></td><td>Disable forward traffic logging.</td></tr></table>	Option	Description	<i>enable</i>	Enable forward traffic logging.	<i>disable</i>	Disable forward traffic logging.					
Option	Description											
<i>enable</i>	Enable forward traffic logging.											
<i>disable</i>	Disable forward traffic logging.											
gtp	Enable/disable GTP messages logging.	option	-	enable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable GTP messages logging.</td></tr><tr><td><i>disable</i></td><td>Disable GTP messages logging.</td></tr></table>	Option	Description	<i>enable</i>	Enable GTP messages logging.	<i>disable</i>	Disable GTP messages logging.					
Option	Description											
<i>enable</i>	Enable GTP messages logging.											
<i>disable</i>	Disable GTP messages logging.											
local-traffic	Enable/disable local in or out traffic logging.	option	-	enable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable local in or out traffic logging.</td></tr><tr><td><i>disable</i></td><td>Disable local in or out traffic logging.</td></tr></table>	Option	Description	<i>enable</i>	Enable local in or out traffic logging.	<i>disable</i>	Disable local in or out traffic logging.					
Option	Description											
<i>enable</i>	Enable local in or out traffic logging.											
<i>disable</i>	Disable local in or out traffic logging.											
multicast-traffic	Enable/disable multicast traffic logging.	option	-	enable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable multicast traffic logging.</td></tr><tr><td><i>disable</i></td><td>Disable multicast traffic logging.</td></tr></table>	Option	Description	<i>enable</i>	Enable multicast traffic logging.	<i>disable</i>	Disable multicast traffic logging.					
Option	Description											
<i>enable</i>	Enable multicast traffic logging.											
<i>disable</i>	Disable multicast traffic logging.											
severity	Lowest severity level to log.	option	-	information								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>emergency</i></td><td>Emergency level.</td></tr><tr><td><i>alert</i></td><td>Alert level.</td></tr><tr><td><i>critical</i></td><td>Critical level.</td></tr></table>	Option	Description	<i>emergency</i>	Emergency level.	<i>alert</i>	Alert level.	<i>critical</i>	Critical level.			
Option	Description											
<i>emergency</i>	Emergency level.											
<i>alert</i>	Alert level.											
<i>critical</i>	Critical level.											

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>error</i>	Error level.		
	<i>warning</i>	Warning level.		
	<i>notification</i>	Notification level.		
	<i>information</i>	Information level.		
	<i>debug</i>	Debug level.		
sniffer-traffic	Enable/disable sniffer traffic logging.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable sniffer traffic logging.		
	<i>disable</i>	Disable sniffer traffic logging.		
voip	Enable/disable VoIP logging.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable VoIP logging.		
	<i>disable</i>	Disable VoIP logging.		
ztna-traffic	Enable/disable ztna traffic logging.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable ztna traffic logging.		
	<i>disable</i>	Disable ztna traffic logging.		

config free-style

Parameter	Description	Type	Size	Default
category	Log category.	option	-	traffic
	Option	Description		
	<i>traffic</i>	Traffic log.		
	<i>event</i>	Event log.		
	<i>virus</i>	Antivirus log.		
	<i>webfilter</i>	Web filter log.		
	<i>attack</i>	Attack log.		

Parameter	Description	Type	Size	Default																										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>spam</i></td><td>Antispam log.</td></tr><tr><td><i>anomaly</i></td><td>Anomaly log.</td></tr><tr><td><i>voip</i></td><td>VoIP log.</td></tr><tr><td><i>dlp</i></td><td>DLP log.</td></tr><tr><td><i>app-ctrl</i></td><td>Application control log.</td></tr><tr><td><i>waf</i></td><td>Web application firewall log.</td></tr><tr><td><i>gtp</i></td><td>GTP log.</td></tr><tr><td><i>dns</i></td><td>DNS detail log.</td></tr><tr><td><i>ssh</i></td><td>SSH log.</td></tr><tr><td><i>ssl</i></td><td>SSL log.</td></tr><tr><td><i>file-filter</i></td><td>File filter log.</td></tr><tr><td><i>icap</i></td><td>ICAP log.</td></tr></table>	Option	Description	<i>spam</i>	Antispam log.	<i>anomaly</i>	Anomaly log.	<i>voip</i>	VoIP log.	<i>dlp</i>	DLP log.	<i>app-ctrl</i>	Application control log.	<i>waf</i>	Web application firewall log.	<i>gtp</i>	GTP log.	<i>dns</i>	DNS detail log.	<i>ssh</i>	SSH log.	<i>ssl</i>	SSL log.	<i>file-filter</i>	File filter log.	<i>icap</i>	ICAP log.			
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	<i>file-filter</i>	File filter log.																												
<i>icap</i>	ICAP log.																													
filter	Free style filter string.	string	Maximum length: 1023																											
filter-type	Include/exclude logs that match the filter.	option	-	include																										
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	<i>include</i>	Include logs that match the filter.																												
<i>exclude</i>	Exclude logs that match the filter.																													
id	Entry ID.	integer	Minimum value: 0 Maximum value: 4294967295																											

config log azure-security-center2 setting



This command is available for model(s): FortiGate-VM64 Azure.

It is not available for: FortiGate 1000D, FortiGate 1000F, FortiGate 1001F, FortiGate 100EF, FortiGate 100E, FortiGate 100F, FortiGate 101F, FortiGate 1100E, FortiGate 1101E, FortiGate 140E-POE, FortiGate 140E, FortiGate 1500DT, FortiGate 1500D, FortiGate 1800F, FortiGate 1801F, FortiGate 2000E, FortiGate 200E, FortiGate 200F, FortiGate 201E, FortiGate 201F, FortiGate 2201E, FortiGate 2500E, FortiGate 2600F, FortiGate 2601F, FortiGate 3000D, FortiGate 3000F, FortiGate 3001F, FortiGate 300E, FortiGate 301E, FortiGate 3100D, FortiGate 3200D, FortiGate 3200F, FortiGate 3201F, FortiGate 3300E, FortiGate 3301E, FortiGate 3400E, FortiGate 3401E, FortiGate 3501F, FortiGate 3600E, FortiGate 3601E, FortiGate 3700D, FortiGate 3700F, FortiGate 3701F, FortiGate 3960E, FortiGate 3980E, FortiGate 400E Bypass, FortiGate 400E, FortiGate 400F, FortiGate 401E, FortiGate 401F, FortiGate 40F 3G4G, FortiGate 4200F, FortiGate 4201F, FortiGate 4400F, FortiGate 4401F, FortiGate 5001E1, FortiGate 5001E, FortiGate 500E, FortiGate 501E, FortiGate 600E, FortiGate 601E, FortiGate 60E-POE, FortiGate 60E, FortiGate 60F, FortiGate 61E, FortiGate 70F, FortiGate 71F, FortiGate 800D, FortiGate 80E-POE, FortiGate 80E, FortiGate 80F Bypass, FortiGate 80F DSL, FortiGate 80F-POE, FortiGate 80F, FortiGate 81E-POE, FortiGate 81E, FortiGate 81F-POE, FortiGate 81F, FortiGate 900D, FortiGate 90E, FortiGate 91E, FortiGate-VM64 Aliyun, FortiGate-VM64 AWS, FortiGate-VM64 GCP, FortiGate-VM64 OPC, FortiGate-VM64, FortiGateRugged 60F 3G4G, FortiGateRugged 60F, FortiGateRugged 70F 3G4G, FortiGateRugged 70F, FortiWiFi 40F 3G4G, FortiWiFi 40F, FortiWiFi 60E, FortiWiFi 60F, FortiWiFi 61E, FortiWiFi 61F, FortiWiFi 80F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G-POE, FortiWiFi 81F 2R-POE, FortiWiFi 81F 2R.

Settings for Azure Security Center.

```
config log azure-security-center2 setting
  Description: Settings for Azure Security Center.
  set appliance-id {string}
  config custom-field-name
    Description: Custom field name for CEF format logging.
    edit <id>
      set custom {string}
      set name {string}
    next
  end
  set eventhub-name {string}
  set policy-name {string}
  set policy-saskey {string}
  set servicebus-namespace {string}
  set status [enable|disable]
end
```


config log azure-security-center2 setting

Parameter	Description	Type	Size	Default
appliance-id	Appliance ID.	string	Maximum length: 128	
eventhub-name	Event hub name.	string	Maximum length: 128	
policy-name	Policy name.	string	Maximum length: 128	
policy-saskey	Policy saskey.	string	Maximum length: 128	
servicebus-namespace	Service bus namespace.	string	Maximum length: 128	
status	Enable Azure Security Center logging.	option	-	disable
		Option	Description	
		<i>enable</i>	Enable setting.	
		<i>disable</i>	Disable setting.	

config custom-field-name

Parameter	Description	Type	Size	Default
custom	Field custom name [A-Za-z0-9_].	string	Maximum length: 35	
id	Entry ID.	integer	Minimum value: 0 Maximum value: 255	0
name	Field name [A-Za-z0-9_].	string	Maximum length: 35	

config log custom-field

Configure custom log fields.

```
config log custom-field
  Description: Configure custom log fields.
  edit <id>
    set name {string}
    set value {string}
```

```
next
end
```

config log custom-field

Parameter	Description	Type	Size	Default
id	Field ID string.	string	Maximum length: 35	
name	Field name (max: 15 characters).	string	Maximum length: 15	
value	Field value (max: 15 characters).	string	Maximum length: 15	

config log disk filter

Configure filters for local disk logging. Use these filters to determine the log messages to record according to severity and type.

```
config log disk filter
    Description: Configure filters for local disk logging. Use these filters to determine the log
    messages to record according to severity and type.
    set anomaly [enable|disable]
    set dlp-archive [enable|disable]
    set forward-traffic [enable|disable]
    config free-style
        Description: Free style filters.
        edit <id>
            set category [traffic|event|...]
            set filter {string}
            set filter-type [include|exclude]
        next
    end
    set gtp [enable|disable]
    set local-traffic [enable|disable]
    set multicast-traffic [enable|disable]
    set severity [emergency|alert|...]
    set sniffer-traffic [enable|disable]
    set voip [enable|disable]
    set ztna-traffic [enable|disable]
end
```

config log disk filter

Parameter	Description	Type	Size	Default						
anomaly	Enable/disable anomaly logging.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable anomaly logging.</td></tr><tr><td><i>disable</i></td><td>Disable anomaly logging.</td></tr></table>	Option	Description	<i>enable</i>	Enable anomaly logging.	<i>disable</i>	Disable anomaly logging.			
Option	Description									
<i>enable</i>	Enable anomaly logging.									
<i>disable</i>	Disable anomaly logging.									
dlp-archive *	Enable/disable DLP archive logging.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable DLP archive logging.</td></tr><tr><td><i>disable</i></td><td>Disable DLP archive logging.</td></tr></table>	Option	Description	<i>enable</i>	Enable DLP archive logging.	<i>disable</i>	Disable DLP archive logging.			
Option	Description									
<i>enable</i>	Enable DLP archive logging.									
<i>disable</i>	Disable DLP archive logging.									
forward-traffic	Enable/disable forward traffic logging.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable forward traffic logging.</td></tr><tr><td><i>disable</i></td><td>Disable forward traffic logging.</td></tr></table>	Option	Description	<i>enable</i>	Enable forward traffic logging.	<i>disable</i>	Disable forward traffic logging.			
Option	Description									
<i>enable</i>	Enable forward traffic logging.									
<i>disable</i>	Disable forward traffic logging.									
gtp *	Enable/disable GTP messages logging.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable GTP messages logging.</td></tr><tr><td><i>disable</i></td><td>Disable GTP messages logging.</td></tr></table>	Option	Description	<i>enable</i>	Enable GTP messages logging.	<i>disable</i>	Disable GTP messages logging.			
Option	Description									
<i>enable</i>	Enable GTP messages logging.									
<i>disable</i>	Disable GTP messages logging.									
local-traffic	Enable/disable local in or out traffic logging.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable local in or out traffic logging.</td></tr><tr><td><i>disable</i></td><td>Disable local in or out traffic logging.</td></tr></table>	Option	Description	<i>enable</i>	Enable local in or out traffic logging.	<i>disable</i>	Disable local in or out traffic logging.			
Option	Description									
<i>enable</i>	Enable local in or out traffic logging.									
<i>disable</i>	Disable local in or out traffic logging.									
multicast-traffic	Enable/disable multicast traffic logging.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable multicast traffic logging.</td></tr><tr><td><i>disable</i></td><td>Disable multicast traffic logging.</td></tr></table>	Option	Description	<i>enable</i>	Enable multicast traffic logging.	<i>disable</i>	Disable multicast traffic logging.			
Option	Description									
<i>enable</i>	Enable multicast traffic logging.									
<i>disable</i>	Disable multicast traffic logging.									

Parameter	Description	Type	Size	Default																		
severity	Log to disk every message above and including this severity level.	option	-	information																		
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>emergency</i></td><td>Emergency level.</td></tr><tr><td><i>alert</i></td><td>Alert level.</td></tr><tr><td><i>critical</i></td><td>Critical level.</td></tr><tr><td><i>error</i></td><td>Error level.</td></tr><tr><td><i>warning</i></td><td>Warning level.</td></tr><tr><td><i>notification</i></td><td>Notification level.</td></tr><tr><td><i>information</i></td><td>Information level.</td></tr><tr><td><i>debug</i></td><td>Debug level.</td></tr></table>	Option	Description	<i>emergency</i>	Emergency level.	<i>alert</i>	Alert level.	<i>critical</i>	Critical level.	<i>error</i>	Error level.	<i>warning</i>	Warning level.	<i>notification</i>	Notification level.	<i>information</i>	Information level.	<i>debug</i>	Debug level.			
Option	Description																					
<i>emergency</i>	Emergency level.																					
<i>alert</i>	Alert level.																					
<i>critical</i>	Critical level.																					
<i>error</i>	Error level.																					
<i>warning</i>	Warning level.																					
<i>notification</i>	Notification level.																					
<i>information</i>	Information level.																					
<i>debug</i>	Debug level.																					
sniffer-traffic	Enable/disable sniffer traffic logging.	option	-	enable																		
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable sniffer traffic logging.</td></tr><tr><td><i>disable</i></td><td>Disable sniffer traffic logging.</td></tr></table>	Option	Description	<i>enable</i>	Enable sniffer traffic logging.	<i>disable</i>	Disable sniffer traffic logging.															
Option	Description																					
<i>enable</i>	Enable sniffer traffic logging.																					
<i>disable</i>	Disable sniffer traffic logging.																					
voip	Enable/disable VoIP logging.	option	-	enable																		
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable VoIP logging.</td></tr><tr><td><i>disable</i></td><td>Disable VoIP logging.</td></tr></table>	Option	Description	<i>enable</i>	Enable VoIP logging.	<i>disable</i>	Disable VoIP logging.															
Option	Description																					
<i>enable</i>	Enable VoIP logging.																					
<i>disable</i>	Disable VoIP logging.																					
ztna-traffic	Enable/disable ztna traffic logging.	option	-	enable																		
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable ztna traffic logging.</td></tr><tr><td><i>disable</i></td><td>Disable ztna traffic logging.</td></tr></table>	Option	Description	<i>enable</i>	Enable ztna traffic logging.	<i>disable</i>	Disable ztna traffic logging.															
Option	Description																					
<i>enable</i>	Enable ztna traffic logging.																					
<i>disable</i>	Disable ztna traffic logging.																					

* This parameter may not exist in some models.

config free-style

Parameter	Description	Type	Size	Default
category	Log category.	option	-	traffic

Parameter	Description	Type	Size	Default																																		
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>traffic</i></td><td>Traffic log.</td></tr><tr><td><i>event</i></td><td>Event log.</td></tr><tr><td><i>virus</i></td><td>Antivirus log.</td></tr><tr><td><i>webfilter</i></td><td>Web filter log.</td></tr><tr><td><i>attack</i></td><td>Attack log.</td></tr><tr><td><i>spam</i></td><td>Antispam log.</td></tr><tr><td><i>anomaly</i></td><td>Anomaly log.</td></tr><tr><td><i>voip</i></td><td>VoIP log.</td></tr><tr><td><i>dlp</i></td><td>DLP log.</td></tr><tr><td><i>app-ctrl</i></td><td>Application control log.</td></tr><tr><td><i>waf</i></td><td>Web application firewall log.</td></tr><tr><td><i>dns</i></td><td>DNS detail log.</td></tr><tr><td><i>ssh</i></td><td>SSH log.</td></tr><tr><td><i>ssl</i></td><td>SSL log.</td></tr><tr><td><i>file-filter</i></td><td>File filter log.</td></tr><tr><td><i>icap</i></td><td>ICAP log.</td></tr></table>	Option	Description	<i>traffic</i>	Traffic log.	<i>event</i>	Event log.	<i>virus</i>	Antivirus log.	<i>webfilter</i>	Web filter log.	<i>attack</i>	Attack log.	<i>spam</i>	Antispam log.	<i>anomaly</i>	Anomaly log.	<i>voip</i>	VoIP log.	<i>dlp</i>	DLP log.	<i>app-ctrl</i>	Application control log.	<i>waf</i>	Web application firewall log.	<i>dns</i>	DNS detail log.	<i>ssh</i>	SSH log.	<i>ssl</i>	SSL log.	<i>file-filter</i>	File filter log.	<i>icap</i>	ICAP log.			
	Option	Description																																				
	<i>traffic</i>	Traffic log.																																				
	<i>event</i>	Event log.																																				
	<i>virus</i>	Antivirus log.																																				
	<i>webfilter</i>	Web filter log.																																				
	<i>attack</i>	Attack log.																																				
	<i>spam</i>	Antispam log.																																				
	<i>anomaly</i>	Anomaly log.																																				
	<i>voip</i>	VoIP log.																																				
	<i>dlp</i>	DLP log.																																				
	<i>app-ctrl</i>	Application control log.																																				
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	<i>dns</i>	DNS detail log.																																				
	<i>ssh</i>	SSH log.																																				
	<i>ssl</i>	SSL log.																																				
	<i>file-filter</i>	File filter log.																																				
	<i>icap</i>	ICAP log.																																				
filter	Free style filter string.	string	Maximum length: 1023																																			
filter-type	Include/exclude logs that match the filter.	option	-	include																																		
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>include</i></td><td>Include logs that match the filter.</td></tr><tr><td><i>exclude</i></td><td>Exclude logs that match the filter.</td></tr></table>	Option	Description	<i>include</i>	Include logs that match the filter.	<i>exclude</i>	Exclude logs that match the filter.																															
	Option	Description																																				
	<i>include</i>	Include logs that match the filter.																																				
<i>exclude</i>	Exclude logs that match the filter.																																					
id	Entry ID.	integer	Minimum value: 0 0 Maximum value: 4294967295																																			

config log disk setting

Settings for local disk logging.

```

config log disk setting
    Description: Settings for local disk logging.
    set diskfull [overwrite|nolog]
    set dlp-archive-quota {integer}
    set full-final-warning-threshold {integer}
    set full-first-warning-threshold {integer}
    set full-second-warning-threshold {integer}
    set interface {string}
    set interface-select-method [auto|sdwan|...]
    set ips-archive [enable|disable]
    set log-quota {integer}
    set max-log-file-size {integer}
    set max-policy-packet-capture-size {integer}
    set maximum-log-age {integer}
    set report-quota {integer}
    set roll-day {option1}, {option2}, ...
    set roll-schedule [daily|weekly]
    set roll-time {user}
    set source-ip {ipv4-address}
    set status [enable|disable]
    set upload [enable|disable]
    set upload-delete-files [enable|disable]
    set upload-destination {option}
    set upload-ssl-conn [default|high|...]
    set uploadaddr {string}
    set uploadip {ipv4-address}
    set uploadpass {password}
    set uploadport {integer}
    set uploadsched [disable|enable]
    set uploadtime {user}
    set uploadtype {option1}, {option2}, ...
    set uploaduser {string}
end

```

config log disk setting

Parameter	Description	Type	Size	Default
diskfull	Action to take when disk is full. The system can overwrite the oldest log messages or stop logging when the disk is full (default = overwrite).	option	-	overwrite
Option	Description			
<i>overwrite</i>	Overwrite the oldest logs when the log disk is full.			
<i>nolog</i>	Stop logging when the log disk is full.			

Parameter	Description	Type	Size	Default								
dlp-archive-quota	DLP archive quota (MB).	integer	Minimum value: 0 0 Maximum value: 4294967295									
full-final-warning-threshold	Log full final warning threshold as a percent (3 - 100, default = 95).	integer	Minimum value: 95 3 Maximum value: 100									
full-first-warning-threshold	Log full first warning threshold as a percent (1 - 98, default = 75).	integer	Minimum value: 75 1 Maximum value: 98									
full-second-warning-threshold	Log full second warning threshold as a percent (2 - 99, default = 90).	integer	Minimum value: 90 2 Maximum value: 99									
interface	Specify outgoing interface to reach server.	string	Maximum length: 15									
interface-select-method	Specify how to select outgoing interface to reach server.	option	-	auto								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>auto</td><td>Set outgoing interface automatically.</td></tr><tr><td>sdwan</td><td>Set outgoing interface by SD-WAN or policy routing rules.</td></tr><tr><td>specify</td><td>Set outgoing interface manually.</td></tr></table>				Option	Description	auto	Set outgoing interface automatically.	sdwan	Set outgoing interface by SD-WAN or policy routing rules.	specify	Set outgoing interface manually.
Option	Description											
auto	Set outgoing interface automatically.											
sdwan	Set outgoing interface by SD-WAN or policy routing rules.											
specify	Set outgoing interface manually.											
ips-archive	Enable/disable IPS packet archiving to the local disk.	option	-	enable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable IPS packet archiving.</td></tr><tr><td>disable</td><td>Disable IPS packet archiving.</td></tr></table>				Option	Description	enable	Enable IPS packet archiving.	disable	Disable IPS packet archiving.		
Option	Description											
enable	Enable IPS packet archiving.											
disable	Disable IPS packet archiving.											
log-quota	Disk log quota (MB).	integer	Minimum value: 0 0 Maximum value: 4294967295									
max-log-file-size	Maximum log file size before rolling (1 - 100 Mbytes).	integer	Minimum value: 20 1 Maximum value: 100									

Parameter	Description	Type	Size	Default																
max-policy-packet-capture-size	Maximum size of policy sniffer in MB (0 means unlimited).	integer	Minimum value: 0 Maximum value: 4294967295	100																
maximum-log-age	Delete log files older than (days).	integer	Minimum value: 0 Maximum value: 3650	7																
report-quota *	Report db quota (MB).	integer	Minimum value: 0 Maximum value: 4294967295	0																
roll-day	Day of week on which to roll log file.	option	-	sunday																
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>sunday</td><td>Sunday</td></tr><tr><td>monday</td><td>Monday</td></tr><tr><td>tuesday</td><td>Tuesday</td></tr><tr><td>wednesday</td><td>Wednesday</td></tr><tr><td>thursday</td><td>Thursday</td></tr><tr><td>friday</td><td>Friday</td></tr><tr><td>saturday</td><td>Saturday</td></tr></table>				Option	Description	sunday	Sunday	monday	Monday	tuesday	Tuesday	wednesday	Wednesday	thursday	Thursday	friday	Friday	saturday	Saturday
Option	Description																			
sunday	Sunday																			
monday	Monday																			
tuesday	Tuesday																			
wednesday	Wednesday																			
thursday	Thursday																			
friday	Friday																			
saturday	Saturday																			
roll-schedule	Frequency to check log file for rolling.	option	-	daily																
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>daily</td><td>Check the log file once a day.</td></tr><tr><td>weekly</td><td>Check the log file once a week.</td></tr></table>				Option	Description	daily	Check the log file once a day.	weekly	Check the log file once a week.										
Option	Description																			
daily	Check the log file once a day.																			
weekly	Check the log file once a week.																			
roll-time	Time of day to roll the log file (hh:mm).	user	Not Specified																	
source-ip	Source IP address to use for uploading disk log files.	ipv4-address	Not Specified	0.0.0.0																
status	Enable/disable local disk logging.	option	-	disable **																
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Log to local disk.</td></tr><tr><td>disable</td><td>Do not log to local disk.</td></tr></table>				Option	Description	enable	Log to local disk.	disable	Do not log to local disk.										
Option	Description																			
enable	Log to local disk.																			
disable	Do not log to local disk.																			

Parameter	Description	Type	Size	Default										
upload	Enable/disable uploading log files when they are rolled.	option	-	disable										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable uploading log files when they are rolled.</td></tr><tr><td><i>disable</i></td><td>Disable uploading log files when they are rolled.</td></tr></table>	Option	Description	<i>enable</i>	Enable uploading log files when they are rolled.	<i>disable</i>	Disable uploading log files when they are rolled.							
Option	Description													
<i>enable</i>	Enable uploading log files when they are rolled.													
<i>disable</i>	Disable uploading log files when they are rolled.													
upload-delete-files	Delete log files after uploading (default = enable).	option	-	enable										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Delete log files after uploading.</td></tr><tr><td><i>disable</i></td><td>Do not delete log files after uploading.</td></tr></table>	Option	Description	<i>enable</i>	Delete log files after uploading.	<i>disable</i>	Do not delete log files after uploading.							
Option	Description													
<i>enable</i>	Delete log files after uploading.													
<i>disable</i>	Do not delete log files after uploading.													
upload-destination	The type of server to upload log files to. Only FTP is currently supported.	option	-	ftp-server										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>ftp-server</i></td><td>Upload rolled log files to an FTP server.</td></tr></table>	Option	Description	<i>ftp-server</i>	Upload rolled log files to an FTP server.									
Option	Description													
<i>ftp-server</i>	Upload rolled log files to an FTP server.													
upload-ssl-conn	Enable/disable encrypted FTPS communication to upload log files.	option	-	default										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>default</i></td><td>FTPS with high and medium encryption algorithms.</td></tr><tr><td><i>high</i></td><td>FTPS with high encryption algorithms.</td></tr><tr><td><i>low</i></td><td>FTPS with low encryption algorithms.</td></tr><tr><td><i>disable</i></td><td>Disable FTPS communication.</td></tr></table>	Option	Description	<i>default</i>	FTPS with high and medium encryption algorithms.	<i>high</i>	FTPS with high encryption algorithms.	<i>low</i>	FTPS with low encryption algorithms.	<i>disable</i>	Disable FTPS communication.			
Option	Description													
<i>default</i>	FTPS with high and medium encryption algorithms.													
<i>high</i>	FTPS with high encryption algorithms.													
<i>low</i>	FTPS with low encryption algorithms.													
<i>disable</i>	Disable FTPS communication.													
uploaddir	The remote directory on the FTP server to upload log files to.	string	Maximum length: 63											
uploadip	IP address of the FTP server to upload log files to.	ipv4-address	Not Specified	0.0.0.0										
uploadpass	Password required to log into the FTP server to upload disk log files.	password	Not Specified											
uploadport	TCP port to use for communicating with the FTP server (default = 21).	integer	Minimum value: 0 Maximum value: 65535	21										

Parameter	Description	Type	Size	Default																														
uploadsched	Set the schedule for uploading log files to the FTP server (default = disable = upload when rolling).	option	-	disable																														
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Upload when rolling.</td></tr><tr><td>enable</td><td>Scheduled upload.</td></tr></table>	Option	Description	disable	Upload when rolling.	enable	Scheduled upload.																											
Option	Description																																	
disable	Upload when rolling.																																	
enable	Scheduled upload.																																	
uploadtime	Time of day at which log files are uploaded if uploadsched is enabled (hh:mm or hh).	user	Not Specified																															
uploadtype	Types of log files to upload. Separate multiple entries with a space.	option	-	traffic event virus webfilter IPS emailfilter dlp-archive anomaly voip dlp app-ctrl waf dns ssh ssl **																														
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>traffic</td><td>Upload traffic log.</td></tr><tr><td>event</td><td>Upload event log.</td></tr><tr><td>virus</td><td>Upload anti-virus log.</td></tr><tr><td>webfilter</td><td>Upload web filter log.</td></tr><tr><td>IPS</td><td>Upload IPS log.</td></tr><tr><td>emailfilter</td><td>Upload spam filter log.</td></tr><tr><td>dlp-archive</td><td>Upload DLP archive.</td></tr><tr><td>anomaly</td><td>Upload anomaly log.</td></tr><tr><td>voip</td><td>Upload VoIP log.</td></tr><tr><td>dlp</td><td>Upload DLP log.</td></tr><tr><td>app-ctrl</td><td>Upload application control log.</td></tr><tr><td>waf</td><td>Upload web application firewall log.</td></tr><tr><td>dns</td><td>Upload DNS log.</td></tr><tr><td>ssh</td><td>Upload SSH log.</td></tr></table>	Option	Description	traffic	Upload traffic log.	event	Upload event log.	virus	Upload anti-virus log.	webfilter	Upload web filter log.	IPS	Upload IPS log.	emailfilter	Upload spam filter log.	dlp-archive	Upload DLP archive.	anomaly	Upload anomaly log.	voip	Upload VoIP log.	dlp	Upload DLP log.	app-ctrl	Upload application control log.	waf	Upload web application firewall log.	dns	Upload DNS log.	ssh	Upload SSH log.			
Option	Description																																	
traffic	Upload traffic log.																																	
event	Upload event log.																																	
virus	Upload anti-virus log.																																	
webfilter	Upload web filter log.																																	
IPS	Upload IPS log.																																	
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voip	Upload VoIP log.																																	
dlp	Upload DLP log.																																	
app-ctrl	Upload application control log.																																	
waf	Upload web application firewall log.																																	
dns	Upload DNS log.																																	
ssh	Upload SSH log.																																	

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>ssl</i>	Upload SSL log.		
	<i>file-filter</i>	Upload file-filter log.		
	<i>icap</i>	Upload ICAP log.		
uploaduser	Username required to log into the FTP server to upload disk log files.	string	Maximum length: 35	

* This parameter may not exist in some models.

** Values may differ between models.

config log eventfilter

Configure log event filters.

```
config log eventfilter
  Description: Configure log event filters.
  set cifs [enable|disable]
  set connector [enable|disable]
  set endpoint [enable|disable]
  set event [enable|disable]
  set fortixtender [enable|disable]
  set ha [enable|disable]
  set rest-api [enable|disable]
  set router [enable|disable]
  set sdwan [enable|disable]
  set security-rating [enable|disable]
  set switch-controller [enable|disable]
  set system [enable|disable]
  set user [enable|disable]
  set vpn [enable|disable]
  set wan-opt [enable|disable]
  set webproxy [enable|disable]
  set wireless-activity [enable|disable]
end
```

config log eventfilter

Parameter	Description	Type	Size	Default
cifs	Enable/disable CIFS logging.	option	-	enable

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>enable</i>	Enable CIFS logging.		
	<i>disable</i>	Disable CIFS logging.		
connector	Enable/disable SDN connector logging.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable SDN connector logging.		
	<i>disable</i>	Disable SDN connector logging.		
endpoint	Enable/disable endpoint event logging.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable endpoint event logging.		
	<i>disable</i>	Disable endpoint event logging.		
event	Enable/disable event logging.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable event logging.		
	<i>disable</i>	Disable event logging.		
fortiextender	Enable/disable FortiExtender logging.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable Forti-Extender logging.		
	<i>disable</i>	Disable Forti-Extender logging.		
ha	Enable/disable ha event logging.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable ha event logging.		
	<i>disable</i>	Disable ha event logging.		
rest-api	Enable/disable REST API logging.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable REST API logging.		
	<i>disable</i>	Disable REST API logging.		
router	Enable/disable router event logging.	option	-	enable

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>enable</i>	Enable router event logging.		
	<i>disable</i>	Disable router event logging.		
sdwan	Enable/disable SD-WAN logging.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable SD-WAN logging.		
	<i>disable</i>	Disable SD-WAN logging.		
security-rating	Enable/disable Security Rating result logging.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable Security Fabric audit result logging.		
	<i>disable</i>	Disable Security Fabric audit result logging.		
switch-controller	Enable/disable Switch-Controller logging.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable Switch-Controller logging.		
	<i>disable</i>	Disable Switch-Controller logging.		
system	Enable/disable system event logging.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable system event logging.		
	<i>disable</i>	Disable system event logging.		
user	Enable/disable user authentication event logging.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable user authentication event logging.		
	<i>disable</i>	Disable user authentication event logging.		
vpn	Enable/disable VPN event logging.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable VPN event logging.		
	<i>disable</i>	Disable VPN event logging.		

Parameter	Description	Type	Size	Default
wan-opt	Enable/disable WAN optimization event logging.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable WAN optimization event logging.		
	<i>disable</i>	Disable WAN optimization event logging.		
webproxy	Enable/disable web proxy event logging.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable Web Proxy event logging.		
	<i>disable</i>	Disable Web Proxy event logging.		
wireless-activity	Enable/disable wireless event logging.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable wireless event logging.		
	<i>disable</i>	Disable wireless event logging.		

config log fortianalyzer filter

Filters for FortiAnalyzer.

```
config log fortianalyzer filter
  Description: Filters for FortiAnalyzer.
  set anomaly [enable|disable]
  set dlp-archive [enable|disable]
  set forward-traffic [enable|disable]
  config free-style
    Description: Free style filters.
    edit <id>
      set category [traffic|event|...]
      set filter {string}
      set filter-type [include|exclude]
    next
  end
  set gtp [enable|disable]
  set local-traffic [enable|disable]
  set multicast-traffic [enable|disable]
  set severity [emergency|alert|...]
  set sniffer-traffic [enable|disable]
  set voip [enable|disable]
  set ztna-traffic [enable|disable]
end
```

config log fortianalyzer filter

Parameter	Description	Type	Size	Default						
anomaly	Enable/disable anomaly logging.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable anomaly logging.</td></tr><tr><td><i>disable</i></td><td>Disable anomaly logging.</td></tr></table>	Option	Description	<i>enable</i>	Enable anomaly logging.	<i>disable</i>	Disable anomaly logging.			
Option	Description									
<i>enable</i>	Enable anomaly logging.									
<i>disable</i>	Disable anomaly logging.									
dlp-archive	Enable/disable DLP archive logging.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable DLP archive logging.</td></tr><tr><td><i>disable</i></td><td>Disable DLP archive logging.</td></tr></table>	Option	Description	<i>enable</i>	Enable DLP archive logging.	<i>disable</i>	Disable DLP archive logging.			
Option	Description									
<i>enable</i>	Enable DLP archive logging.									
<i>disable</i>	Disable DLP archive logging.									
forward-traffic	Enable/disable forward traffic logging.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable forward traffic logging.</td></tr><tr><td><i>disable</i></td><td>Disable forward traffic logging.</td></tr></table>	Option	Description	<i>enable</i>	Enable forward traffic logging.	<i>disable</i>	Disable forward traffic logging.			
Option	Description									
<i>enable</i>	Enable forward traffic logging.									
<i>disable</i>	Disable forward traffic logging.									
gtp *	Enable/disable GTP messages logging.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable GTP messages logging.</td></tr><tr><td><i>disable</i></td><td>Disable GTP messages logging.</td></tr></table>	Option	Description	<i>enable</i>	Enable GTP messages logging.	<i>disable</i>	Disable GTP messages logging.			
Option	Description									
<i>enable</i>	Enable GTP messages logging.									
<i>disable</i>	Disable GTP messages logging.									
local-traffic	Enable/disable local in or out traffic logging.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable local in or out traffic logging.</td></tr><tr><td><i>disable</i></td><td>Disable local in or out traffic logging.</td></tr></table>	Option	Description	<i>enable</i>	Enable local in or out traffic logging.	<i>disable</i>	Disable local in or out traffic logging.			
Option	Description									
<i>enable</i>	Enable local in or out traffic logging.									
<i>disable</i>	Disable local in or out traffic logging.									
multicast-traffic	Enable/disable multicast traffic logging.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable multicast traffic logging.</td></tr><tr><td><i>disable</i></td><td>Disable multicast traffic logging.</td></tr></table>	Option	Description	<i>enable</i>	Enable multicast traffic logging.	<i>disable</i>	Disable multicast traffic logging.			
Option	Description									
<i>enable</i>	Enable multicast traffic logging.									
<i>disable</i>	Disable multicast traffic logging.									
severity	Lowest severity level to log.	option	-	information						

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>emergency</i>	Emergency level.		
	<i>alert</i>	Alert level.		
	<i>critical</i>	Critical level.		
	<i>error</i>	Error level.		
	<i>warning</i>	Warning level.		
	<i>notification</i>	Notification level.		
	<i>information</i>	Information level.		
	<i>debug</i>	Debug level.		
sniffer-traffic	Enable/disable sniffer traffic logging.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable sniffer traffic logging.		
	<i>disable</i>	Disable sniffer traffic logging.		
voip	Enable/disable VoIP logging.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable VoIP logging.		
	<i>disable</i>	Disable VoIP logging.		
ztna-traffic	Enable/disable ztna traffic logging.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable ztna traffic logging.		
	<i>disable</i>	Disable ztna traffic logging.		

* This parameter may not exist in some models.

config free-style

Parameter	Description	Type	Size	Default
category	Log category.	option	-	traffic
	Option	Description		
	<i>traffic</i>	Traffic log.		

Parameter	Description	Type	Size	Default																																
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>event</i></td><td>Event log.</td></tr><tr><td><i>virus</i></td><td>Antivirus log.</td></tr><tr><td><i>webfilter</i></td><td>Web filter log.</td></tr><tr><td><i>attack</i></td><td>Attack log.</td></tr><tr><td><i>spam</i></td><td>Antispam log.</td></tr><tr><td><i>anomaly</i></td><td>Anomaly log.</td></tr><tr><td><i>voip</i></td><td>VoIP log.</td></tr><tr><td><i>dlp</i></td><td>DLP log.</td></tr><tr><td><i>app-ctrl</i></td><td>Application control log.</td></tr><tr><td><i>waf</i></td><td>Web application firewall log.</td></tr><tr><td><i>dns</i></td><td>DNS detail log.</td></tr><tr><td><i>ssh</i></td><td>SSH log.</td></tr><tr><td><i>ssl</i></td><td>SSL log.</td></tr><tr><td><i>file-filter</i></td><td>File filter log.</td></tr><tr><td><i>icap</i></td><td>ICAP log.</td></tr></table>	Option	Description	<i>event</i>	Event log.	<i>virus</i>	Antivirus log.	<i>webfilter</i>	Web filter log.	<i>attack</i>	Attack log.	<i>spam</i>	Antispam log.	<i>anomaly</i>	Anomaly log.	<i>voip</i>	VoIP log.	<i>dlp</i>	DLP log.	<i>app-ctrl</i>	Application control log.	<i>waf</i>	Web application firewall log.	<i>dns</i>	DNS detail log.	<i>ssh</i>	SSH log.	<i>ssl</i>	SSL log.	<i>file-filter</i>	File filter log.	<i>icap</i>	ICAP log.			
	Option	Description																																		
	<i>event</i>	Event log.																																		
	<i>virus</i>	Antivirus log.																																		
	<i>webfilter</i>	Web filter log.																																		
	<i>attack</i>	Attack log.																																		
	<i>spam</i>	Antispam log.																																		
	<i>anomaly</i>	Anomaly log.																																		
	<i>voip</i>	VoIP log.																																		
	<i>dlp</i>	DLP log.																																		
	<i>app-ctrl</i>	Application control log.																																		
	<i>waf</i>	Web application firewall log.																																		
	<i>dns</i>	DNS detail log.																																		
	<i>ssh</i>	SSH log.																																		
	<i>ssl</i>	SSL log.																																		
	<i>file-filter</i>	File filter log.																																		
<i>icap</i>	ICAP log.																																			
filter	Free style filter string.	string	Maximum length: 1023																																	
filter-type	Include/exclude logs that match the filter.	option	-	include																																
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>include</i></td><td>Include logs that match the filter.</td></tr><tr><td><i>exclude</i></td><td>Exclude logs that match the filter.</td></tr></table>	Option	Description	<i>include</i>	Include logs that match the filter.	<i>exclude</i>	Exclude logs that match the filter.																													
	Option	Description																																		
	<i>include</i>	Include logs that match the filter.																																		
<i>exclude</i>	Exclude logs that match the filter.																																			
id	Entry ID.	integer	Minimum value: 0 Maximum value: 4294967295																																	

config log fortianalyzer override-filter

Override filters for FortiAnalyzer.

```
config log fortianalyzer override-filter
    Description: Override filters for FortiAnalyzer.
```

```

set anomaly [enable|disable]
set dlp-archive [enable|disable]
set forward-traffic [enable|disable]
config free-style
    Description: Free style filters.
    edit <id>
        set category [traffic|event|...]
        set filter {string}
        set filter-type [include|exclude]
    next
end
set gtp [enable|disable]
set local-traffic [enable|disable]
set multicast-traffic [enable|disable]
set severity [emergency|alert|...]
set sniffer-traffic [enable|disable]
set voip [enable|disable]
set ztna-traffic [enable|disable]
end

```

config log fortianalyzer override-filter

Parameter	Description	Type	Size	Default
anomaly	Enable/disable anomaly logging.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable anomaly logging.		
	<i>disable</i>	Disable anomaly logging.		
dlp-archive	Enable/disable DLP archive logging.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable DLP archive logging.		
	<i>disable</i>	Disable DLP archive logging.		
forward-traffic	Enable/disable forward traffic logging.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable forward traffic logging.		
	<i>disable</i>	Disable forward traffic logging.		
gtp *	Enable/disable GTP messages logging.	option	-	enable

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>enable</i>	Enable GTP messages logging.		
	<i>disable</i>	Disable GTP messages logging.		
local-traffic	Enable/disable local in or out traffic logging.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable local in or out traffic logging.		
	<i>disable</i>	Disable local in or out traffic logging.		
multicast-traffic	Enable/disable multicast traffic logging.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable multicast traffic logging.		
	<i>disable</i>	Disable multicast traffic logging.		
severity	Lowest severity level to log.	option	-	information
	Option	Description		
	<i>emergency</i>	Emergency level.		
	<i>alert</i>	Alert level.		
	<i>critical</i>	Critical level.		
	<i>error</i>	Error level.		
	<i>warning</i>	Warning level.		
	<i>notification</i>	Notification level.		
	<i>information</i>	Information level.		
	<i>debug</i>	Debug level.		
sniffer-traffic	Enable/disable sniffer traffic logging.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable sniffer traffic logging.		
	<i>disable</i>	Disable sniffer traffic logging.		
voip	Enable/disable VoIP logging.	option	-	enable

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>enable</i>	Enable VoIP logging.		
	<i>disable</i>	Disable VoIP logging.		
ztna-traffic	Enable/disable ztna traffic logging.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable ztna traffic logging.		
	<i>disable</i>	Disable ztna traffic logging.		

* This parameter may not exist in some models.

config free-style

Parameter	Description	Type	Size	Default
category	Log category.	option	-	traffic
	Option	Description		
	<i>traffic</i>	Traffic log.		
	<i>event</i>	Event log.		
	<i>virus</i>	Antivirus log.		
	<i>webfilter</i>	Web filter log.		
	<i>attack</i>	Attack log.		
	<i>spam</i>	Antispam log.		
	<i>anomaly</i>	Anomaly log.		
	<i>voip</i>	VoIP log.		
	<i>dlp</i>	DLP log.		
	<i>app-ctrl</i>	Application control log.		
	<i>waf</i>	Web application firewall log.		
	<i>dns</i>	DNS detail log.		
	<i>ssh</i>	SSH log.		
	<i>ssl</i>	SSL log.		
	<i>file-filter</i>	File filter log.		
	<i>icap</i>	ICAP log.		

Parameter	Description	Type	Size	Default
filter	Free style filter string.	string	Maximum length: 1023	
filter-type	Include/exclude logs that match the filter.	option	-	include
	Option	Description		
	<i>include</i>	Include logs that match the filter.		
	<i>exclude</i>	Exclude logs that match the filter.		
id	Entry ID.	integer	Minimum value: 0 0 Maximum value: 4294967295	

config log fortianalyzer override-setting

Override FortiAnalyzer settings.

```

config log fortianalyzer override-setting
  Description: Override FortiAnalyzer settings.
  set access-config [enable|disable]
  set alt-server {string}
  set certificate {string}
  set certificate-verification [enable|disable]
  set conn-timeout {integer}
  set enc-algorithm [high-medium|high|...]
  set fallback-to-primary [enable|disable]
  set hmac-algorithm [sha256|sha1]
  set interface {string}
  set interface-select-method [auto|sdwan|...]
  set ips-archive [enable|disable]
  set max-log-rate {integer}
  set monitor-failure-retry-period {integer}
  set monitor-keepalive-period {integer}
  set preshared-key {string}
  set priority [default|low]
  set reliable [enable|disable]
  set serial <name1>, <name2>, ...
  set server {string}
  set server-cert-ca {string}
  set source-ip {string}
  set ssl-min-proto-version [default|SSLv3|...]
  set status [enable|disable]
  set upload-day {user}
  set upload-interval [daily|weekly|...]
  set upload-option [store-and-upload|realtime|...]
  set upload-time {user}

```

```

set use-management-vdom [enable|disable]
end

```

config log fortianalyzer override-setting

Parameter	Description	Type	Size	Default
access-config	Enable/disable FortiAnalyzer access to configuration and data.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable FortiAnalyzer access to configuration and data.		
	<i>disable</i>	Disable FortiAnalyzer access to configuration and data.		
alt-server	Alternate FortiAnalyzer.	string	Maximum length: 127	
certificate	Certificate used to communicate with FortiAnalyzer.	string	Maximum length: 35	
certificate-verification	Enable/disable identity verification of FortiAnalyzer by use of certificate.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable identity verification of FortiAnalyzer by use of certificate.		
	<i>disable</i>	Disable identity verification of FortiAnalyzer by use of certificate.		
conn-timeout	FortiAnalyzer connection time-out in seconds (for status and log buffer).	integer	Minimum value: 1 Maximum value: 3600	10
enc-algorithm	Configure the level of SSL protection for secure communication with FortiAnalyzer.	option	-	high
	Option	Description		
	<i>high-medium</i>	Encrypt logs using high and medium encryption algorithms.		
	<i>high</i>	Encrypt logs using high encryption algorithms.		
	<i>low</i>	Encrypt logs using all encryption algorithms.		
fallback-to-primary	Enable/disable this FortiGate unit to fallback to the primary FortiAnalyzer when it is available.	option	-	enable

Parameter	Description	Type	Size	Default								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable this FortiGate unit to fallback to the primary FortiAnalyzer when it is available.</td></tr><tr><td><i>disable</i></td><td>Disable this FortiGate unit to fallback to the primary FortiAnalyzer when it is available.</td></tr></table>	Option	Description	<i>enable</i>	Enable this FortiGate unit to fallback to the primary FortiAnalyzer when it is available.	<i>disable</i>	Disable this FortiGate unit to fallback to the primary FortiAnalyzer when it is available.					
	Option	Description										
	<i>enable</i>	Enable this FortiGate unit to fallback to the primary FortiAnalyzer when it is available.										
<i>disable</i>	Disable this FortiGate unit to fallback to the primary FortiAnalyzer when it is available.											
hmac-algorithm	OFTP login hash algorithm.	option	-	sha256								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>sha256</i></td><td>Use SHA256 as HMAC algorithm.</td></tr><tr><td><i>sha1</i></td><td>Step down to SHA1 as the HMAC algorithm.</td></tr></table>	Option	Description	<i>sha256</i>	Use SHA256 as HMAC algorithm.	<i>sha1</i>	Step down to SHA1 as the HMAC algorithm.					
	Option	Description										
	<i>sha256</i>	Use SHA256 as HMAC algorithm.										
<i>sha1</i>	Step down to SHA1 as the HMAC algorithm.											
interface	Specify outgoing interface to reach server.	string	Maximum length: 15									
interface-select-method	Specify how to select outgoing interface to reach server.	option	-	auto								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>auto</i></td><td>Set outgoing interface automatically.</td></tr><tr><td><i>sdwan</i></td><td>Set outgoing interface by SD-WAN or policy routing rules.</td></tr><tr><td><i>specify</i></td><td>Set outgoing interface manually.</td></tr></table>	Option	Description	<i>auto</i>	Set outgoing interface automatically.	<i>sdwan</i>	Set outgoing interface by SD-WAN or policy routing rules.	<i>specify</i>	Set outgoing interface manually.			
	Option	Description										
	<i>auto</i>	Set outgoing interface automatically.										
	<i>sdwan</i>	Set outgoing interface by SD-WAN or policy routing rules.										
<i>specify</i>	Set outgoing interface manually.											
ips-archive	Enable/disable IPS packet archive logging.	option	-	enable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable IPS packet archive logging.</td></tr><tr><td><i>disable</i></td><td>Disable IPS packet archive logging.</td></tr></table>	Option	Description	<i>enable</i>	Enable IPS packet archive logging.	<i>disable</i>	Disable IPS packet archive logging.					
	Option	Description										
	<i>enable</i>	Enable IPS packet archive logging.										
<i>disable</i>	Disable IPS packet archive logging.											
max-log-rate	FortiAnalyzer maximum log rate in MBps (0 = unlimited).	integer	Minimum value: 0 Maximum value: 100000	0								
monitor-failure-retry-period	Time between FortiAnalyzer connection retries in seconds (for status and log buffer).	integer	Minimum value: 1 Maximum value: 86400	5								

Parameter	Description	Type	Size	Default														
monitor-keepalive-period	Time between OFTP keepalives in seconds (for status and log buffer).	integer	Minimum value: 1 Maximum value: 120	5														
preshared-key	Preshared-key used for auto-authorization on FortiAnalyzer.	string	Maximum length: 63															
priority	Set log transmission priority.	option	-	default														
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>default</td><td>Set FortiAnalyzer log transmission priority to default.</td></tr><tr><td>low</td><td>Set FortiAnalyzer log transmission priority to low.</td></tr></table>	Option	Description	default	Set FortiAnalyzer log transmission priority to default.	low	Set FortiAnalyzer log transmission priority to low.											
Option	Description																	
default	Set FortiAnalyzer log transmission priority to default.																	
low	Set FortiAnalyzer log transmission priority to low.																	
reliable	Enable/disable reliable logging to FortiAnalyzer.	option	-	disable														
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable reliable logging to FortiAnalyzer.</td></tr><tr><td>disable</td><td>Disable reliable logging to FortiAnalyzer.</td></tr></table>	Option	Description	enable	Enable reliable logging to FortiAnalyzer.	disable	Disable reliable logging to FortiAnalyzer.											
Option	Description																	
enable	Enable reliable logging to FortiAnalyzer.																	
disable	Disable reliable logging to FortiAnalyzer.																	
serial <name>	Serial numbers of the FortiAnalyzer. Serial Number.	string	Maximum length: 79															
server	The remote FortiAnalyzer.	string	Maximum length: 127															
server-cert-ca	Mandatory CA on FortiGate in certificate chain of server.	string	Maximum length: 79															
source-ip	Source IPv4 or IPv6 address used to communicate with FortiAnalyzer.	string	Maximum length: 63															
ssl-min-protocol-version	Minimum supported protocol version for SSL/TLS connections (default is to follow system global setting).	option	-	default														
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>default</td><td>Follow system global setting.</td></tr><tr><td>SSLv3</td><td>SSLv3.</td></tr><tr><td>TLSv1</td><td>TLSv1.</td></tr><tr><td>TLSv1-1</td><td>TLSv1.1.</td></tr><tr><td>TLSv1-2</td><td>TLSv1.2.</td></tr><tr><td>TLSv1-3</td><td>TLSv1.3.</td></tr></table>	Option	Description	default	Follow system global setting.	SSLv3	SSLv3.	TLSv1	TLSv1.	TLSv1-1	TLSv1.1.	TLSv1-2	TLSv1.2.	TLSv1-3	TLSv1.3.			
Option	Description																	
default	Follow system global setting.																	
SSLv3	SSLv3.																	
TLSv1	TLSv1.																	
TLSv1-1	TLSv1.1.																	
TLSv1-2	TLSv1.2.																	
TLSv1-3	TLSv1.3.																	

Parameter	Description	Type	Size	Default
status	Enable/disable logging to FortiAnalyzer.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable logging to FortiAnalyzer.		
	<i>disable</i>	Disable logging to FortiAnalyzer.		
upload-day	Day of week (month) to upload logs.	user	Not Specified	
upload-interval	Frequency to upload log files to FortiAnalyzer.	option	-	daily
	Option	Description		
	<i>daily</i>	Upload log files to FortiAnalyzer once a day.		
	<i>weekly</i>	Upload log files to FortiAnalyzer once a week.		
	<i>monthly</i>	Upload log files to FortiAnalyzer once a month.		
upload-option	Enable/disable logging to hard disk and then uploading to FortiAnalyzer.	option	-	5-minute
	Option	Description		
	<i>store-and-upload</i>	Log to hard disk and then upload to FortiAnalyzer.		
	<i>realtime</i>	Log directly to FortiAnalyzer in real time.		
	<i>1-minute</i>	Log directly to FortiAnalyzer at least every 1 minute.		
	<i>5-minute</i>	Log directly to FortiAnalyzer at least every 5 minutes.		
upload-time	Time to upload logs (hh:mm).	user	Not Specified	
use-management-vdom	Enable/disable use of management VDOM IP address as source IP for logs sent to FortiAnalyzer.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable use of management VDOM IP address as source IP for logs sent to FortiAnalyzer.		
	<i>disable</i>	Disable use of management VDOM IP address as source IP for logs sent to FortiAnalyzer.		

config log fortianalyzer setting

Global FortiAnalyzer settings.

```

config log fortianalyzer setting
    Description: Global FortiAnalyzer settings.
    set access-config [enable|disable]
    set alt-server {string}
    set certificate {string}
    set certificate-verification [enable|disable]
    set conn-timeout {integer}
    set enc-algorithm [high-medium|high|...]
    set fallback-to-primary [enable|disable]
    set hmac-algorithm [sha256|sha1]
    set interface {string}
    set interface-select-method [auto|sdwan|...]
    set ips-archive [enable|disable]
    set max-log-rate {integer}
    set monitor-failure-retry-period {integer}
    set monitor-keepalive-period {integer}
    set preshared-key {string}
    set priority [default|low]
    set reliable [enable|disable]
    set serial <name1>, <name2>, ...
    set server {string}
    set server-cert-ca {string}
    set source-ip {string}
    set ssl-min-proto-version [default|SSLv3|...]
    set status [enable|disable]
    set upload-day {user}
    set upload-interval [daily|weekly|...]
    set upload-option [store-and-upload|realtime|...]
    set upload-time {user}
end

```

config log fortianalyzer setting

Parameter	Description	Type	Size	Default						
access-config	Enable/disable FortiAnalyzer access to configuration and data.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable FortiAnalyzer access to configuration and data.</td></tr><tr><td><i>disable</i></td><td>Disable FortiAnalyzer access to configuration and data.</td></tr></table>	Option	Description	<i>enable</i>	Enable FortiAnalyzer access to configuration and data.	<i>disable</i>	Disable FortiAnalyzer access to configuration and data.			
	Option	Description								
	<i>enable</i>	Enable FortiAnalyzer access to configuration and data.								
<i>disable</i>	Disable FortiAnalyzer access to configuration and data.									
alt-server	Alternate FortiAnalyzer.	string	Maximum length: 127							
certificate	Certificate used to communicate with FortiAnalyzer.	string	Maximum length: 35							

Parameter	Description	Type	Size	Default								
certificate-verification	Enable/disable identity verification of FortiAnalyzer by use of certificate.	option	-	enable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable identity verification of FortiAnalyzer by use of certificate.</td></tr><tr><td>disable</td><td>Disable identity verification of FortiAnalyzer by use of certificate.</td></tr></table>	Option	Description	enable	Enable identity verification of FortiAnalyzer by use of certificate.	disable	Disable identity verification of FortiAnalyzer by use of certificate.					
Option	Description											
enable	Enable identity verification of FortiAnalyzer by use of certificate.											
disable	Disable identity verification of FortiAnalyzer by use of certificate.											
conn-timeout	FortiAnalyzer connection time-out in seconds (for status and log buffer).	integer	Minimum value: 1 Maximum value: 3600	10								
enc-algorithm	Configure the level of SSL protection for secure communication with FortiAnalyzer.	option	-	high								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>high-medium</td><td>Encrypt logs using high and medium encryption algorithms.</td></tr><tr><td>high</td><td>Encrypt logs using high encryption algorithms.</td></tr><tr><td>low</td><td>Encrypt logs using all encryption algorithms.</td></tr></table>	Option	Description	high-medium	Encrypt logs using high and medium encryption algorithms.	high	Encrypt logs using high encryption algorithms.	low	Encrypt logs using all encryption algorithms.			
Option	Description											
high-medium	Encrypt logs using high and medium encryption algorithms.											
high	Encrypt logs using high encryption algorithms.											
low	Encrypt logs using all encryption algorithms.											
fallback-to-primary	Enable/disable this FortiGate unit to fallback to the primary FortiAnalyzer when it is available.	option	-	enable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable this FortiGate unit to fallback to the primary FortiAnalyzer when it is available.</td></tr><tr><td>disable</td><td>Disable this FortiGate unit to fallback to the primary FortiAnalyzer when it is available.</td></tr></table>	Option	Description	enable	Enable this FortiGate unit to fallback to the primary FortiAnalyzer when it is available.	disable	Disable this FortiGate unit to fallback to the primary FortiAnalyzer when it is available.					
Option	Description											
enable	Enable this FortiGate unit to fallback to the primary FortiAnalyzer when it is available.											
disable	Disable this FortiGate unit to fallback to the primary FortiAnalyzer when it is available.											
hmac-algorithm	OFTP login hash algorithm.	option	-	sha256								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>sha256</td><td>Use SHA256 as HMAC algorithm.</td></tr><tr><td>sha1</td><td>Step down to SHA1 as the HMAC algorithm.</td></tr></table>	Option	Description	sha256	Use SHA256 as HMAC algorithm.	sha1	Step down to SHA1 as the HMAC algorithm.					
Option	Description											
sha256	Use SHA256 as HMAC algorithm.											
sha1	Step down to SHA1 as the HMAC algorithm.											
interface	Specify outgoing interface to reach server.	string	Maximum length: 15									
interface-select-method	Specify how to select outgoing interface to reach server.	option	-	auto								

Parameter	Description	Type	Size	Default								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>auto</td><td>Set outgoing interface automatically.</td></tr><tr><td>sdwan</td><td>Set outgoing interface by SD-WAN or policy routing rules.</td></tr><tr><td>specify</td><td>Set outgoing interface manually.</td></tr></table>	Option	Description	auto	Set outgoing interface automatically.	sdwan	Set outgoing interface by SD-WAN or policy routing rules.	specify	Set outgoing interface manually.			
	Option	Description										
	auto	Set outgoing interface automatically.										
	sdwan	Set outgoing interface by SD-WAN or policy routing rules.										
specify	Set outgoing interface manually.											
ips-archive	Enable/disable IPS packet archive logging.	option	-	enable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable IPS packet archive logging.</td></tr><tr><td>disable</td><td>Disable IPS packet archive logging.</td></tr></table>	Option	Description	enable	Enable IPS packet archive logging.	disable	Disable IPS packet archive logging.					
	Option	Description										
	enable	Enable IPS packet archive logging.										
disable	Disable IPS packet archive logging.											
max-log-rate	FortiAnalyzer maximum log rate in MBps (0 = unlimited).	integer	Minimum value: 0 Maximum value: 100000	0								
monitor-failure-retry-period	Time between FortiAnalyzer connection retries in seconds (for status and log buffer).	integer	Minimum value: 1 Maximum value: 86400	5								
monitor-keepalive-period	Time between OFTP keepalives in seconds (for status and log buffer).	integer	Minimum value: 1 Maximum value: 120	5								
preshared-key	Preshared-key used for auto-authorization on FortiAnalyzer.	string	Maximum length: 63									
priority	Set log transmission priority.	option	-	default								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>default</td><td>Set FortiAnalyzer log transmission priority to default.</td></tr><tr><td>low</td><td>Set FortiAnalyzer log transmission priority to low.</td></tr></table>	Option	Description	default	Set FortiAnalyzer log transmission priority to default.	low	Set FortiAnalyzer log transmission priority to low.					
	Option	Description										
	default	Set FortiAnalyzer log transmission priority to default.										
low	Set FortiAnalyzer log transmission priority to low.											
reliable	Enable/disable reliable logging to FortiAnalyzer.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable reliable logging to FortiAnalyzer.</td></tr><tr><td>disable</td><td>Disable reliable logging to FortiAnalyzer.</td></tr></table>	Option	Description	enable	Enable reliable logging to FortiAnalyzer.	disable	Disable reliable logging to FortiAnalyzer.					
	Option	Description										
	enable	Enable reliable logging to FortiAnalyzer.										
disable	Disable reliable logging to FortiAnalyzer.											

Parameter	Description	Type	Size	Default														
serial <name>	Serial numbers of the FortiAnalyzer. Serial Number.	string	Maximum length: 79															
server	The remote FortiAnalyzer.	string	Maximum length: 127															
server-cert-ca	Mandatory CA on FortiGate in certificate chain of server.	string	Maximum length: 79															
source-ip	Source IPv4 or IPv6 address used to communicate with FortiAnalyzer.	string	Maximum length: 63															
ssl-min- proto-version	Minimum supported protocol version for SSL/TLS connections (default is to follow system global setting).	option	-	default														
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>default</td><td>Follow system global setting.</td></tr><tr><td>SSLv3</td><td>SSLv3.</td></tr><tr><td>TLSv1</td><td>TLSv1.</td></tr><tr><td>TLSv1-1</td><td>TLSv1.1.</td></tr><tr><td>TLSv1-2</td><td>TLSv1.2.</td></tr><tr><td>TLSv1-3</td><td>TLSv1.3.</td></tr></table>	Option	Description	default	Follow system global setting.	SSLv3	SSLv3.	TLSv1	TLSv1.	TLSv1-1	TLSv1.1.	TLSv1-2	TLSv1.2.	TLSv1-3	TLSv1.3.			
Option	Description																	
default	Follow system global setting.																	
SSLv3	SSLv3.																	
TLSv1	TLSv1.																	
TLSv1-1	TLSv1.1.																	
TLSv1-2	TLSv1.2.																	
TLSv1-3	TLSv1.3.																	
status	Enable/disable logging to FortiAnalyzer.	option	-	disable														
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable logging to FortiAnalyzer.</td></tr><tr><td>disable</td><td>Disable logging to FortiAnalyzer.</td></tr></table>	Option	Description	enable	Enable logging to FortiAnalyzer.	disable	Disable logging to FortiAnalyzer.											
Option	Description																	
enable	Enable logging to FortiAnalyzer.																	
disable	Disable logging to FortiAnalyzer.																	
upload-day	Day of week (month) to upload logs.	user	Not Specified															
upload- interval	Frequency to upload log files to FortiAnalyzer.	option	-	daily														
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>daily</td><td>Upload log files to FortiAnalyzer once a day.</td></tr><tr><td>weekly</td><td>Upload log files to FortiAnalyzer once a week.</td></tr><tr><td>monthly</td><td>Upload log files to FortiAnalyzer once a month.</td></tr></table>	Option	Description	daily	Upload log files to FortiAnalyzer once a day.	weekly	Upload log files to FortiAnalyzer once a week.	monthly	Upload log files to FortiAnalyzer once a month.									
Option	Description																	
daily	Upload log files to FortiAnalyzer once a day.																	
weekly	Upload log files to FortiAnalyzer once a week.																	
monthly	Upload log files to FortiAnalyzer once a month.																	
upload- option	Enable/disable logging to hard disk and then uploading to FortiAnalyzer.	option	-	5-minute														

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>store-and-upload</i>	Log to hard disk and then upload to FortiAnalyzer.		
	<i>realtime</i>	Log directly to FortiAnalyzer in real time.		
	<i>1-minute</i>	Log directly to FortiAnalyzer at least every 1 minute.		
	<i>5-minute</i>	Log directly to FortiAnalyzer at least every 5 minutes.		
upload-time	Time to upload logs (hh:mm).	user	Not Specified	

config log fortianalyzer2 filter

Filters for FortiAnalyzer.

```
config log fortianalyzer2 filter
  Description: Filters for FortiAnalyzer.
  set anomaly [enable|disable]
  set dlp-archive [enable|disable]
  set forward-traffic [enable|disable]
  config free-style
    Description: Free style filters.
    edit <id>
      set category [traffic|event|...]
      set filter {string}
      set filter-type [include|exclude]
    next
  end
  set gtp [enable|disable]
  set local-traffic [enable|disable]
  set multicast-traffic [enable|disable]
  set severity [emergency|alert|...]
  set sniffer-traffic [enable|disable]
  set voip [enable|disable]
  set ztna-traffic [enable|disable]
end
```

config log fortianalyzer2 filter

Parameter	Description	Type	Size	Default
anomaly	Enable/disable anomaly logging.	option	-	enable

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>enable</i>	Enable anomaly logging.		
	<i>disable</i>	Disable anomaly logging.		
dlp-archive	Enable/disable DLP archive logging.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable DLP archive logging.		
	<i>disable</i>	Disable DLP archive logging.		
forward-traffic	Enable/disable forward traffic logging.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable forward traffic logging.		
	<i>disable</i>	Disable forward traffic logging.		
gtp *	Enable/disable GTP messages logging.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable GTP messages logging.		
	<i>disable</i>	Disable GTP messages logging.		
local-traffic	Enable/disable local in or out traffic logging.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable local in or out traffic logging.		
	<i>disable</i>	Disable local in or out traffic logging.		
multicast-traffic	Enable/disable multicast traffic logging.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable multicast traffic logging.		
	<i>disable</i>	Disable multicast traffic logging.		
severity	Log every message above and including this severity level.	option	-	information

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>emergency</i>	Emergency level.		
	<i>alert</i>	Alert level.		
	<i>critical</i>	Critical level.		
	<i>error</i>	Error level.		
	<i>warning</i>	Warning level.		
	<i>notification</i>	Notification level.		
	<i>information</i>	Information level.		
	<i>debug</i>	Debug level.		
sniffer-traffic	Enable/disable sniffer traffic logging.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable sniffer traffic logging.		
	<i>disable</i>	Disable sniffer traffic logging.		
voip	Enable/disable VoIP logging.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable VoIP logging.		
	<i>disable</i>	Disable VoIP logging.		
ztna-traffic	Enable/disable ztna traffic logging.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable ztna traffic logging.		
	<i>disable</i>	Disable ztna traffic logging.		

* This parameter may not exist in some models.

config free-style

Parameter	Description	Type	Size	Default
category	Log category.	option	-	traffic
	Option	Description		
	<i>traffic</i>	Traffic log.		

Parameter	Description	Type	Size	Default																																
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>event</i></td><td>Event log.</td></tr><tr><td><i>virus</i></td><td>Antivirus log.</td></tr><tr><td><i>webfilter</i></td><td>Web filter log.</td></tr><tr><td><i>attack</i></td><td>Attack log.</td></tr><tr><td><i>spam</i></td><td>Antispam log.</td></tr><tr><td><i>anomaly</i></td><td>Anomaly log.</td></tr><tr><td><i>voip</i></td><td>VoIP log.</td></tr><tr><td><i>dlp</i></td><td>DLP log.</td></tr><tr><td><i>app-ctrl</i></td><td>Application control log.</td></tr><tr><td><i>waf</i></td><td>Web application firewall log.</td></tr><tr><td><i>dns</i></td><td>DNS detail log.</td></tr><tr><td><i>ssh</i></td><td>SSH log.</td></tr><tr><td><i>ssl</i></td><td>SSL log.</td></tr><tr><td><i>file-filter</i></td><td>File filter log.</td></tr><tr><td><i>icap</i></td><td>ICAP log.</td></tr></table>	Option	Description	<i>event</i>	Event log.	<i>virus</i>	Antivirus log.	<i>webfilter</i>	Web filter log.	<i>attack</i>	Attack log.	<i>spam</i>	Antispam log.	<i>anomaly</i>	Anomaly log.	<i>voip</i>	VoIP log.	<i>dlp</i>	DLP log.	<i>app-ctrl</i>	Application control log.	<i>waf</i>	Web application firewall log.	<i>dns</i>	DNS detail log.	<i>ssh</i>	SSH log.	<i>ssl</i>	SSL log.	<i>file-filter</i>	File filter log.	<i>icap</i>	ICAP log.			
	Option	Description																																		
	<i>event</i>	Event log.																																		
	<i>virus</i>	Antivirus log.																																		
	<i>webfilter</i>	Web filter log.																																		
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	<i>spam</i>	Antispam log.																																		
	<i>anomaly</i>	Anomaly log.																																		
	<i>voip</i>	VoIP log.																																		
	<i>dlp</i>	DLP log.																																		
	<i>app-ctrl</i>	Application control log.																																		
	<i>waf</i>	Web application firewall log.																																		
	<i>dns</i>	DNS detail log.																																		
	<i>ssh</i>	SSH log.																																		
	<i>ssl</i>	SSL log.																																		
	<i>file-filter</i>	File filter log.																																		
<i>icap</i>	ICAP log.																																			
filter	Free style filter string.	string	Maximum length: 1023																																	
filter-type	Include/exclude logs that match the filter.	option	-	include																																
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>include</i></td><td>Include logs that match the filter.</td></tr><tr><td><i>exclude</i></td><td>Exclude logs that match the filter.</td></tr></table>	Option	Description	<i>include</i>	Include logs that match the filter.	<i>exclude</i>	Exclude logs that match the filter.																													
	Option	Description																																		
	<i>include</i>	Include logs that match the filter.																																		
<i>exclude</i>	Exclude logs that match the filter.																																			
id	Entry ID.	integer	Minimum value: 0 Maximum value: 4294967295																																	

config log fortianalyzer2 override-filter

Override filters for FortiAnalyzer.

```
config log fortianalyzer2 override-filter
  Description: Override filters for FortiAnalyzer.
```

```

set anomaly [enable|disable]
set dlp-archive [enable|disable]
set forward-traffic [enable|disable]
config free-style
    Description: Free style filters.
    edit <id>
        set category [traffic|event|...]
        set filter {string}
        set filter-type [include|exclude]
    next
end
set gtp [enable|disable]
set local-traffic [enable|disable]
set multicast-traffic [enable|disable]
set severity [emergency|alert|...]
set sniffer-traffic [enable|disable]
set voip [enable|disable]
set ztna-traffic [enable|disable]
end

```

config log fortianalyzer2 override-filter

Parameter	Description	Type	Size	Default
anomaly	Enable/disable anomaly logging.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable anomaly logging.		
	<i>disable</i>	Disable anomaly logging.		
dlp-archive	Enable/disable DLP archive logging.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable DLP archive logging.		
	<i>disable</i>	Disable DLP archive logging.		
forward-traffic	Enable/disable forward traffic logging.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable forward traffic logging.		
	<i>disable</i>	Disable forward traffic logging.		
gtp *	Enable/disable GTP messages logging.	option	-	enable

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>enable</i>	Enable GTP messages logging.		
	<i>disable</i>	Disable GTP messages logging.		
local-traffic	Enable/disable local in or out traffic logging.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable local in or out traffic logging.		
	<i>disable</i>	Disable local in or out traffic logging.		
multicast-traffic	Enable/disable multicast traffic logging.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable multicast traffic logging.		
	<i>disable</i>	Disable multicast traffic logging.		
severity	Log every message above and including this severity level.	option	-	information
	Option	Description		
	<i>emergency</i>	Emergency level.		
	<i>alert</i>	Alert level.		
	<i>critical</i>	Critical level.		
	<i>error</i>	Error level.		
	<i>warning</i>	Warning level.		
	<i>notification</i>	Notification level.		
	<i>information</i>	Information level.		
	<i>debug</i>	Debug level.		
sniffer-traffic	Enable/disable sniffer traffic logging.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable sniffer traffic logging.		
	<i>disable</i>	Disable sniffer traffic logging.		
voip	Enable/disable VoIP logging.	option	-	enable

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>enable</i>	Enable VoIP logging.		
	<i>disable</i>	Disable VoIP logging.		
ztna-traffic	Enable/disable ztna traffic logging.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable ztna traffic logging.		
	<i>disable</i>	Disable ztna traffic logging.		

* This parameter may not exist in some models.

config free-style

Parameter	Description	Type	Size	Default
category	Log category.	option	-	traffic
	Option	Description		
	<i>traffic</i>	Traffic log.		
	<i>event</i>	Event log.		
	<i>virus</i>	Antivirus log.		
	<i>webfilter</i>	Web filter log.		
	<i>attack</i>	Attack log.		
	<i>spam</i>	Antispam log.		
	<i>anomaly</i>	Anomaly log.		
	<i>voip</i>	VoIP log.		
	<i>dlp</i>	DLP log.		
	<i>app-ctrl</i>	Application control log.		
	<i>waf</i>	Web application firewall log.		
	<i>dns</i>	DNS detail log.		
	<i>ssh</i>	SSH log.		
	<i>ssl</i>	SSL log.		
	<i>file-filter</i>	File filter log.		
	<i>icap</i>	ICAP log.		

Parameter	Description	Type	Size	Default
filter	Free style filter string.	string	Maximum length: 1023	
filter-type	Include/exclude logs that match the filter.	option	-	include
	Option	Description		
	<i>include</i>	Include logs that match the filter.		
	<i>exclude</i>	Exclude logs that match the filter.		
id	Entry ID.	integer	Minimum value: 0 0 Maximum value: 4294967295	

config log fortianalyzer2 override-setting

Override FortiAnalyzer settings.

```

config log fortianalyzer2 override-setting
    Description: Override FortiAnalyzer settings.
    set access-config [enable|disable]
    set alt-server {string}
    set certificate {string}
    set certificate-verification [enable|disable]
    set conn-timeout {integer}
    set enc-algorithm [high-medium|high|...]
    set fallback-to-primary [enable|disable]
    set hmac-algorithm [sha256|sha1]
    set interface {string}
    set interface-select-method [auto|sdwan|...]
    set ips-archive [enable|disable]
    set max-log-rate {integer}
    set monitor-failure-retry-period {integer}
    set monitor-keepalive-period {integer}
    set preshared-key {string}
    set priority [default|low]
    set reliable [enable|disable]
    set serial <name1>, <name2>, ...
    set server {string}
    set server-cert-ca {string}
    set source-ip {string}
    set ssl-min-proto-version [default|SSLv3|...]
    set status [enable|disable]
    set upload-day {user}
    set upload-interval [daily|weekly|...]
    set upload-option [store-and-upload|realtime|...]
    set upload-time {user}

```

```

set use-management-vdom [enable|disable]
end

```

config log fortianalyzer2 override-setting

Parameter	Description	Type	Size	Default
access-config	Enable/disable FortiAnalyzer access to configuration and data.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable FortiAnalyzer access to configuration and data.		
	<i>disable</i>	Disable FortiAnalyzer access to configuration and data.		
alt-server	Alternate FortiAnalyzer.	string	Maximum length: 127	
certificate	Certificate used to communicate with FortiAnalyzer.	string	Maximum length: 35	
certificate-verification	Enable/disable identity verification of FortiAnalyzer by use of certificate.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable identity verification of FortiAnalyzer by use of certificate.		
	<i>disable</i>	Disable identity verification of FortiAnalyzer by use of certificate.		
conn-timeout	FortiAnalyzer connection time-out in seconds (for status and log buffer).	integer	Minimum value: 1 Maximum value: 3600	10
enc-algorithm	Configure the level of SSL protection for secure communication with FortiAnalyzer.	option	-	high
	Option	Description		
	<i>high-medium</i>	Encrypt logs using high and medium encryption algorithms.		
	<i>high</i>	Encrypt logs using high encryption algorithms.		
	<i>low</i>	Encrypt logs using all encryption algorithms.		
fallback-to-primary	Enable/disable this FortiGate unit to fallback to the primary FortiAnalyzer when it is available.	option	-	enable

Parameter	Description	Type	Size	Default								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable this FortiGate unit to fallback to the primary FortiAnalyzer when it is available.</td></tr><tr><td><i>disable</i></td><td>Disable this FortiGate unit to fallback to the primary FortiAnalyzer when it is available.</td></tr></table>	Option	Description	<i>enable</i>	Enable this FortiGate unit to fallback to the primary FortiAnalyzer when it is available.	<i>disable</i>	Disable this FortiGate unit to fallback to the primary FortiAnalyzer when it is available.					
	Option	Description										
	<i>enable</i>	Enable this FortiGate unit to fallback to the primary FortiAnalyzer when it is available.										
<i>disable</i>	Disable this FortiGate unit to fallback to the primary FortiAnalyzer when it is available.											
hmac-algorithm	OFTP login hash algorithm.	option	-	sha256								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>sha256</i></td><td>Use SHA256 as HMAC algorithm.</td></tr><tr><td><i>sha1</i></td><td>Step down to SHA1 as the HMAC algorithm.</td></tr></table>	Option	Description	<i>sha256</i>	Use SHA256 as HMAC algorithm.	<i>sha1</i>	Step down to SHA1 as the HMAC algorithm.					
	Option	Description										
	<i>sha256</i>	Use SHA256 as HMAC algorithm.										
<i>sha1</i>	Step down to SHA1 as the HMAC algorithm.											
interface	Specify outgoing interface to reach server.	string	Maximum length: 15									
interface-select-method	Specify how to select outgoing interface to reach server.	option	-	auto								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>auto</i></td><td>Set outgoing interface automatically.</td></tr><tr><td><i>sdwan</i></td><td>Set outgoing interface by SD-WAN or policy routing rules.</td></tr><tr><td><i>specify</i></td><td>Set outgoing interface manually.</td></tr></table>	Option	Description	<i>auto</i>	Set outgoing interface automatically.	<i>sdwan</i>	Set outgoing interface by SD-WAN or policy routing rules.	<i>specify</i>	Set outgoing interface manually.			
	Option	Description										
	<i>auto</i>	Set outgoing interface automatically.										
	<i>sdwan</i>	Set outgoing interface by SD-WAN or policy routing rules.										
<i>specify</i>	Set outgoing interface manually.											
ips-archive	Enable/disable IPS packet archive logging.	option	-	enable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable IPS packet archive logging.</td></tr><tr><td><i>disable</i></td><td>Disable IPS packet archive logging.</td></tr></table>	Option	Description	<i>enable</i>	Enable IPS packet archive logging.	<i>disable</i>	Disable IPS packet archive logging.					
	Option	Description										
	<i>enable</i>	Enable IPS packet archive logging.										
<i>disable</i>	Disable IPS packet archive logging.											
max-log-rate	FortiAnalyzer maximum log rate in MBps (0 = unlimited).	integer	Minimum value: 0 Maximum value: 100000	0								
monitor-failure-retry-period	Time between FortiAnalyzer connection retries in seconds (for status and log buffer).	integer	Minimum value: 1 Maximum value: 86400	5								

Parameter	Description	Type	Size	Default														
monitor-keepalive-period	Time between OFTP keepalives in seconds (for status and log buffer).	integer	Minimum value: 1 Maximum value: 120	5														
preshared-key	Preshared-key used for auto-authorization on FortiAnalyzer.	string	Maximum length: 63															
priority	Set log transmission priority.	option	-	default														
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>default</td><td>Set FortiAnalyzer log transmission priority to default.</td></tr><tr><td>low</td><td>Set FortiAnalyzer log transmission priority to low.</td></tr></table>	Option	Description	default	Set FortiAnalyzer log transmission priority to default.	low	Set FortiAnalyzer log transmission priority to low.											
Option	Description																	
default	Set FortiAnalyzer log transmission priority to default.																	
low	Set FortiAnalyzer log transmission priority to low.																	
reliable	Enable/disable reliable logging to FortiAnalyzer.	option	-	disable														
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable reliable logging to FortiAnalyzer.</td></tr><tr><td>disable</td><td>Disable reliable logging to FortiAnalyzer.</td></tr></table>	Option	Description	enable	Enable reliable logging to FortiAnalyzer.	disable	Disable reliable logging to FortiAnalyzer.											
Option	Description																	
enable	Enable reliable logging to FortiAnalyzer.																	
disable	Disable reliable logging to FortiAnalyzer.																	
serial <name>	Serial numbers of the FortiAnalyzer. Serial Number.	string	Maximum length: 79															
server	The remote FortiAnalyzer.	string	Maximum length: 127															
server-cert-ca	Mandatory CA on FortiGate in certificate chain of server.	string	Maximum length: 79															
source-ip	Source IPv4 or IPv6 address used to communicate with FortiAnalyzer.	string	Maximum length: 63															
ssl-min-protocol-version	Minimum supported protocol version for SSL/TLS connections (default is to follow system global setting).	option	-	default														
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>default</td><td>Follow system global setting.</td></tr><tr><td>SSLv3</td><td>SSLv3.</td></tr><tr><td>TLSv1</td><td>TLSv1.</td></tr><tr><td>TLSv1-1</td><td>TLSv1.1.</td></tr><tr><td>TLSv1-2</td><td>TLSv1.2.</td></tr><tr><td>TLSv1-3</td><td>TLSv1.3.</td></tr></table>	Option	Description	default	Follow system global setting.	SSLv3	SSLv3.	TLSv1	TLSv1.	TLSv1-1	TLSv1.1.	TLSv1-2	TLSv1.2.	TLSv1-3	TLSv1.3.			
Option	Description																	
default	Follow system global setting.																	
SSLv3	SSLv3.																	
TLSv1	TLSv1.																	
TLSv1-1	TLSv1.1.																	
TLSv1-2	TLSv1.2.																	
TLSv1-3	TLSv1.3.																	

Parameter	Description	Type	Size	Default										
status	Enable/disable logging to FortiAnalyzer.	option	-	disable										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable logging to FortiAnalyzer.</td></tr><tr><td><i>disable</i></td><td>Disable logging to FortiAnalyzer.</td></tr></table>	Option	Description	<i>enable</i>	Enable logging to FortiAnalyzer.	<i>disable</i>	Disable logging to FortiAnalyzer.							
Option	Description													
<i>enable</i>	Enable logging to FortiAnalyzer.													
<i>disable</i>	Disable logging to FortiAnalyzer.													
upload-day	Day of week (month) to upload logs.	user	Not Specified											
upload-interval	Frequency to upload log files to FortiAnalyzer.	option	-	daily										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>daily</i></td><td>Upload log files to FortiAnalyzer once a day.</td></tr><tr><td><i>weekly</i></td><td>Upload log files to FortiAnalyzer once a week.</td></tr><tr><td><i>monthly</i></td><td>Upload log files to FortiAnalyzer once a month.</td></tr></table>	Option	Description	<i>daily</i>	Upload log files to FortiAnalyzer once a day.	<i>weekly</i>	Upload log files to FortiAnalyzer once a week.	<i>monthly</i>	Upload log files to FortiAnalyzer once a month.					
Option	Description													
<i>daily</i>	Upload log files to FortiAnalyzer once a day.													
<i>weekly</i>	Upload log files to FortiAnalyzer once a week.													
<i>monthly</i>	Upload log files to FortiAnalyzer once a month.													
upload-option	Enable/disable logging to hard disk and then uploading to FortiAnalyzer.	option	-	5-minute										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>store-and-upload</i></td><td>Log to hard disk and then upload to FortiAnalyzer.</td></tr><tr><td><i>realtime</i></td><td>Log directly to FortiAnalyzer in real time.</td></tr><tr><td><i>1-minute</i></td><td>Log directly to FortiAnalyzer at least every 1 minute.</td></tr><tr><td><i>5-minute</i></td><td>Log directly to FortiAnalyzer at least every 5 minutes.</td></tr></table>	Option	Description	<i>store-and-upload</i>	Log to hard disk and then upload to FortiAnalyzer.	<i>realtime</i>	Log directly to FortiAnalyzer in real time.	<i>1-minute</i>	Log directly to FortiAnalyzer at least every 1 minute.	<i>5-minute</i>	Log directly to FortiAnalyzer at least every 5 minutes.			
Option	Description													
<i>store-and-upload</i>	Log to hard disk and then upload to FortiAnalyzer.													
<i>realtime</i>	Log directly to FortiAnalyzer in real time.													
<i>1-minute</i>	Log directly to FortiAnalyzer at least every 1 minute.													
<i>5-minute</i>	Log directly to FortiAnalyzer at least every 5 minutes.													
upload-time	Time to upload logs (hh:mm).	user	Not Specified											
use-management-vdom	Enable/disable use of management VDOM IP address as source IP for logs sent to FortiAnalyzer.	option	-	disable										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable use of management VDOM IP address as source IP for logs sent to FortiAnalyzer.</td></tr><tr><td><i>disable</i></td><td>Disable use of management VDOM IP address as source IP for logs sent to FortiAnalyzer.</td></tr></table>	Option	Description	<i>enable</i>	Enable use of management VDOM IP address as source IP for logs sent to FortiAnalyzer.	<i>disable</i>	Disable use of management VDOM IP address as source IP for logs sent to FortiAnalyzer.							
Option	Description													
<i>enable</i>	Enable use of management VDOM IP address as source IP for logs sent to FortiAnalyzer.													
<i>disable</i>	Disable use of management VDOM IP address as source IP for logs sent to FortiAnalyzer.													

config log fortianalyzer2 setting

Global FortiAnalyzer settings.

```

config log fortianalyzer2 setting
    Description: Global FortiAnalyzer settings.
    set access-config [enable|disable]
    set alt-server {string}
    set certificate {string}
    set certificate-verification [enable|disable]
    set conn-timeout {integer}
    set enc-algorithm [high-medium|high|...]
    set fallback-to-primary [enable|disable]
    set hmac-algorithm [sha256|sha1]
    set interface {string}
    set interface-select-method [auto|sdwan|...]
    set ips-archive [enable|disable]
    set max-log-rate {integer}
    set monitor-failure-retry-period {integer}
    set monitor-keepalive-period {integer}
    set preshared-key {string}
    set priority [default|low]
    set reliable [enable|disable]
    set serial <name1>, <name2>, ...
    set server {string}
    set server-cert-ca {string}
    set source-ip {string}
    set ssl-min-proto-version [default|SSLv3|...]
    set status [enable|disable]
    set upload-day {user}
    set upload-interval [daily|weekly|...]
    set upload-option [store-and-upload|realtime|...]
    set upload-time {user}
end

```

config log fortianalyzer2 setting

Parameter	Description	Type	Size	Default						
access-config	Enable/disable FortiAnalyzer access to configuration and data.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable FortiAnalyzer access to configuration and data.</td></tr><tr><td><i>disable</i></td><td>Disable FortiAnalyzer access to configuration and data.</td></tr></table>	Option	Description	<i>enable</i>	Enable FortiAnalyzer access to configuration and data.	<i>disable</i>	Disable FortiAnalyzer access to configuration and data.			
Option	Description									
<i>enable</i>	Enable FortiAnalyzer access to configuration and data.									
<i>disable</i>	Disable FortiAnalyzer access to configuration and data.									
alt-server	Alternate FortiAnalyzer.	string	Maximum length: 127							
certificate	Certificate used to communicate with FortiAnalyzer.	string	Maximum length: 35							

Parameter	Description	Type	Size	Default								
certificate-verification	Enable/disable identity verification of FortiAnalyzer by use of certificate.	option	-	enable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable identity verification of FortiAnalyzer by use of certificate.</td></tr><tr><td>disable</td><td>Disable identity verification of FortiAnalyzer by use of certificate.</td></tr></table>	Option	Description	enable	Enable identity verification of FortiAnalyzer by use of certificate.	disable	Disable identity verification of FortiAnalyzer by use of certificate.					
Option	Description											
enable	Enable identity verification of FortiAnalyzer by use of certificate.											
disable	Disable identity verification of FortiAnalyzer by use of certificate.											
conn-timeout	FortiAnalyzer connection time-out in seconds (for status and log buffer).	integer	Minimum value: 1 Maximum value: 3600	10								
enc-algorithm	Configure the level of SSL protection for secure communication with FortiAnalyzer.	option	-	high								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>high-medium</td><td>Encrypt logs using high and medium encryption algorithms.</td></tr><tr><td>high</td><td>Encrypt logs using high encryption algorithms.</td></tr><tr><td>low</td><td>Encrypt logs using all encryption algorithms.</td></tr></table>	Option	Description	high-medium	Encrypt logs using high and medium encryption algorithms.	high	Encrypt logs using high encryption algorithms.	low	Encrypt logs using all encryption algorithms.			
Option	Description											
high-medium	Encrypt logs using high and medium encryption algorithms.											
high	Encrypt logs using high encryption algorithms.											
low	Encrypt logs using all encryption algorithms.											
fallback-to-primary	Enable/disable this FortiGate unit to fallback to the primary FortiAnalyzer when it is available.	option	-	enable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable this FortiGate unit to fallback to the primary FortiAnalyzer when it is available.</td></tr><tr><td>disable</td><td>Disable this FortiGate unit to fallback to the primary FortiAnalyzer when it is available.</td></tr></table>	Option	Description	enable	Enable this FortiGate unit to fallback to the primary FortiAnalyzer when it is available.	disable	Disable this FortiGate unit to fallback to the primary FortiAnalyzer when it is available.					
Option	Description											
enable	Enable this FortiGate unit to fallback to the primary FortiAnalyzer when it is available.											
disable	Disable this FortiGate unit to fallback to the primary FortiAnalyzer when it is available.											
hmac-algorithm	OFTP login hash algorithm.	option	-	sha256								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>sha256</td><td>Use SHA256 as HMAC algorithm.</td></tr><tr><td>sha1</td><td>Step down to SHA1 as the HMAC algorithm.</td></tr></table>	Option	Description	sha256	Use SHA256 as HMAC algorithm.	sha1	Step down to SHA1 as the HMAC algorithm.					
Option	Description											
sha256	Use SHA256 as HMAC algorithm.											
sha1	Step down to SHA1 as the HMAC algorithm.											
interface	Specify outgoing interface to reach server.	string	Maximum length: 15									
interface-select-method	Specify how to select outgoing interface to reach server.	option	-	auto								

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>auto</i>	Set outgoing interface automatically.		
	<i>sdwan</i>	Set outgoing interface by SD-WAN or policy routing rules.		
	<i>specify</i>	Set outgoing interface manually.		
ips-archive	Enable/disable IPS packet archive logging.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable IPS packet archive logging.		
	<i>disable</i>	Disable IPS packet archive logging.		
max-log-rate	FortiAnalyzer maximum log rate in MBps (0 = unlimited).	integer	Minimum value: 0 Maximum value: 100000	0
monitor-failure-retry-period	Time between FortiAnalyzer connection retries in seconds (for status and log buffer).	integer	Minimum value: 1 Maximum value: 86400	5
monitor-keepalive-period	Time between OFTP keepalives in seconds (for status and log buffer).	integer	Minimum value: 1 Maximum value: 120	5
preshared-key	Preshared-key used for auto-authorization on FortiAnalyzer.	string	Maximum length: 63	
priority	Set log transmission priority.	option	-	default
	Option	Description		
	<i>default</i>	Set FortiAnalyzer log transmission priority to default.		
	<i>low</i>	Set FortiAnalyzer log transmission priority to low.		
reliable	Enable/disable reliable logging to FortiAnalyzer.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable reliable logging to FortiAnalyzer.		
	<i>disable</i>	Disable reliable logging to FortiAnalyzer.		

Parameter	Description	Type	Size	Default														
serial <name>	Serial numbers of the FortiAnalyzer. Serial Number.	string	Maximum length: 79															
server	The remote FortiAnalyzer.	string	Maximum length: 127															
server-cert-ca	Mandatory CA on FortiGate in certificate chain of server.	string	Maximum length: 79															
source-ip	Source IPv4 or IPv6 address used to communicate with FortiAnalyzer.	string	Maximum length: 63															
ssl-min- proto-version	Minimum supported protocol version for SSL/TLS connections (default is to follow system global setting).	option	-	default														
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>default</td><td>Follow system global setting.</td></tr><tr><td>SSLv3</td><td>SSLv3.</td></tr><tr><td>TLSv1</td><td>TLSv1.</td></tr><tr><td>TLSv1-1</td><td>TLSv1.1.</td></tr><tr><td>TLSv1-2</td><td>TLSv1.2.</td></tr><tr><td>TLSv1-3</td><td>TLSv1.3.</td></tr></table>	Option	Description	default	Follow system global setting.	SSLv3	SSLv3.	TLSv1	TLSv1.	TLSv1-1	TLSv1.1.	TLSv1-2	TLSv1.2.	TLSv1-3	TLSv1.3.			
Option	Description																	
default	Follow system global setting.																	
SSLv3	SSLv3.																	
TLSv1	TLSv1.																	
TLSv1-1	TLSv1.1.																	
TLSv1-2	TLSv1.2.																	
TLSv1-3	TLSv1.3.																	
status	Enable/disable logging to FortiAnalyzer.	option	-	disable														
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable logging to FortiAnalyzer.</td></tr><tr><td>disable</td><td>Disable logging to FortiAnalyzer.</td></tr></table>	Option	Description	enable	Enable logging to FortiAnalyzer.	disable	Disable logging to FortiAnalyzer.											
Option	Description																	
enable	Enable logging to FortiAnalyzer.																	
disable	Disable logging to FortiAnalyzer.																	
upload-day	Day of week (month) to upload logs.	user	Not Specified															
upload- interval	Frequency to upload log files to FortiAnalyzer.	option	-	daily														
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>daily</td><td>Upload log files to FortiAnalyzer once a day.</td></tr><tr><td>weekly</td><td>Upload log files to FortiAnalyzer once a week.</td></tr><tr><td>monthly</td><td>Upload log files to FortiAnalyzer once a month.</td></tr></table>	Option	Description	daily	Upload log files to FortiAnalyzer once a day.	weekly	Upload log files to FortiAnalyzer once a week.	monthly	Upload log files to FortiAnalyzer once a month.									
Option	Description																	
daily	Upload log files to FortiAnalyzer once a day.																	
weekly	Upload log files to FortiAnalyzer once a week.																	
monthly	Upload log files to FortiAnalyzer once a month.																	
upload- option	Enable/disable logging to hard disk and then uploading to FortiAnalyzer.	option	-	5-minute														

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>store-and-upload</i>	Log to hard disk and then upload to FortiAnalyzer.		
	<i>realtime</i>	Log directly to FortiAnalyzer in real time.		
	<i>1-minute</i>	Log directly to FortiAnalyzer at least every 1 minute.		
	<i>5-minute</i>	Log directly to FortiAnalyzer at least every 5 minutes.		
upload-time	Time to upload logs (hh:mm).	user	Not Specified	

config log fortianalyzer3 filter

Filters for FortiAnalyzer.

```

config log fortianalyzer3 filter
  Description: Filters for FortiAnalyzer.
  set anomaly [enable|disable]
  set dlp-archive [enable|disable]
  set forward-traffic [enable|disable]
  config free-style
    Description: Free style filters.
    edit <id>
      set category [traffic|event|...]
      set filter {string}
      set filter-type [include|exclude]
    next
  end
  set gtp [enable|disable]
  set local-traffic [enable|disable]
  set multicast-traffic [enable|disable]
  set severity [emergency|alert|...]
  set sniffer-traffic [enable|disable]
  set voip [enable|disable]
  set ztna-traffic [enable|disable]
end

```

config log fortianalyzer3 filter

Parameter	Description	Type	Size	Default
anomaly	Enable/disable anomaly logging.	option	-	enable

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>enable</i>	Enable anomaly logging.		
	<i>disable</i>	Disable anomaly logging.		
dlp-archive	Enable/disable DLP archive logging.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable DLP archive logging.		
	<i>disable</i>	Disable DLP archive logging.		
forward-traffic	Enable/disable forward traffic logging.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable forward traffic logging.		
	<i>disable</i>	Disable forward traffic logging.		
gtp *	Enable/disable GTP messages logging.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable GTP messages logging.		
	<i>disable</i>	Disable GTP messages logging.		
local-traffic	Enable/disable local in or out traffic logging.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable local in or out traffic logging.		
	<i>disable</i>	Disable local in or out traffic logging.		
multicast-traffic	Enable/disable multicast traffic logging.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable multicast traffic logging.		
	<i>disable</i>	Disable multicast traffic logging.		
severity	Lowest severity level to log.	option	-	information

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>emergency</i>	Emergency level.		
	<i>alert</i>	Alert level.		
	<i>critical</i>	Critical level.		
	<i>error</i>	Error level.		
	<i>warning</i>	Warning level.		
	<i>notification</i>	Notification level.		
	<i>information</i>	Information level.		
	<i>debug</i>	Debug level.		
sniffer-traffic	Enable/disable sniffer traffic logging.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable sniffer traffic logging.		
	<i>disable</i>	Disable sniffer traffic logging.		
voip	Enable/disable VoIP logging.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable VoIP logging.		
	<i>disable</i>	Disable VoIP logging.		
ztna-traffic	Enable/disable ztna traffic logging.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable ztna traffic logging.		
	<i>disable</i>	Disable ztna traffic logging.		

* This parameter may not exist in some models.

config free-style

Parameter	Description	Type	Size	Default
category	Log category.	option	-	traffic
	Option	Description		
	<i>traffic</i>	Traffic log.		

Parameter	Description	Type	Size	Default																																
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>event</i></td><td>Event log.</td></tr><tr><td><i>virus</i></td><td>Antivirus log.</td></tr><tr><td><i>webfilter</i></td><td>Web filter log.</td></tr><tr><td><i>attack</i></td><td>Attack log.</td></tr><tr><td><i>spam</i></td><td>Antispam log.</td></tr><tr><td><i>anomaly</i></td><td>Anomaly log.</td></tr><tr><td><i>voip</i></td><td>VoIP log.</td></tr><tr><td><i>dlp</i></td><td>DLP log.</td></tr><tr><td><i>app-ctrl</i></td><td>Application control log.</td></tr><tr><td><i>waf</i></td><td>Web application firewall log.</td></tr><tr><td><i>dns</i></td><td>DNS detail log.</td></tr><tr><td><i>ssh</i></td><td>SSH log.</td></tr><tr><td><i>ssl</i></td><td>SSL log.</td></tr><tr><td><i>file-filter</i></td><td>File filter log.</td></tr><tr><td><i>icap</i></td><td>ICAP log.</td></tr></table>	Option	Description	<i>event</i>	Event log.	<i>virus</i>	Antivirus log.	<i>webfilter</i>	Web filter log.	<i>attack</i>	Attack log.	<i>spam</i>	Antispam log.	<i>anomaly</i>	Anomaly log.	<i>voip</i>	VoIP log.	<i>dlp</i>	DLP log.	<i>app-ctrl</i>	Application control log.	<i>waf</i>	Web application firewall log.	<i>dns</i>	DNS detail log.	<i>ssh</i>	SSH log.	<i>ssl</i>	SSL log.	<i>file-filter</i>	File filter log.	<i>icap</i>	ICAP log.			
	Option	Description																																		
	<i>event</i>	Event log.																																		
	<i>virus</i>	Antivirus log.																																		
	<i>webfilter</i>	Web filter log.																																		
	<i>attack</i>	Attack log.																																		
	<i>spam</i>	Antispam log.																																		
	<i>anomaly</i>	Anomaly log.																																		
	<i>voip</i>	VoIP log.																																		
	<i>dlp</i>	DLP log.																																		
	<i>app-ctrl</i>	Application control log.																																		
	<i>waf</i>	Web application firewall log.																																		
	<i>dns</i>	DNS detail log.																																		
	<i>ssh</i>	SSH log.																																		
	<i>ssl</i>	SSL log.																																		
	<i>file-filter</i>	File filter log.																																		
<i>icap</i>	ICAP log.																																			
filter	Free style filter string.	string	Maximum length: 1023																																	
filter-type	Include/exclude logs that match the filter.	option	-	include																																
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>include</i></td><td>Include logs that match the filter.</td></tr><tr><td><i>exclude</i></td><td>Exclude logs that match the filter.</td></tr></table>	Option	Description	<i>include</i>	Include logs that match the filter.	<i>exclude</i>	Exclude logs that match the filter.																													
	Option	Description																																		
	<i>include</i>	Include logs that match the filter.																																		
<i>exclude</i>	Exclude logs that match the filter.																																			
id	Entry ID.	integer	Minimum value: 0 0 Maximum value: 4294967295																																	

config log fortianalyzer3 override-filter

Override filters for FortiAnalyzer.

```
config log fortianalyzer3 override-filter
    Description: Override filters for FortiAnalyzer.
```

```

set anomaly [enable|disable]
set dlp-archive [enable|disable]
set forward-traffic [enable|disable]
config free-style
    Description: Free style filters.
    edit <id>
        set category [traffic|event|...]
        set filter {string}
        set filter-type [include|exclude]
    next
end
set gtp [enable|disable]
set local-traffic [enable|disable]
set multicast-traffic [enable|disable]
set severity [emergency|alert|...]
set sniffer-traffic [enable|disable]
set voip [enable|disable]
set ztna-traffic [enable|disable]
end

```

config log fortianalyzer3 override-filter

Parameter	Description	Type	Size	Default						
anomaly	Enable/disable anomaly logging.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable anomaly logging.</td></tr><tr><td><i>disable</i></td><td>Disable anomaly logging.</td></tr></table>	Option	Description	<i>enable</i>	Enable anomaly logging.	<i>disable</i>	Disable anomaly logging.			
Option	Description									
<i>enable</i>	Enable anomaly logging.									
<i>disable</i>	Disable anomaly logging.									
dlp-archive	Enable/disable DLP archive logging.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable DLP archive logging.</td></tr><tr><td><i>disable</i></td><td>Disable DLP archive logging.</td></tr></table>	Option	Description	<i>enable</i>	Enable DLP archive logging.	<i>disable</i>	Disable DLP archive logging.			
Option	Description									
<i>enable</i>	Enable DLP archive logging.									
<i>disable</i>	Disable DLP archive logging.									
forward-traffic	Enable/disable forward traffic logging.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable forward traffic logging.</td></tr><tr><td><i>disable</i></td><td>Disable forward traffic logging.</td></tr></table>	Option	Description	<i>enable</i>	Enable forward traffic logging.	<i>disable</i>	Disable forward traffic logging.			
Option	Description									
<i>enable</i>	Enable forward traffic logging.									
<i>disable</i>	Disable forward traffic logging.									
gtp *	Enable/disable GTP messages logging.	option	-	enable						

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>enable</i>	Enable GTP messages logging.		
	<i>disable</i>	Disable GTP messages logging.		
local-traffic	Enable/disable local in or out traffic logging.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable local in or out traffic logging.		
	<i>disable</i>	Disable local in or out traffic logging.		
multicast-traffic	Enable/disable multicast traffic logging.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable multicast traffic logging.		
	<i>disable</i>	Disable multicast traffic logging.		
severity	Lowest severity level to log.	option	-	information
	Option	Description		
	<i>emergency</i>	Emergency level.		
	<i>alert</i>	Alert level.		
	<i>critical</i>	Critical level.		
	<i>error</i>	Error level.		
	<i>warning</i>	Warning level.		
	<i>notification</i>	Notification level.		
	<i>information</i>	Information level.		
	<i>debug</i>	Debug level.		
sniffer-traffic	Enable/disable sniffer traffic logging.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable sniffer traffic logging.		
	<i>disable</i>	Disable sniffer traffic logging.		
voip	Enable/disable VoIP logging.	option	-	enable

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>enable</i>	Enable VoIP logging.		
	<i>disable</i>	Disable VoIP logging.		
ztna-traffic	Enable/disable ztna traffic logging.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable ztna traffic logging.		
	<i>disable</i>	Disable ztna traffic logging.		

* This parameter may not exist in some models.

config free-style

Parameter	Description	Type	Size	Default
category	Log category.	option	-	traffic
	Option	Description		
	<i>traffic</i>	Traffic log.		
	<i>event</i>	Event log.		
	<i>virus</i>	Antivirus log.		
	<i>webfilter</i>	Web filter log.		
	<i>attack</i>	Attack log.		
	<i>spam</i>	Antispam log.		
	<i>anomaly</i>	Anomaly log.		
	<i>voip</i>	VoIP log.		
	<i>dlp</i>	DLP log.		
	<i>app-ctrl</i>	Application control log.		
	<i>waf</i>	Web application firewall log.		
	<i>dns</i>	DNS detail log.		
	<i>ssh</i>	SSH log.		
	<i>ssl</i>	SSL log.		
	<i>file-filter</i>	File filter log.		
	<i>icap</i>	ICAP log.		

Parameter	Description	Type	Size	Default
filter	Free style filter string.	string	Maximum length: 1023	
filter-type	Include/exclude logs that match the filter.	option	-	include
	Option	Description		
	<i>include</i>	Include logs that match the filter.		
	<i>exclude</i>	Exclude logs that match the filter.		
id	Entry ID.	integer	Minimum value: 0 0 Maximum value: 4294967295	

config log fortianalyzer3 override-setting

Override FortiAnalyzer settings.

```

config log fortianalyzer3 override-setting
  Description: Override FortiAnalyzer settings.
  set access-config [enable|disable]
  set alt-server {string}
  set certificate {string}
  set certificate-verification [enable|disable]
  set conn-timeout {integer}
  set enc-algorithm [high-medium|high|...]
  set fallback-to-primary [enable|disable]
  set hmac-algorithm [sha256|sha1]
  set interface {string}
  set interface-select-method [auto|sdwan|...]
  set ips-archive [enable|disable]
  set max-log-rate {integer}
  set monitor-failure-retry-period {integer}
  set monitor-keepalive-period {integer}
  set preshared-key {string}
  set priority [default|low]
  set reliable [enable|disable]
  set serial <name1>, <name2>, ...
  set server {string}
  set server-cert-ca {string}
  set source-ip {string}
  set ssl-min-proto-version [default|SSLv3|...]
  set status [enable|disable]
  set upload-day {user}
  set upload-interval [daily|weekly|...]
  set upload-option [store-and-upload|realtime|...]
  set upload-time {user}

```

```

set use-management-vdom [enable|disable]
end

```

config log fortianalyzer3 override-setting

Parameter	Description	Type	Size	Default
access-config	Enable/disable FortiAnalyzer access to configuration and data.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable FortiAnalyzer access to configuration and data.		
	<i>disable</i>	Disable FortiAnalyzer access to configuration and data.		
alt-server	Alternate FortiAnalyzer.	string	Maximum length: 127	
certificate	Certificate used to communicate with FortiAnalyzer.	string	Maximum length: 35	
certificate-verification	Enable/disable identity verification of FortiAnalyzer by use of certificate.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable identity verification of FortiAnalyzer by use of certificate.		
	<i>disable</i>	Disable identity verification of FortiAnalyzer by use of certificate.		
conn-timeout	FortiAnalyzer connection time-out in seconds (for status and log buffer).	integer	Minimum value: 1 Maximum value: 3600	10
enc-algorithm	Configure the level of SSL protection for secure communication with FortiAnalyzer.	option	-	high
	Option	Description		
	<i>high-medium</i>	Encrypt logs using high and medium encryption algorithms.		
	<i>high</i>	Encrypt logs using high encryption algorithms.		
	<i>low</i>	Encrypt logs using all encryption algorithms.		
fallback-to-primary	Enable/disable this FortiGate unit to fallback to the primary FortiAnalyzer when it is available.	option	-	enable

Parameter	Description	Type	Size	Default								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable this FortiGate unit to fallback to the primary FortiAnalyzer when it is available.</td></tr><tr><td><i>disable</i></td><td>Disable this FortiGate unit to fallback to the primary FortiAnalyzer when it is available.</td></tr></table>	Option	Description	<i>enable</i>	Enable this FortiGate unit to fallback to the primary FortiAnalyzer when it is available.	<i>disable</i>	Disable this FortiGate unit to fallback to the primary FortiAnalyzer when it is available.					
	Option	Description										
	<i>enable</i>	Enable this FortiGate unit to fallback to the primary FortiAnalyzer when it is available.										
<i>disable</i>	Disable this FortiGate unit to fallback to the primary FortiAnalyzer when it is available.											
hmac-algorithm	OFTP login hash algorithm.	option	-	sha256								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>sha256</i></td><td>Use SHA256 as HMAC algorithm.</td></tr><tr><td><i>sha1</i></td><td>Step down to SHA1 as the HMAC algorithm.</td></tr></table>	Option	Description	<i>sha256</i>	Use SHA256 as HMAC algorithm.	<i>sha1</i>	Step down to SHA1 as the HMAC algorithm.					
	Option	Description										
	<i>sha256</i>	Use SHA256 as HMAC algorithm.										
<i>sha1</i>	Step down to SHA1 as the HMAC algorithm.											
interface	Specify outgoing interface to reach server.	string	Maximum length: 15									
interface-select-method	Specify how to select outgoing interface to reach server.	option	-	auto								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>auto</i></td><td>Set outgoing interface automatically.</td></tr><tr><td><i>sdwan</i></td><td>Set outgoing interface by SD-WAN or policy routing rules.</td></tr><tr><td><i>specify</i></td><td>Set outgoing interface manually.</td></tr></table>	Option	Description	<i>auto</i>	Set outgoing interface automatically.	<i>sdwan</i>	Set outgoing interface by SD-WAN or policy routing rules.	<i>specify</i>	Set outgoing interface manually.			
	Option	Description										
	<i>auto</i>	Set outgoing interface automatically.										
	<i>sdwan</i>	Set outgoing interface by SD-WAN or policy routing rules.										
	<i>specify</i>	Set outgoing interface manually.										
ips-archive	Enable/disable IPS packet archive logging.	option	-	enable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable IPS packet archive logging.</td></tr><tr><td><i>disable</i></td><td>Disable IPS packet archive logging.</td></tr></table>	Option	Description	<i>enable</i>	Enable IPS packet archive logging.	<i>disable</i>	Disable IPS packet archive logging.					
	Option	Description										
	<i>enable</i>	Enable IPS packet archive logging.										
<i>disable</i>	Disable IPS packet archive logging.											
max-log-rate	FortiAnalyzer maximum log rate in MBps (0 = unlimited).	integer	Minimum value: 0 Maximum value: 100000	0								
monitor-failure-retry-period	Time between FortiAnalyzer connection retries in seconds (for status and log buffer).	integer	Minimum value: 1 Maximum value: 86400	5								

Parameter	Description	Type	Size	Default														
monitor-keepalive-period	Time between OFTP keepalives in seconds (for status and log buffer).	integer	Minimum value: 1 Maximum value: 120	5														
preshared-key	Preshared-key used for auto-authorization on FortiAnalyzer.	string	Maximum length: 63															
priority	Set log transmission priority.	option	-	default														
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>default</td><td>Set FortiAnalyzer log transmission priority to default.</td></tr><tr><td>low</td><td>Set FortiAnalyzer log transmission priority to low.</td></tr></table>	Option	Description	default	Set FortiAnalyzer log transmission priority to default.	low	Set FortiAnalyzer log transmission priority to low.											
Option	Description																	
default	Set FortiAnalyzer log transmission priority to default.																	
low	Set FortiAnalyzer log transmission priority to low.																	
reliable	Enable/disable reliable logging to FortiAnalyzer.	option	-	disable														
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable reliable logging to FortiAnalyzer.</td></tr><tr><td>disable</td><td>Disable reliable logging to FortiAnalyzer.</td></tr></table>	Option	Description	enable	Enable reliable logging to FortiAnalyzer.	disable	Disable reliable logging to FortiAnalyzer.											
Option	Description																	
enable	Enable reliable logging to FortiAnalyzer.																	
disable	Disable reliable logging to FortiAnalyzer.																	
serial <name>	Serial numbers of the FortiAnalyzer. Serial Number.	string	Maximum length: 79															
server	The remote FortiAnalyzer.	string	Maximum length: 127															
server-cert-ca	Mandatory CA on FortiGate in certificate chain of server.	string	Maximum length: 79															
source-ip	Source IPv4 or IPv6 address used to communicate with FortiAnalyzer.	string	Maximum length: 63															
ssl-min-protocol-version	Minimum supported protocol version for SSL/TLS connections (default is to follow system global setting).	option	-	default														
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>default</td><td>Follow system global setting.</td></tr><tr><td>SSLv3</td><td>SSLv3.</td></tr><tr><td>TLSv1</td><td>TLSv1.</td></tr><tr><td>TLSv1-1</td><td>TLSv1.1.</td></tr><tr><td>TLSv1-2</td><td>TLSv1.2.</td></tr><tr><td>TLSv1-3</td><td>TLSv1.3.</td></tr></table>	Option	Description	default	Follow system global setting.	SSLv3	SSLv3.	TLSv1	TLSv1.	TLSv1-1	TLSv1.1.	TLSv1-2	TLSv1.2.	TLSv1-3	TLSv1.3.			
Option	Description																	
default	Follow system global setting.																	
SSLv3	SSLv3.																	
TLSv1	TLSv1.																	
TLSv1-1	TLSv1.1.																	
TLSv1-2	TLSv1.2.																	
TLSv1-3	TLSv1.3.																	

Parameter	Description	Type	Size	Default										
status	Enable/disable logging to FortiAnalyzer.	option	-	disable										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable logging to FortiAnalyzer.</td></tr><tr><td><i>disable</i></td><td>Disable logging to FortiAnalyzer.</td></tr></table>	Option	Description	<i>enable</i>	Enable logging to FortiAnalyzer.	<i>disable</i>	Disable logging to FortiAnalyzer.							
Option	Description													
<i>enable</i>	Enable logging to FortiAnalyzer.													
<i>disable</i>	Disable logging to FortiAnalyzer.													
upload-day	Day of week (month) to upload logs.	user	Not Specified											
upload-interval	Frequency to upload log files to FortiAnalyzer.	option	-	daily										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>daily</i></td><td>Upload log files to FortiAnalyzer once a day.</td></tr><tr><td><i>weekly</i></td><td>Upload log files to FortiAnalyzer once a week.</td></tr><tr><td><i>monthly</i></td><td>Upload log files to FortiAnalyzer once a month.</td></tr></table>	Option	Description	<i>daily</i>	Upload log files to FortiAnalyzer once a day.	<i>weekly</i>	Upload log files to FortiAnalyzer once a week.	<i>monthly</i>	Upload log files to FortiAnalyzer once a month.					
Option	Description													
<i>daily</i>	Upload log files to FortiAnalyzer once a day.													
<i>weekly</i>	Upload log files to FortiAnalyzer once a week.													
<i>monthly</i>	Upload log files to FortiAnalyzer once a month.													
upload-option	Enable/disable logging to hard disk and then uploading to FortiAnalyzer.	option	-	5-minute										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>store-and-upload</i></td><td>Log to hard disk and then upload to FortiAnalyzer.</td></tr><tr><td><i>realtime</i></td><td>Log directly to FortiAnalyzer in real time.</td></tr><tr><td><i>1-minute</i></td><td>Log directly to FortiAnalyzer at least every 1 minute.</td></tr><tr><td><i>5-minute</i></td><td>Log directly to FortiAnalyzer at least every 5 minutes.</td></tr></table>	Option	Description	<i>store-and-upload</i>	Log to hard disk and then upload to FortiAnalyzer.	<i>realtime</i>	Log directly to FortiAnalyzer in real time.	<i>1-minute</i>	Log directly to FortiAnalyzer at least every 1 minute.	<i>5-minute</i>	Log directly to FortiAnalyzer at least every 5 minutes.			
Option	Description													
<i>store-and-upload</i>	Log to hard disk and then upload to FortiAnalyzer.													
<i>realtime</i>	Log directly to FortiAnalyzer in real time.													
<i>1-minute</i>	Log directly to FortiAnalyzer at least every 1 minute.													
<i>5-minute</i>	Log directly to FortiAnalyzer at least every 5 minutes.													
upload-time	Time to upload logs (hh:mm).	user	Not Specified											
use-management-vdom	Enable/disable use of management VDOM IP address as source IP for logs sent to FortiAnalyzer.	option	-	disable										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable use of management VDOM IP address as source IP for logs sent to FortiAnalyzer.</td></tr><tr><td><i>disable</i></td><td>Disable use of management VDOM IP address as source IP for logs sent to FortiAnalyzer.</td></tr></table>	Option	Description	<i>enable</i>	Enable use of management VDOM IP address as source IP for logs sent to FortiAnalyzer.	<i>disable</i>	Disable use of management VDOM IP address as source IP for logs sent to FortiAnalyzer.							
Option	Description													
<i>enable</i>	Enable use of management VDOM IP address as source IP for logs sent to FortiAnalyzer.													
<i>disable</i>	Disable use of management VDOM IP address as source IP for logs sent to FortiAnalyzer.													

config log fortianalyzer3 setting

Global FortiAnalyzer settings.

```

config log fortianalyzer3 setting
    Description: Global FortiAnalyzer settings.
    set access-config [enable|disable]
    set alt-server {string}
    set certificate {string}
    set certificate-verification [enable|disable]
    set conn-timeout {integer}
    set enc-algorithm [high-medium|high|...]
    set fallback-to-primary [enable|disable]
    set hmac-algorithm [sha256|sha1]
    set interface {string}
    set interface-select-method [auto|sdwan|...]
    set ips-archive [enable|disable]
    set max-log-rate {integer}
    set monitor-failure-retry-period {integer}
    set monitor-keepalive-period {integer}
    set preshared-key {string}
    set priority [default|low]
    set reliable [enable|disable]
    set serial <name1>, <name2>, ...
    set server {string}
    set server-cert-ca {string}
    set source-ip {string}
    set ssl-min-proto-version [default|SSLv3|...]
    set status [enable|disable]
    set upload-day {user}
    set upload-interval [daily|weekly|...]
    set upload-option [store-and-upload|realtime|...]
    set upload-time {user}
end

```

config log fortianalyzer3 setting

Parameter	Description	Type	Size	Default						
access-config	Enable/disable FortiAnalyzer access to configuration and data.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable FortiAnalyzer access to configuration and data.</td></tr><tr><td><i>disable</i></td><td>Disable FortiAnalyzer access to configuration and data.</td></tr></table>	Option	Description	<i>enable</i>	Enable FortiAnalyzer access to configuration and data.	<i>disable</i>	Disable FortiAnalyzer access to configuration and data.			
Option	Description									
<i>enable</i>	Enable FortiAnalyzer access to configuration and data.									
<i>disable</i>	Disable FortiAnalyzer access to configuration and data.									
alt-server	Alternate FortiAnalyzer.	string	Maximum length: 127							
certificate	Certificate used to communicate with FortiAnalyzer.	string	Maximum length: 35							

Parameter	Description	Type	Size	Default								
certificate-verification	Enable/disable identity verification of FortiAnalyzer by use of certificate.	option	-	enable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable identity verification of FortiAnalyzer by use of certificate.</td></tr><tr><td>disable</td><td>Disable identity verification of FortiAnalyzer by use of certificate.</td></tr></table>	Option	Description	enable	Enable identity verification of FortiAnalyzer by use of certificate.	disable	Disable identity verification of FortiAnalyzer by use of certificate.					
Option	Description											
enable	Enable identity verification of FortiAnalyzer by use of certificate.											
disable	Disable identity verification of FortiAnalyzer by use of certificate.											
conn-timeout	FortiAnalyzer connection time-out in seconds (for status and log buffer).	integer	Minimum value: 1 Maximum value: 3600	10								
enc-algorithm	Configure the level of SSL protection for secure communication with FortiAnalyzer.	option	-	high								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>high-medium</td><td>Encrypt logs using high and medium encryption algorithms.</td></tr><tr><td>high</td><td>Encrypt logs using high encryption algorithms.</td></tr><tr><td>low</td><td>Encrypt logs using all encryption algorithms.</td></tr></table>	Option	Description	high-medium	Encrypt logs using high and medium encryption algorithms.	high	Encrypt logs using high encryption algorithms.	low	Encrypt logs using all encryption algorithms.			
Option	Description											
high-medium	Encrypt logs using high and medium encryption algorithms.											
high	Encrypt logs using high encryption algorithms.											
low	Encrypt logs using all encryption algorithms.											
fallback-to-primary	Enable/disable this FortiGate unit to fallback to the primary FortiAnalyzer when it is available.	option	-	enable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable this FortiGate unit to fallback to the primary FortiAnalyzer when it is available.</td></tr><tr><td>disable</td><td>Disable this FortiGate unit to fallback to the primary FortiAnalyzer when it is available.</td></tr></table>	Option	Description	enable	Enable this FortiGate unit to fallback to the primary FortiAnalyzer when it is available.	disable	Disable this FortiGate unit to fallback to the primary FortiAnalyzer when it is available.					
Option	Description											
enable	Enable this FortiGate unit to fallback to the primary FortiAnalyzer when it is available.											
disable	Disable this FortiGate unit to fallback to the primary FortiAnalyzer when it is available.											
hmac-algorithm	OFTP login hash algorithm.	option	-	sha256								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>sha256</td><td>Use SHA256 as HMAC algorithm.</td></tr><tr><td>sha1</td><td>Step down to SHA1 as the HMAC algorithm.</td></tr></table>	Option	Description	sha256	Use SHA256 as HMAC algorithm.	sha1	Step down to SHA1 as the HMAC algorithm.					
Option	Description											
sha256	Use SHA256 as HMAC algorithm.											
sha1	Step down to SHA1 as the HMAC algorithm.											
interface	Specify outgoing interface to reach server.	string	Maximum length: 15									
interface-select-method	Specify how to select outgoing interface to reach server.	option	-	auto								

Parameter	Description	Type	Size	Default								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>auto</td><td>Set outgoing interface automatically.</td></tr><tr><td>sdwan</td><td>Set outgoing interface by SD-WAN or policy routing rules.</td></tr><tr><td>specify</td><td>Set outgoing interface manually.</td></tr></table>	Option	Description	auto	Set outgoing interface automatically.	sdwan	Set outgoing interface by SD-WAN or policy routing rules.	specify	Set outgoing interface manually.			
	Option	Description										
	auto	Set outgoing interface automatically.										
	sdwan	Set outgoing interface by SD-WAN or policy routing rules.										
specify	Set outgoing interface manually.											
ips-archive	Enable/disable IPS packet archive logging.	option	-	enable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable IPS packet archive logging.</td></tr><tr><td>disable</td><td>Disable IPS packet archive logging.</td></tr></table>	Option	Description	enable	Enable IPS packet archive logging.	disable	Disable IPS packet archive logging.					
	Option	Description										
	enable	Enable IPS packet archive logging.										
disable	Disable IPS packet archive logging.											
max-log-rate	FortiAnalyzer maximum log rate in MBps (0 = unlimited).	integer	Minimum value: 0 Maximum value: 100000	0								
monitor-failure-retry-period	Time between FortiAnalyzer connection retries in seconds (for status and log buffer).	integer	Minimum value: 1 Maximum value: 86400	5								
monitor-keepalive-period	Time between OFTP keepalives in seconds (for status and log buffer).	integer	Minimum value: 1 Maximum value: 120	5								
preshared-key	Preshared-key used for auto-authorization on FortiAnalyzer.	string	Maximum length: 63									
priority	Set log transmission priority.	option	-	default								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>default</td><td>Set FortiAnalyzer log transmission priority to default.</td></tr><tr><td>low</td><td>Set FortiAnalyzer log transmission priority to low.</td></tr></table>	Option	Description	default	Set FortiAnalyzer log transmission priority to default.	low	Set FortiAnalyzer log transmission priority to low.					
	Option	Description										
	default	Set FortiAnalyzer log transmission priority to default.										
low	Set FortiAnalyzer log transmission priority to low.											
reliable	Enable/disable reliable logging to FortiAnalyzer.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable reliable logging to FortiAnalyzer.</td></tr><tr><td>disable</td><td>Disable reliable logging to FortiAnalyzer.</td></tr></table>	Option	Description	enable	Enable reliable logging to FortiAnalyzer.	disable	Disable reliable logging to FortiAnalyzer.					
	Option	Description										
	enable	Enable reliable logging to FortiAnalyzer.										
disable	Disable reliable logging to FortiAnalyzer.											

Parameter	Description	Type	Size	Default														
serial <name>	Serial numbers of the FortiAnalyzer. Serial Number.	string	Maximum length: 79															
server	The remote FortiAnalyzer.	string	Maximum length: 127															
server-cert-ca	Mandatory CA on FortiGate in certificate chain of server.	string	Maximum length: 79															
source-ip	Source IPv4 or IPv6 address used to communicate with FortiAnalyzer.	string	Maximum length: 63															
ssl-min- proto-version	Minimum supported protocol version for SSL/TLS connections (default is to follow system global setting).	option	-	default														
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>default</td><td>Follow system global setting.</td></tr><tr><td>SSLv3</td><td>SSLv3.</td></tr><tr><td>TLSv1</td><td>TLSv1.</td></tr><tr><td>TLSv1-1</td><td>TLSv1.1.</td></tr><tr><td>TLSv1-2</td><td>TLSv1.2.</td></tr><tr><td>TLSv1-3</td><td>TLSv1.3.</td></tr></table>	Option	Description	default	Follow system global setting.	SSLv3	SSLv3.	TLSv1	TLSv1.	TLSv1-1	TLSv1.1.	TLSv1-2	TLSv1.2.	TLSv1-3	TLSv1.3.			
Option	Description																	
default	Follow system global setting.																	
SSLv3	SSLv3.																	
TLSv1	TLSv1.																	
TLSv1-1	TLSv1.1.																	
TLSv1-2	TLSv1.2.																	
TLSv1-3	TLSv1.3.																	
status	Enable/disable logging to FortiAnalyzer.	option	-	disable														
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable logging to FortiAnalyzer.</td></tr><tr><td>disable</td><td>Disable logging to FortiAnalyzer.</td></tr></table>	Option	Description	enable	Enable logging to FortiAnalyzer.	disable	Disable logging to FortiAnalyzer.											
Option	Description																	
enable	Enable logging to FortiAnalyzer.																	
disable	Disable logging to FortiAnalyzer.																	
upload-day	Day of week (month) to upload logs.	user	Not Specified															
upload- interval	Frequency to upload log files to FortiAnalyzer.	option	-	daily														
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>daily</td><td>Upload log files to FortiAnalyzer once a day.</td></tr><tr><td>weekly</td><td>Upload log files to FortiAnalyzer once a week.</td></tr><tr><td>monthly</td><td>Upload log files to FortiAnalyzer once a month.</td></tr></table>	Option	Description	daily	Upload log files to FortiAnalyzer once a day.	weekly	Upload log files to FortiAnalyzer once a week.	monthly	Upload log files to FortiAnalyzer once a month.									
Option	Description																	
daily	Upload log files to FortiAnalyzer once a day.																	
weekly	Upload log files to FortiAnalyzer once a week.																	
monthly	Upload log files to FortiAnalyzer once a month.																	
upload- option	Enable/disable logging to hard disk and then uploading to FortiAnalyzer.	option	-	5-minute														

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>store-and-upload</i>	Log to hard disk and then upload to FortiAnalyzer.		
	<i>realtime</i>	Log directly to FortiAnalyzer in real time.		
	<i>1-minute</i>	Log directly to FortiAnalyzer at least every 1 minute.		
	<i>5-minute</i>	Log directly to FortiAnalyzer at least every 5 minutes.		
upload-time	Time to upload logs (hh:mm).	user	Not Specified	

config log fortianalyzer-cloud filter

Filters for FortiAnalyzer Cloud.

```
config log fortianalyzer-cloud filter
  Description: Filters for FortiAnalyzer Cloud.
  set anomaly [enable|disable]
  set dlp-archive [enable|disable]
  set forward-traffic [enable|disable]
  config free-style
    Description: Free style filters.
    edit <id>
      set category [traffic|event|...]
      set filter {string}
      set filter-type [include|exclude]
    next
  end
  set gtp [enable|disable]
  set local-traffic [enable|disable]
  set multicast-traffic [enable|disable]
  set severity [emergency|alert|...]
  set sniffer-traffic [enable|disable]
  set voip [enable|disable]
  set ztna-traffic [enable|disable]
end
```

config log fortianalyzer-cloud filter

Parameter	Description	Type	Size	Default
anomaly	Enable/disable anomaly logging.	option	-	enable

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>enable</i>	Enable anomaly logging.		
	<i>disable</i>	Disable anomaly logging.		
dlp-archive	Enable/disable DLP archive logging.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable DLP archive logging.		
	<i>disable</i>	Disable DLP archive logging.		
forward-traffic	Enable/disable forward traffic logging.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable forward traffic logging.		
	<i>disable</i>	Disable forward traffic logging.		
gtp *	Enable/disable GTP messages logging.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable GTP messages logging.		
	<i>disable</i>	Disable GTP messages logging.		
local-traffic	Enable/disable local in or out traffic logging.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable local in or out traffic logging.		
	<i>disable</i>	Disable local in or out traffic logging.		
multicast-traffic	Enable/disable multicast traffic logging.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable multicast traffic logging.		
	<i>disable</i>	Disable multicast traffic logging.		
severity	Lowest severity level to log.	option	-	information

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>emergency</i>	Emergency level.		
	<i>alert</i>	Alert level.		
	<i>critical</i>	Critical level.		
	<i>error</i>	Error level.		
	<i>warning</i>	Warning level.		
	<i>notification</i>	Notification level.		
	<i>information</i>	Information level.		
	<i>debug</i>	Debug level.		
sniffer-traffic	Enable/disable sniffer traffic logging.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable sniffer traffic logging.		
	<i>disable</i>	Disable sniffer traffic logging.		
voip	Enable/disable VoIP logging.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable VoIP logging.		
	<i>disable</i>	Disable VoIP logging.		
ztna-traffic	Enable/disable ztna traffic logging.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable ztna traffic logging.		
	<i>disable</i>	Disable ztna traffic logging.		

* This parameter may not exist in some models.

config free-style

Parameter	Description	Type	Size	Default
category	Log category.	option	-	traffic
	Option	Description		
	<i>traffic</i>	Traffic log.		

Parameter	Description	Type	Size	Default																																
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>event</i></td><td>Event log.</td></tr><tr><td><i>virus</i></td><td>Antivirus log.</td></tr><tr><td><i>webfilter</i></td><td>Web filter log.</td></tr><tr><td><i>attack</i></td><td>Attack log.</td></tr><tr><td><i>spam</i></td><td>Antispam log.</td></tr><tr><td><i>anomaly</i></td><td>Anomaly log.</td></tr><tr><td><i>voip</i></td><td>VoIP log.</td></tr><tr><td><i>dlp</i></td><td>DLP log.</td></tr><tr><td><i>app-ctrl</i></td><td>Application control log.</td></tr><tr><td><i>waf</i></td><td>Web application firewall log.</td></tr><tr><td><i>dns</i></td><td>DNS detail log.</td></tr><tr><td><i>ssh</i></td><td>SSH log.</td></tr><tr><td><i>ssl</i></td><td>SSL log.</td></tr><tr><td><i>file-filter</i></td><td>File filter log.</td></tr><tr><td><i>icap</i></td><td>ICAP log.</td></tr></table>	Option	Description	<i>event</i>	Event log.	<i>virus</i>	Antivirus log.	<i>webfilter</i>	Web filter log.	<i>attack</i>	Attack log.	<i>spam</i>	Antispam log.	<i>anomaly</i>	Anomaly log.	<i>voip</i>	VoIP log.	<i>dlp</i>	DLP log.	<i>app-ctrl</i>	Application control log.	<i>waf</i>	Web application firewall log.	<i>dns</i>	DNS detail log.	<i>ssh</i>	SSH log.	<i>ssl</i>	SSL log.	<i>file-filter</i>	File filter log.	<i>icap</i>	ICAP log.			
	Option	Description																																		
	<i>event</i>	Event log.																																		
	<i>virus</i>	Antivirus log.																																		
	<i>webfilter</i>	Web filter log.																																		
	<i>attack</i>	Attack log.																																		
	<i>spam</i>	Antispam log.																																		
	<i>anomaly</i>	Anomaly log.																																		
	<i>voip</i>	VoIP log.																																		
	<i>dlp</i>	DLP log.																																		
	<i>app-ctrl</i>	Application control log.																																		
	<i>waf</i>	Web application firewall log.																																		
	<i>dns</i>	DNS detail log.																																		
	<i>ssh</i>	SSH log.																																		
	<i>ssl</i>	SSL log.																																		
	<i>file-filter</i>	File filter log.																																		
<i>icap</i>	ICAP log.																																			
filter	Free style filter string.	string	Maximum length: 1023																																	
filter-type	Include/exclude logs that match the filter.	option	-	include																																
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>include</i></td><td>Include logs that match the filter.</td></tr><tr><td><i>exclude</i></td><td>Exclude logs that match the filter.</td></tr></table>	Option	Description	<i>include</i>	Include logs that match the filter.	<i>exclude</i>	Exclude logs that match the filter.																													
	Option	Description																																		
	<i>include</i>	Include logs that match the filter.																																		
<i>exclude</i>	Exclude logs that match the filter.																																			
id	Entry ID.	integer	Minimum value: 0 0 Maximum value: 4294967295																																	

config log fortianalyzer-cloud override-filter

Override filters for FortiAnalyzer Cloud.

```
config log fortianalyzer-cloud override-filter
    Description: Override filters for FortiAnalyzer Cloud.
```

```

set anomaly [enable|disable]
set dlp-archive [enable|disable]
set forward-traffic [enable|disable]
config free-style
    Description: Free style filters.
    edit <id>
        set category [traffic|event|...]
        set filter {string}
        set filter-type [include|exclude]
    next
end
set gtp [enable|disable]
set local-traffic [enable|disable]
set multicast-traffic [enable|disable]
set severity [emergency|alert|...]
set sniffer-traffic [enable|disable]
set voip [enable|disable]
set ztna-traffic [enable|disable]
end

```

config log fortianalyzer-cloud override-filter

Parameter	Description	Type	Size	Default						
anomaly	Enable/disable anomaly logging.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable anomaly logging.</td></tr><tr><td><i>disable</i></td><td>Disable anomaly logging.</td></tr></table>	Option	Description	<i>enable</i>	Enable anomaly logging.	<i>disable</i>	Disable anomaly logging.			
Option	Description									
<i>enable</i>	Enable anomaly logging.									
<i>disable</i>	Disable anomaly logging.									
dlp-archive	Enable/disable DLP archive logging.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable DLP archive logging.</td></tr><tr><td><i>disable</i></td><td>Disable DLP archive logging.</td></tr></table>	Option	Description	<i>enable</i>	Enable DLP archive logging.	<i>disable</i>	Disable DLP archive logging.			
Option	Description									
<i>enable</i>	Enable DLP archive logging.									
<i>disable</i>	Disable DLP archive logging.									
forward-traffic	Enable/disable forward traffic logging.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable forward traffic logging.</td></tr><tr><td><i>disable</i></td><td>Disable forward traffic logging.</td></tr></table>	Option	Description	<i>enable</i>	Enable forward traffic logging.	<i>disable</i>	Disable forward traffic logging.			
Option	Description									
<i>enable</i>	Enable forward traffic logging.									
<i>disable</i>	Disable forward traffic logging.									
gtp *	Enable/disable GTP messages logging.	option	-	enable						

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>enable</i>	Enable GTP messages logging.		
	<i>disable</i>	Disable GTP messages logging.		
local-traffic	Enable/disable local in or out traffic logging.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable local in or out traffic logging.		
	<i>disable</i>	Disable local in or out traffic logging.		
multicast-traffic	Enable/disable multicast traffic logging.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable multicast traffic logging.		
	<i>disable</i>	Disable multicast traffic logging.		
severity	Lowest severity level to log.	option	-	information
	Option	Description		
	<i>emergency</i>	Emergency level.		
	<i>alert</i>	Alert level.		
	<i>critical</i>	Critical level.		
	<i>error</i>	Error level.		
	<i>warning</i>	Warning level.		
	<i>notification</i>	Notification level.		
	<i>information</i>	Information level.		
	<i>debug</i>	Debug level.		
sniffer-traffic	Enable/disable sniffer traffic logging.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable sniffer traffic logging.		
	<i>disable</i>	Disable sniffer traffic logging.		
voip	Enable/disable VoIP logging.	option	-	enable

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>enable</i>	Enable VoIP logging.		
	<i>disable</i>	Disable VoIP logging.		
ztna-traffic	Enable/disable ztna traffic logging.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable ztna traffic logging.		
	<i>disable</i>	Disable ztna traffic logging.		

* This parameter may not exist in some models.

config free-style

Parameter	Description	Type	Size	Default
category	Log category.	option	-	traffic
	Option	Description		
	<i>traffic</i>	Traffic log.		
	<i>event</i>	Event log.		
	<i>virus</i>	Antivirus log.		
	<i>webfilter</i>	Web filter log.		
	<i>attack</i>	Attack log.		
	<i>spam</i>	Antispam log.		
	<i>anomaly</i>	Anomaly log.		
	<i>voip</i>	VoIP log.		
	<i>dlp</i>	DLP log.		
	<i>app-ctrl</i>	Application control log.		
	<i>waf</i>	Web application firewall log.		
	<i>dns</i>	DNS detail log.		
	<i>ssh</i>	SSH log.		
	<i>ssl</i>	SSL log.		
	<i>file-filter</i>	File filter log.		
	<i>icap</i>	ICAP log.		

Parameter	Description	Type	Size	Default						
filter	Free style filter string.	string	Maximum length: 1023							
filter-type	Include/exclude logs that match the filter.	option	-	include						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>include</td><td>Include logs that match the filter.</td></tr><tr><td>exclude</td><td>Exclude logs that match the filter.</td></tr></table>				Option	Description	include	Include logs that match the filter.	exclude	Exclude logs that match the filter.
	Option	Description								
	include	Include logs that match the filter.								
exclude	Exclude logs that match the filter.									
id	Entry ID.	integer	Minimum value: 0 Maximum value: 4294967295							

config log fortianalyzer-cloud override-setting

Override FortiAnalyzer Cloud settings.

```
config log fortianalyzer-cloud override-setting
    Description: Override FortiAnalyzer Cloud settings.
    set status [enable|disable]
end
```

config log fortianalyzer-cloud override-setting

Parameter	Description	Type	Size	Default						
status	Enable/disable logging to FortiAnalyzer.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable logging to FortiAnalyzer.</td></tr><tr><td><i>disable</i></td><td>Disable logging to FortiAnalyzer.</td></tr></table>				Option	Description	<i>enable</i>	Enable logging to FortiAnalyzer.	<i>disable</i>	Disable logging to FortiAnalyzer.
Option	Description									
<i>enable</i>	Enable logging to FortiAnalyzer.									
<i>disable</i>	Disable logging to FortiAnalyzer.									

config log fortianalyzer-cloud setting

Global FortiAnalyzer Cloud settings.

```
config log fortianalyzer-cloud setting
    Description: Global FortiAnalyzer Cloud settings.
    set access-config [enable|disable]
    set certificate {string}
```

```

set certificate-verification [enable|disable]
set conn-timeout {integer}
set enc-algorithm [high-medium|high|...]
set hmac-algorithm [sha256|sha1]
set interface {string}
set interface-select-method [auto|sdwan|...]
set ips-archive [enable|disable]
set max-log-rate {integer}
set monitor-failure-retry-period {integer}
set monitor-keepalive-period {integer}
set preshared-key {string}
set priority [default|low]
set serial <name1>, <name2>, ...
set source-ip {string}
set ssl-min-proto-version [default|SSLv3|...]
set status [enable|disable]
set upload-day {user}
set upload-interval [daily|weekly|...]
set upload-option [store-and-upload|realtime|...]
set upload-time {user}
end

```

config log fortianalyzer-cloud setting

Parameter	Description	Type	Size	Default						
access-config	Enable/disable FortiAnalyzer access to configuration and data.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable FortiAnalyzer access to configuration and data.</td></tr><tr><td>disable</td><td>Disable FortiAnalyzer access to configuration and data.</td></tr></table>	Option	Description	enable	Enable FortiAnalyzer access to configuration and data.	disable	Disable FortiAnalyzer access to configuration and data.			
Option	Description									
enable	Enable FortiAnalyzer access to configuration and data.									
disable	Disable FortiAnalyzer access to configuration and data.									
certificate	Certificate used to communicate with FortiAnalyzer.	string	Maximum length: 35							
certificate-verification	Enable/disable identity verification of FortiAnalyzer by use of certificate.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable identity verification of FortiAnalyzer by use of certificate.</td></tr><tr><td>disable</td><td>Disable identity verification of FortiAnalyzer by use of certificate.</td></tr></table>	Option	Description	enable	Enable identity verification of FortiAnalyzer by use of certificate.	disable	Disable identity verification of FortiAnalyzer by use of certificate.			
Option	Description									
enable	Enable identity verification of FortiAnalyzer by use of certificate.									
disable	Disable identity verification of FortiAnalyzer by use of certificate.									
conn-timeout	FortiAnalyzer connection time-out in seconds (for status and log buffer).	integer	Minimum value: 1 Maximum value: 3600	10						

Parameter	Description	Type	Size	Default								
enc-algorithm	Configure the level of SSL protection for secure communication with FortiAnalyzer.	option	-	high								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>high-medium</td><td>Encrypt logs using high and medium encryption algorithms.</td></tr><tr><td>high</td><td>Encrypt logs using high encryption algorithms.</td></tr><tr><td>low</td><td>Encrypt logs using all encryption algorithms.</td></tr></table>	Option	Description	high-medium	Encrypt logs using high and medium encryption algorithms.	high	Encrypt logs using high encryption algorithms.	low	Encrypt logs using all encryption algorithms.			
Option	Description											
high-medium	Encrypt logs using high and medium encryption algorithms.											
high	Encrypt logs using high encryption algorithms.											
low	Encrypt logs using all encryption algorithms.											
hmac-algorithm	OFTP login hash algorithm.	option	-	sha256								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>sha256</td><td>Use SHA256 as HMAC algorithm.</td></tr><tr><td>sha1</td><td>Step down to SHA1 as the HMAC algorithm.</td></tr></table>	Option	Description	sha256	Use SHA256 as HMAC algorithm.	sha1	Step down to SHA1 as the HMAC algorithm.					
Option	Description											
sha256	Use SHA256 as HMAC algorithm.											
sha1	Step down to SHA1 as the HMAC algorithm.											
interface	Specify outgoing interface to reach server.	string	Maximum length: 15									
interface-select-method	Specify how to select outgoing interface to reach server.	option	-	auto								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>auto</td><td>Set outgoing interface automatically.</td></tr><tr><td>sdwan</td><td>Set outgoing interface by SD-WAN or policy routing rules.</td></tr><tr><td>specify</td><td>Set outgoing interface manually.</td></tr></table>	Option	Description	auto	Set outgoing interface automatically.	sdwan	Set outgoing interface by SD-WAN or policy routing rules.	specify	Set outgoing interface manually.			
Option	Description											
auto	Set outgoing interface automatically.											
sdwan	Set outgoing interface by SD-WAN or policy routing rules.											
specify	Set outgoing interface manually.											
ips-archive	Enable/disable IPS packet archive logging.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable IPS packet archive logging.</td></tr><tr><td>disable</td><td>Disable IPS packet archive logging.</td></tr></table>	Option	Description	enable	Enable IPS packet archive logging.	disable	Disable IPS packet archive logging.					
Option	Description											
enable	Enable IPS packet archive logging.											
disable	Disable IPS packet archive logging.											
max-log-rate	FortiAnalyzer maximum log rate in MBps (0 = unlimited).	integer	Minimum value: 0 Maximum value: 100000	0								

Parameter	Description	Type	Size	Default														
monitor-failure-retry-period	Time between FortiAnalyzer connection retries in seconds (for status and log buffer).	integer	Minimum value: 1 Maximum value: 86400	5														
monitor-keepalive-period	Time between OFTP keepalives in seconds (for status and log buffer).	integer	Minimum value: 1 Maximum value: 120	5														
preshared-key	Preshared-key used for auto-authorization on FortiAnalyzer.	string	Maximum length: 63															
priority	Set log transmission priority.	option	-	default														
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>default</td><td>Set FortiAnalyzer log transmission priority to default.</td></tr><tr><td>low</td><td>Set FortiAnalyzer log transmission priority to low.</td></tr></table>				Option	Description	default	Set FortiAnalyzer log transmission priority to default.	low	Set FortiAnalyzer log transmission priority to low.								
	Option	Description																
	default	Set FortiAnalyzer log transmission priority to default.																
low	Set FortiAnalyzer log transmission priority to low.																	
serial <name>	Serial numbers of the FortiAnalyzer. Serial Number.	string	Maximum length: 79															
source-ip	Source IPv4 or IPv6 address used to communicate with FortiAnalyzer.	string	Maximum length: 63															
ssl-min-proto-version	Minimum supported protocol version for SSL/TLS connections (default is to follow system global setting).	option	-	default														
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>default</td><td>Follow system global setting.</td></tr><tr><td>SSLv3</td><td>SSLv3.</td></tr><tr><td>TLSv1</td><td>TLSv1.</td></tr><tr><td>TLSv1-1</td><td>TLSv1.1.</td></tr><tr><td>TLSv1-2</td><td>TLSv1.2.</td></tr><tr><td>TLSv1-3</td><td>TLSv1.3.</td></tr></table>				Option	Description	default	Follow system global setting.	SSLv3	SSLv3.	TLSv1	TLSv1.	TLSv1-1	TLSv1.1.	TLSv1-2	TLSv1.2.	TLSv1-3	TLSv1.3.
	Option	Description																
	default	Follow system global setting.																
	SSLv3	SSLv3.																
	TLSv1	TLSv1.																
	TLSv1-1	TLSv1.1.																
	TLSv1-2	TLSv1.2.																
TLSv1-3	TLSv1.3.																	
status	Enable/disable logging to FortiAnalyzer.	option	-	disable														
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable logging to FortiAnalyzer.</td></tr><tr><td>disable</td><td>Disable logging to FortiAnalyzer.</td></tr></table>				Option	Description	enable	Enable logging to FortiAnalyzer.	disable	Disable logging to FortiAnalyzer.								
	Option	Description																
	enable	Enable logging to FortiAnalyzer.																
disable	Disable logging to FortiAnalyzer.																	

Parameter	Description	Type	Size	Default										
upload-day	Day of week (month) to upload logs.	user	Not Specified											
upload-interval	Frequency to upload log files to FortiAnalyzer.	option	-	daily										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>daily</td><td>Upload log files to FortiAnalyzer once a day.</td></tr><tr><td>weekly</td><td>Upload log files to FortiAnalyzer once a week.</td></tr><tr><td>monthly</td><td>Upload log files to FortiAnalyzer once a month.</td></tr></table>	Option	Description	daily	Upload log files to FortiAnalyzer once a day.	weekly	Upload log files to FortiAnalyzer once a week.	monthly	Upload log files to FortiAnalyzer once a month.					
Option	Description													
daily	Upload log files to FortiAnalyzer once a day.													
weekly	Upload log files to FortiAnalyzer once a week.													
monthly	Upload log files to FortiAnalyzer once a month.													
upload-option	Enable/disable logging to hard disk and then uploading to FortiAnalyzer.	option	-	5-minute										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>store-and-upload</td><td>Log to hard disk and then upload to FortiAnalyzer.</td></tr><tr><td>realtime</td><td>Log directly to FortiAnalyzer in real time.</td></tr><tr><td>1-minute</td><td>Log directly to FortiAnalyzer at least every 1 minute.</td></tr><tr><td>5-minute</td><td>Log directly to FortiAnalyzer at least every 5 minutes.</td></tr></table>	Option	Description	store-and-upload	Log to hard disk and then upload to FortiAnalyzer.	realtime	Log directly to FortiAnalyzer in real time.	1-minute	Log directly to FortiAnalyzer at least every 1 minute.	5-minute	Log directly to FortiAnalyzer at least every 5 minutes.			
Option	Description													
store-and-upload	Log to hard disk and then upload to FortiAnalyzer.													
realtime	Log directly to FortiAnalyzer in real time.													
1-minute	Log directly to FortiAnalyzer at least every 1 minute.													
5-minute	Log directly to FortiAnalyzer at least every 5 minutes.													
upload-time	Time to upload logs (hh:mm).	user	Not Specified											

config log fortiguard filter

Filters for FortiCloud.

```

config log fortiguard filter
  Description: Filters for FortiCloud.
  set anomaly [enable|disable]
  set forward-traffic [enable|disable]
  config free-style
    Description: Free style filters.
    edit <id>
      set category [traffic|event|...]
      set filter {string}
      set filter-type [include|exclude]
    next
  end
  set gtp [enable|disable]
  set local-traffic [enable|disable]
  set multicast-traffic [enable|disable]
  set severity [emergency|alert|...]

```

```

set sniffer-traffic [enable|disable]
set voip [enable|disable]
set ztna-traffic [enable|disable]
end

```

config log fortiguard filter

Parameter	Description	Type	Size	Default						
anomaly	Enable/disable anomaly logging.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable anomaly logging.</td></tr><tr><td><i>disable</i></td><td>Disable anomaly logging.</td></tr></table>	Option	Description	<i>enable</i>	Enable anomaly logging.	<i>disable</i>	Disable anomaly logging.			
Option	Description									
<i>enable</i>	Enable anomaly logging.									
<i>disable</i>	Disable anomaly logging.									
forward-traffic	Enable/disable forward traffic logging.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable forward traffic logging.</td></tr><tr><td><i>disable</i></td><td>Disable forward traffic logging.</td></tr></table>	Option	Description	<i>enable</i>	Enable forward traffic logging.	<i>disable</i>	Disable forward traffic logging.			
Option	Description									
<i>enable</i>	Enable forward traffic logging.									
<i>disable</i>	Disable forward traffic logging.									
gtp *	Enable/disable GTP messages logging.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable GTP messages logging.</td></tr><tr><td><i>disable</i></td><td>Disable GTP messages logging.</td></tr></table>	Option	Description	<i>enable</i>	Enable GTP messages logging.	<i>disable</i>	Disable GTP messages logging.			
Option	Description									
<i>enable</i>	Enable GTP messages logging.									
<i>disable</i>	Disable GTP messages logging.									
local-traffic	Enable/disable local in or out traffic logging.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable local in or out traffic logging.</td></tr><tr><td><i>disable</i></td><td>Disable local in or out traffic logging.</td></tr></table>	Option	Description	<i>enable</i>	Enable local in or out traffic logging.	<i>disable</i>	Disable local in or out traffic logging.			
Option	Description									
<i>enable</i>	Enable local in or out traffic logging.									
<i>disable</i>	Disable local in or out traffic logging.									
multicast-traffic	Enable/disable multicast traffic logging.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable multicast traffic logging.</td></tr><tr><td><i>disable</i></td><td>Disable multicast traffic logging.</td></tr></table>	Option	Description	<i>enable</i>	Enable multicast traffic logging.	<i>disable</i>	Disable multicast traffic logging.			
Option	Description									
<i>enable</i>	Enable multicast traffic logging.									
<i>disable</i>	Disable multicast traffic logging.									
severity	Lowest severity level to log.	option	-	information						

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>emergency</i>	Emergency level.		
	<i>alert</i>	Alert level.		
	<i>critical</i>	Critical level.		
	<i>error</i>	Error level.		
	<i>warning</i>	Warning level.		
	<i>notification</i>	Notification level.		
	<i>information</i>	Information level.		
	<i>debug</i>	Debug level.		
sniffer-traffic	Enable/disable sniffer traffic logging.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable sniffer traffic logging.		
	<i>disable</i>	Disable sniffer traffic logging.		
voip	Enable/disable VoIP logging.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable VoIP logging.		
	<i>disable</i>	Disable VoIP logging.		
ztna-traffic	Enable/disable ztna traffic logging.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable ztna traffic logging.		
	<i>disable</i>	Disable ztna traffic logging.		

* This parameter may not exist in some models.

config free-style

Parameter	Description	Type	Size	Default
category	Log category.	option	-	traffic
	Option	Description		
	<i>traffic</i>	Traffic log.		

Parameter	Description	Type	Size	Default																																
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>event</i></td><td>Event log.</td></tr><tr><td><i>virus</i></td><td>Antivirus log.</td></tr><tr><td><i>webfilter</i></td><td>Web filter log.</td></tr><tr><td><i>attack</i></td><td>Attack log.</td></tr><tr><td><i>spam</i></td><td>Antispam log.</td></tr><tr><td><i>anomaly</i></td><td>Anomaly log.</td></tr><tr><td><i>voip</i></td><td>VoIP log.</td></tr><tr><td><i>dlp</i></td><td>DLP log.</td></tr><tr><td><i>app-ctrl</i></td><td>Application control log.</td></tr><tr><td><i>waf</i></td><td>Web application firewall log.</td></tr><tr><td><i>dns</i></td><td>DNS detail log.</td></tr><tr><td><i>ssh</i></td><td>SSH log.</td></tr><tr><td><i>ssl</i></td><td>SSL log.</td></tr><tr><td><i>file-filter</i></td><td>File filter log.</td></tr><tr><td><i>icap</i></td><td>ICAP log.</td></tr></table>	Option	Description	<i>event</i>	Event log.	<i>virus</i>	Antivirus log.	<i>webfilter</i>	Web filter log.	<i>attack</i>	Attack log.	<i>spam</i>	Antispam log.	<i>anomaly</i>	Anomaly log.	<i>voip</i>	VoIP log.	<i>dlp</i>	DLP log.	<i>app-ctrl</i>	Application control log.	<i>waf</i>	Web application firewall log.	<i>dns</i>	DNS detail log.	<i>ssh</i>	SSH log.	<i>ssl</i>	SSL log.	<i>file-filter</i>	File filter log.	<i>icap</i>	ICAP log.			
	Option	Description																																		
	<i>event</i>	Event log.																																		
	<i>virus</i>	Antivirus log.																																		
	<i>webfilter</i>	Web filter log.																																		
	<i>attack</i>	Attack log.																																		
	<i>spam</i>	Antispam log.																																		
	<i>anomaly</i>	Anomaly log.																																		
	<i>voip</i>	VoIP log.																																		
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	<i>waf</i>	Web application firewall log.																																		
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	<i>ssh</i>	SSH log.																																		
	<i>ssl</i>	SSL log.																																		
	<i>file-filter</i>	File filter log.																																		
<i>icap</i>	ICAP log.																																			
filter	Free style filter string.	string	Maximum length: 1023																																	
filter-type	Include/exclude logs that match the filter.	option	-	include																																
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>include</i></td><td>Include logs that match the filter.</td></tr><tr><td><i>exclude</i></td><td>Exclude logs that match the filter.</td></tr></table>	Option	Description	<i>include</i>	Include logs that match the filter.	<i>exclude</i>	Exclude logs that match the filter.																													
	Option	Description																																		
	<i>include</i>	Include logs that match the filter.																																		
<i>exclude</i>	Exclude logs that match the filter.																																			
id	Entry ID.	integer	Minimum value: 0 0 Maximum value: 4294967295																																	

config log fortiguard override-filter

Override filters for FortiCloud.

```
config log fortiguard override-filter
    Description: Override filters for FortiCloud.
```

```

set anomaly [enable|disable]
set forward-traffic [enable|disable]
config free-style
    Description: Free style filters.
    edit <id>
        set category [traffic|event|...]
        set filter {string}
        set filter-type [include|exclude]
    next
end
set gtp [enable|disable]
set local-traffic [enable|disable]
set multicast-traffic [enable|disable]
set severity [emergency|alert|...]
set sniffer-traffic [enable|disable]
set voip [enable|disable]
set ztna-traffic [enable|disable]
end

```

config log fortiguard override-filter

Parameter	Description	Type	Size	Default						
anomaly	Enable/disable anomaly logging.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable anomaly logging.</td></tr><tr><td><i>disable</i></td><td>Disable anomaly logging.</td></tr></table>	Option	Description	<i>enable</i>	Enable anomaly logging.	<i>disable</i>	Disable anomaly logging.			
Option	Description									
<i>enable</i>	Enable anomaly logging.									
<i>disable</i>	Disable anomaly logging.									
forward-traffic	Enable/disable forward traffic logging.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable forward traffic logging.</td></tr><tr><td><i>disable</i></td><td>Disable forward traffic logging.</td></tr></table>	Option	Description	<i>enable</i>	Enable forward traffic logging.	<i>disable</i>	Disable forward traffic logging.			
Option	Description									
<i>enable</i>	Enable forward traffic logging.									
<i>disable</i>	Disable forward traffic logging.									
gtp *	Enable/disable GTP messages logging.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable GTP messages logging.</td></tr><tr><td><i>disable</i></td><td>Disable GTP messages logging.</td></tr></table>	Option	Description	<i>enable</i>	Enable GTP messages logging.	<i>disable</i>	Disable GTP messages logging.			
Option	Description									
<i>enable</i>	Enable GTP messages logging.									
<i>disable</i>	Disable GTP messages logging.									
local-traffic	Enable/disable local in or out traffic logging.	option	-	enable						

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>enable</i>	Enable local in or out traffic logging.		
	<i>disable</i>	Disable local in or out traffic logging.		
multicast-traffic	Enable/disable multicast traffic logging.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable multicast traffic logging.		
	<i>disable</i>	Disable multicast traffic logging.		
severity	Lowest severity level to log.	option	-	information
	Option	Description		
	<i>emergency</i>	Emergency level.		
	<i>alert</i>	Alert level.		
	<i>critical</i>	Critical level.		
	<i>error</i>	Error level.		
	<i>warning</i>	Warning level.		
	<i>notification</i>	Notification level.		
	<i>information</i>	Information level.		
	<i>debug</i>	Debug level.		
sniffer-traffic	Enable/disable sniffer traffic logging.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable sniffer traffic logging.		
	<i>disable</i>	Disable sniffer traffic logging.		
voip	Enable/disable VoIP logging.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable VoIP logging.		
	<i>disable</i>	Disable VoIP logging.		
ztna-traffic	Enable/disable ztna traffic logging.	option	-	enable

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>enable</i>	Enable ztna traffic logging.		
	<i>disable</i>	Disable ztna traffic logging.		

* This parameter may not exist in some models.

config free-style

Parameter	Description	Type	Size	Default
category	Log category.	option	-	traffic
	Option	Description		
	<i>traffic</i>	Traffic log.		
	<i>event</i>	Event log.		
	<i>virus</i>	Antivirus log.		
	<i>webfilter</i>	Web filter log.		
	<i>attack</i>	Attack log.		
	<i>spam</i>	Antispam log.		
	<i>anomaly</i>	Anomaly log.		
	<i>voip</i>	VoIP log.		
	<i>dlp</i>	DLP log.		
	<i>app-ctrl</i>	Application control log.		
	<i>waf</i>	Web application firewall log.		
	<i>dns</i>	DNS detail log.		
	<i>ssh</i>	SSH log.		
	<i>ssl</i>	SSL log.		
	<i>file-filter</i>	File filter log.		
	<i>icap</i>	ICAP log.		
filter	Free style filter string.	string	Maximum length: 1023	
filter-type	Include/exclude logs that match the filter.	option	-	include

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>include</i>	Include logs that match the filter.		
	<i>exclude</i>	Exclude logs that match the filter.		
id	Entry ID.	integer	Minimum value: 0 0 Maximum value: 4294967295	

config log fortiguard override-setting

Override global FortiCloud logging settings for this VDOM.

```
config log fortiguard override-setting
  Description: Override global FortiCloud logging settings for this VDOM.
  set access-config [enable|disable]
  set max-log-rate {integer}
  set override [enable|disable]
  set priority [default|low]
  set status [enable|disable]
  set upload-day {user}
  set upload-interval [daily|weekly|...]
  set upload-option [store-and-upload|realtime|...]
  set upload-time {user}
end
```

config log fortiguard override-setting

Parameter	Description	Type	Size	Default
access-config	Enable/disable FortiCloud access to configuration and data.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable FortiCloud access to configuration and data.		
	<i>disable</i>	Disable FortiCloud access to configuration and data.		
max-log-rate	FortiCloud maximum log rate in MBps (0 = unlimited).	integer	Minimum value: 0 Maximum value: 100000	0

Parameter	Description	Type	Size	Default										
override	Overriding FortiCloud settings for this VDOM or use global settings.	option	-	disable										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Override FortiCloud logging settings.</td></tr><tr><td><i>disable</i></td><td>Use global FortiCloud logging settings.</td></tr></table>	Option	Description	<i>enable</i>	Override FortiCloud logging settings.	<i>disable</i>	Use global FortiCloud logging settings.							
Option	Description													
<i>enable</i>	Override FortiCloud logging settings.													
<i>disable</i>	Use global FortiCloud logging settings.													
priority	Set log transmission priority.	option	-	default										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>default</i></td><td>Set FortiCloud log transmission priority to default.</td></tr><tr><td><i>low</i></td><td>Set FortiCloud log transmission priority to low.</td></tr></table>	Option	Description	<i>default</i>	Set FortiCloud log transmission priority to default.	<i>low</i>	Set FortiCloud log transmission priority to low.							
Option	Description													
<i>default</i>	Set FortiCloud log transmission priority to default.													
<i>low</i>	Set FortiCloud log transmission priority to low.													
status	Enable/disable logging to FortiCloud.	option	-	disable										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable logging to FortiCloud.</td></tr><tr><td><i>disable</i></td><td>Disable logging to FortiCloud.</td></tr></table>	Option	Description	<i>enable</i>	Enable logging to FortiCloud.	<i>disable</i>	Disable logging to FortiCloud.							
Option	Description													
<i>enable</i>	Enable logging to FortiCloud.													
<i>disable</i>	Disable logging to FortiCloud.													
upload-day	Day of week to roll logs.	user	Not Specified											
upload-interval	Frequency of uploading log files to FortiCloud.	option	-	daily										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>daily</i></td><td>Upload log files to FortiCloud once a day.</td></tr><tr><td><i>weekly</i></td><td>Upload log files to FortiCloud once a week.</td></tr><tr><td><i>monthly</i></td><td>Upload log files to FortiCloud once a month.</td></tr></table>	Option	Description	<i>daily</i>	Upload log files to FortiCloud once a day.	<i>weekly</i>	Upload log files to FortiCloud once a week.	<i>monthly</i>	Upload log files to FortiCloud once a month.					
Option	Description													
<i>daily</i>	Upload log files to FortiCloud once a day.													
<i>weekly</i>	Upload log files to FortiCloud once a week.													
<i>monthly</i>	Upload log files to FortiCloud once a month.													
upload-option	Configure how log messages are sent to FortiCloud.	option	-	5-minute										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>store-and-upload</i></td><td>Log to the hard disk and then upload logs to FortiCloud.</td></tr><tr><td><i>realtime</i></td><td>Log directly to FortiCloud in real time.</td></tr><tr><td><i>1-minute</i></td><td>Log directly to FortiCloud at 1-minute intervals.</td></tr><tr><td><i>5-minute</i></td><td>Log directly to FortiCloud at 5-minute intervals.</td></tr></table>	Option	Description	<i>store-and-upload</i>	Log to the hard disk and then upload logs to FortiCloud.	<i>realtime</i>	Log directly to FortiCloud in real time.	<i>1-minute</i>	Log directly to FortiCloud at 1-minute intervals.	<i>5-minute</i>	Log directly to FortiCloud at 5-minute intervals.			
Option	Description													
<i>store-and-upload</i>	Log to the hard disk and then upload logs to FortiCloud.													
<i>realtime</i>	Log directly to FortiCloud in real time.													
<i>1-minute</i>	Log directly to FortiCloud at 1-minute intervals.													
<i>5-minute</i>	Log directly to FortiCloud at 5-minute intervals.													
upload-time	Time of day to roll logs (hh:mm).	user	Not Specified											

config log fortiguard setting

Configure logging to FortiCloud.

```
config log fortiguard setting
  Description: Configure logging to FortiCloud.
  set access-config [enable|disable]
  set conn-timeout {integer}
  set enc-algorithm [high-medium|high|...]
  set interface {string}
  set interface-select-method [auto|sdwan|...]
  set max-log-rate {integer}
  set priority [default|low]
  set source-ip {ipv4-address}
  set ssl-min-proto-version [default|SSLv3|...]
  set status [enable|disable]
  set upload-day {user}
  set upload-interval [daily|weekly|...]
  set upload-option [store-and-upload|realtime|...]
  set upload-time {user}
end
```

config log fortiguard setting

Parameter	Description	Type	Size	Default								
access-config	Enable/disable FortiCloud access to configuration and data.	option	-	enable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable FortiCloud access to configuration and data.</td></tr><tr><td>disable</td><td>Disable FortiCloud access to configuration and data.</td></tr></table>	Option	Description	enable	Enable FortiCloud access to configuration and data.	disable	Disable FortiCloud access to configuration and data.					
Option	Description											
enable	Enable FortiCloud access to configuration and data.											
disable	Disable FortiCloud access to configuration and data.											
conn-timeout	FortiGate Cloud connection timeout in seconds.	integer	Minimum value: 1 Maximum value: 3600	10								
enc-algorithm	Configure the level of SSL protection for secure communication with FortiCloud.	option	-	high								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>high-medium</td><td>Encrypt logs using high and medium encryption.</td></tr><tr><td>high</td><td>Encrypt logs using high encryption.</td></tr><tr><td>low</td><td>Encrypt logs using low encryption.</td></tr></table>	Option	Description	high-medium	Encrypt logs using high and medium encryption.	high	Encrypt logs using high encryption.	low	Encrypt logs using low encryption.			
Option	Description											
high-medium	Encrypt logs using high and medium encryption.											
high	Encrypt logs using high encryption.											
low	Encrypt logs using low encryption.											

Parameter	Description	Type	Size	Default												
interface	Specify outgoing interface to reach server.	string	Maximum length: 15													
interface-select-method	Specify how to select outgoing interface to reach server.	option	-	auto												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>auto</td><td>Set outgoing interface automatically.</td></tr><tr><td>sdwan</td><td>Set outgoing interface by SD-WAN or policy routing rules.</td></tr><tr><td>specify</td><td>Set outgoing interface manually.</td></tr></table>	Option	Description	auto	Set outgoing interface automatically.	sdwan	Set outgoing interface by SD-WAN or policy routing rules.	specify	Set outgoing interface manually.							
Option	Description															
auto	Set outgoing interface automatically.															
sdwan	Set outgoing interface by SD-WAN or policy routing rules.															
specify	Set outgoing interface manually.															
max-log-rate	FortiCloud maximum log rate in MBps (0 = unlimited).	integer	Minimum value: 0 Maximum value: 100000	0												
priority	Set log transmission priority.	option	-	default												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>default</td><td>Set FortiCloud log transmission priority to default.</td></tr><tr><td>low</td><td>Set FortiCloud log transmission priority to low.</td></tr></table>	Option	Description	default	Set FortiCloud log transmission priority to default.	low	Set FortiCloud log transmission priority to low.									
Option	Description															
default	Set FortiCloud log transmission priority to default.															
low	Set FortiCloud log transmission priority to low.															
source-ip	Source IP address used to connect FortiCloud.	ipv4-address	Not Specified	0.0.0.0												
ssl-min-proto-version	Minimum supported protocol version for SSL/TLS connections (default is to follow system global setting).	option	-	default												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>default</td><td>Follow system global setting.</td></tr><tr><td>SSLv3</td><td>SSLv3.</td></tr><tr><td>TLSv1</td><td>TLSv1.</td></tr><tr><td>TLSv1-1</td><td>TLSv1.1.</td></tr><tr><td>TLSv1-2</td><td>TLSv1.2.</td></tr></table>	Option	Description	default	Follow system global setting.	SSLv3	SSLv3.	TLSv1	TLSv1.	TLSv1-1	TLSv1.1.	TLSv1-2	TLSv1.2.			
Option	Description															
default	Follow system global setting.															
SSLv3	SSLv3.															
TLSv1	TLSv1.															
TLSv1-1	TLSv1.1.															
TLSv1-2	TLSv1.2.															
status	Enable/disable logging to FortiCloud.	option	-	disable												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable logging to FortiCloud.</td></tr></table>	Option	Description	enable	Enable logging to FortiCloud.											
Option	Description															
enable	Enable logging to FortiCloud.															

Parameter	Description	Type	Size	Default										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>disable</i></td><td>Disable logging to FortiCloud.</td></tr></table>	Option	Description	<i>disable</i>	Disable logging to FortiCloud.									
Option	Description													
<i>disable</i>	Disable logging to FortiCloud.													
upload-day	Day of week to roll logs.	user	Not Specified											
upload-interval	Frequency of uploading log files to FortiCloud.	option	-	daily										
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Option	Description													
<i>daily</i>	Upload log files to FortiCloud once a day.													
<i>weekly</i>	Upload log files to FortiCloud once a week.													
<i>monthly</i>	Upload log files to FortiCloud once a month.													
upload-option	Configure how log messages are sent to FortiCloud.	option	-	5-minute										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>store-and-upload</i></td><td>Log to the hard disk and then upload logs to FortiCloud.</td></tr><tr><td><i>realtime</i></td><td>Log directly to FortiCloud in real time.</td></tr><tr><td><i>1-minute</i></td><td>Log directly to FortiCloud at 1-minute intervals.</td></tr><tr><td><i>5-minute</i></td><td>Log directly to FortiCloud at 5-minute intervals.</td></tr></table>	Option	Description	<i>store-and-upload</i>	Log to the hard disk and then upload logs to FortiCloud.	<i>realtime</i>	Log directly to FortiCloud in real time.	<i>1-minute</i>	Log directly to FortiCloud at 1-minute intervals.	<i>5-minute</i>	Log directly to FortiCloud at 5-minute intervals.			
Option	Description													
<i>store-and-upload</i>	Log to the hard disk and then upload logs to FortiCloud.													
<i>realtime</i>	Log directly to FortiCloud in real time.													
<i>1-minute</i>	Log directly to FortiCloud at 1-minute intervals.													
<i>5-minute</i>	Log directly to FortiCloud at 5-minute intervals.													
upload-time	Time of day to roll logs (hh:mm).	user	Not Specified											

config log gui-display

Configure how log messages are displayed on the GUI.

```

config log gui-display
  Description: Configure how log messages are displayed on the GUI.
  set fortiview-unscanned-apps [enable|disable]
  set resolve-apps [enable|disable]
  set resolve-hosts [enable|disable]
end

```

config log gui-display

Parameter	Description	Type	Size	Default						
fortiview-unscanned-apps	Enable/disable showing unscanned traffic in FortiView application charts.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable showing unscanned traffic.</td></tr><tr><td>disable</td><td>Disable showing unscanned traffic.</td></tr></table>	Option	Description	enable	Enable showing unscanned traffic.	disable	Disable showing unscanned traffic.			
Option	Description									
enable	Enable showing unscanned traffic.									
disable	Disable showing unscanned traffic.									
resolve-apps	Resolve unknown applications on the GUI using Fortinet's remote application database.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable unknown applications on the GUI.</td></tr><tr><td>disable</td><td>Disable unknown applications on the GUI.</td></tr></table>	Option	Description	enable	Enable unknown applications on the GUI.	disable	Disable unknown applications on the GUI.			
Option	Description									
enable	Enable unknown applications on the GUI.									
disable	Disable unknown applications on the GUI.									
resolve-hosts	Enable/disable resolving IP addresses to hostname in log messages on the GUI using reverse DNS lookup.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable resolving IP addresses to hostnames.</td></tr><tr><td>disable</td><td>Disable resolving IP addresses to hostnames.</td></tr></table>	Option	Description	enable	Enable resolving IP addresses to hostnames.	disable	Disable resolving IP addresses to hostnames.			
Option	Description									
enable	Enable resolving IP addresses to hostnames.									
disable	Disable resolving IP addresses to hostnames.									

config log memory filter

Filters for memory buffer.

```
config log memory filter
  Description: Filters for memory buffer.
  set anomaly [enable|disable]
  set forward-traffic [enable|disable]
  config free-style
    Description: Free style filters.
    edit <id>
      set category [traffic|event|...]
      set filter {string}
      set filter-type [include|exclude]
    next
  end
  set gtp [enable|disable]
  set local-traffic [enable|disable]
```

```

set multicast-traffic [enable|disable]
set severity [emergency|alert|...]
set sniffer-traffic [enable|disable]
set voip [enable|disable]
set ztna-traffic [enable|disable]
end

```

config log memory filter

Parameter	Description	Type	Size	Default						
anomaly	Enable/disable anomaly logging.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable anomaly logging.</td></tr><tr><td><i>disable</i></td><td>Disable anomaly logging.</td></tr></table>	Option	Description	<i>enable</i>	Enable anomaly logging.	<i>disable</i>	Disable anomaly logging.			
Option	Description									
<i>enable</i>	Enable anomaly logging.									
<i>disable</i>	Disable anomaly logging.									
forward-traffic	Enable/disable forward traffic logging.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable forward traffic logging.</td></tr><tr><td><i>disable</i></td><td>Disable forward traffic logging.</td></tr></table>	Option	Description	<i>enable</i>	Enable forward traffic logging.	<i>disable</i>	Disable forward traffic logging.			
Option	Description									
<i>enable</i>	Enable forward traffic logging.									
<i>disable</i>	Disable forward traffic logging.									
gtp *	Enable/disable GTP messages logging.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable GTP messages logging.</td></tr><tr><td><i>disable</i></td><td>Disable GTP messages logging.</td></tr></table>	Option	Description	<i>enable</i>	Enable GTP messages logging.	<i>disable</i>	Disable GTP messages logging.			
Option	Description									
<i>enable</i>	Enable GTP messages logging.									
<i>disable</i>	Disable GTP messages logging.									
local-traffic	Enable/disable local in or out traffic logging.	option	-	enable **						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable local in or out traffic logging.</td></tr><tr><td><i>disable</i></td><td>Disable local in or out traffic logging.</td></tr></table>	Option	Description	<i>enable</i>	Enable local in or out traffic logging.	<i>disable</i>	Disable local in or out traffic logging.			
Option	Description									
<i>enable</i>	Enable local in or out traffic logging.									
<i>disable</i>	Disable local in or out traffic logging.									
multicast-traffic	Enable/disable multicast traffic logging.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable multicast traffic logging.</td></tr><tr><td><i>disable</i></td><td>Disable multicast traffic logging.</td></tr></table>	Option	Description	<i>enable</i>	Enable multicast traffic logging.	<i>disable</i>	Disable multicast traffic logging.			
Option	Description									
<i>enable</i>	Enable multicast traffic logging.									
<i>disable</i>	Disable multicast traffic logging.									

Parameter	Description	Type	Size	Default																		
severity	Log every message above and including this severity level.	option	-	information																		
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>emergency</i></td><td>Emergency level.</td></tr><tr><td><i>alert</i></td><td>Alert level.</td></tr><tr><td><i>critical</i></td><td>Critical level.</td></tr><tr><td><i>error</i></td><td>Error level.</td></tr><tr><td><i>warning</i></td><td>Warning level.</td></tr><tr><td><i>notification</i></td><td>Notification level.</td></tr><tr><td><i>information</i></td><td>Information level.</td></tr><tr><td><i>debug</i></td><td>Debug level.</td></tr></table>	Option	Description	<i>emergency</i>	Emergency level.	<i>alert</i>	Alert level.	<i>critical</i>	Critical level.	<i>error</i>	Error level.	<i>warning</i>	Warning level.	<i>notification</i>	Notification level.	<i>information</i>	Information level.	<i>debug</i>	Debug level.			
Option	Description																					
<i>emergency</i>	Emergency level.																					
<i>alert</i>	Alert level.																					
<i>critical</i>	Critical level.																					
<i>error</i>	Error level.																					
<i>warning</i>	Warning level.																					
<i>notification</i>	Notification level.																					
<i>information</i>	Information level.																					
<i>debug</i>	Debug level.																					
sniffer-traffic	Enable/disable sniffer traffic logging.	option	-	enable																		
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable sniffer traffic logging.</td></tr><tr><td><i>disable</i></td><td>Disable sniffer traffic logging.</td></tr></table>	Option	Description	<i>enable</i>	Enable sniffer traffic logging.	<i>disable</i>	Disable sniffer traffic logging.															
Option	Description																					
<i>enable</i>	Enable sniffer traffic logging.																					
<i>disable</i>	Disable sniffer traffic logging.																					
voip	Enable/disable VoIP logging.	option	-	enable																		
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable VoIP logging.</td></tr><tr><td><i>disable</i></td><td>Disable VoIP logging.</td></tr></table>	Option	Description	<i>enable</i>	Enable VoIP logging.	<i>disable</i>	Disable VoIP logging.															
Option	Description																					
<i>enable</i>	Enable VoIP logging.																					
<i>disable</i>	Disable VoIP logging.																					
ztna-traffic	Enable/disable ztna traffic logging.	option	-	enable																		
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable ztna traffic logging.</td></tr><tr><td><i>disable</i></td><td>Disable ztna traffic logging.</td></tr></table>	Option	Description	<i>enable</i>	Enable ztna traffic logging.	<i>disable</i>	Disable ztna traffic logging.															
Option	Description																					
<i>enable</i>	Enable ztna traffic logging.																					
<i>disable</i>	Disable ztna traffic logging.																					

* This parameter may not exist in some models.

** Values may differ between models.

config free-style

Parameter	Description	Type	Size	Default
category	Log category.	option	-	traffic

Parameter	Description	Type	Size	Default																																		
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>traffic</td><td>Traffic log.</td></tr><tr><td>event</td><td>Event log.</td></tr><tr><td>virus</td><td>Antivirus log.</td></tr><tr><td>webfilter</td><td>Web filter log.</td></tr><tr><td>attack</td><td>Attack log.</td></tr><tr><td>spam</td><td>Antispam log.</td></tr><tr><td>anomaly</td><td>Anomaly log.</td></tr><tr><td>voip</td><td>VoIP log.</td></tr><tr><td>dlp</td><td>DLP log.</td></tr><tr><td>app-ctrl</td><td>Application control log.</td></tr><tr><td>waf</td><td>Web application firewall log.</td></tr><tr><td>dns</td><td>DNS detail log.</td></tr><tr><td>ssh</td><td>SSH log.</td></tr><tr><td>ssl</td><td>SSL log.</td></tr><tr><td>file-filter</td><td>File filter log.</td></tr><tr><td>icap</td><td>ICAP log.</td></tr></table>	Option	Description	traffic	Traffic log.	event	Event log.	virus	Antivirus log.	webfilter	Web filter log.	attack	Attack log.	spam	Antispam log.	anomaly	Anomaly log.	voip	VoIP log.	dlp	DLP log.	app-ctrl	Application control log.	waf	Web application firewall log.	dns	DNS detail log.	ssh	SSH log.	ssl	SSL log.	file-filter	File filter log.	icap	ICAP log.			
	Option	Description																																				
	traffic	Traffic log.																																				
	event	Event log.																																				
	virus	Antivirus log.																																				
	webfilter	Web filter log.																																				
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	anomaly	Anomaly log.																																				
	voip	VoIP log.																																				
	dlp	DLP log.																																				
	app-ctrl	Application control log.																																				
	waf	Web application firewall log.																																				
	dns	DNS detail log.																																				
	ssh	SSH log.																																				
	ssl	SSL log.																																				
	file-filter	File filter log.																																				
icap	ICAP log.																																					
filter	Free style filter string.	string	Maximum length: 1023																																			
filter-type	Include/exclude logs that match the filter.	option	-	include																																		
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>include</td><td>Include logs that match the filter.</td></tr><tr><td>exclude</td><td>Exclude logs that match the filter.</td></tr></table>	Option	Description	include	Include logs that match the filter.	exclude	Exclude logs that match the filter.																															
	Option	Description																																				
	include	Include logs that match the filter.																																				
exclude	Exclude logs that match the filter.																																					
id	Entry ID.	integer	Minimum value: 0 0 Maximum value: 4294967295																																			

config log memory global-setting

Global settings for memory logging.


```

config log memory global-setting
    Description: Global settings for memory logging.
    set full-final-warning-threshold {integer}
    set full-first-warning-threshold {integer}
    set full-second-warning-threshold {integer}
    set max-size {integer}
end

```

config log memory global-setting

Parameter	Description	Type	Size	Default
full-final-warning-threshold	Log full final warning threshold as a percent (3 - 100, default = 95).	integer	Minimum value: 3 Maximum value: 100	95
full-first-warning-threshold	Log full first warning threshold as a percent (1 - 98, default = 75).	integer	Minimum value: 1 Maximum value: 98	75
full-second-warning-threshold	Log full second warning threshold as a percent (2 - 99, default = 90).	integer	Minimum value: 2 Maximum value: 99	90
max-size	Maximum amount of memory that can be used for memory logging in bytes.	integer	Minimum value: 0 Maximum value: 4294967295	168438906 **

** Values may differ between models.

config log memory setting

Settings for memory buffer.

```

config log memory setting
    Description: Settings for memory buffer.
    set status [enable|disable]
end

```

config log memory setting

Parameter	Description	Type	Size	Default
status	Enable/disable logging to the FortiGate's memory.	option	-	enable **

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>enable</i>	Enable logging to memory.		
	<i>disable</i>	Disable logging to memory.		

** Values may differ between models.

config log null-device filter

Filters for null device logging.

```
config log null-device filter
  Description: Filters for null device logging.
  set anomaly [enable|disable]
  set forward-traffic [enable|disable]
  config free-style
    Description: Free style filters.
    edit <id>
      set category [traffic|event|...]
      set filter {string}
      set filter-type [include|exclude]
    next
  end
  set gtp [enable|disable]
  set local-traffic [enable|disable]
  set multicast-traffic [enable|disable]
  set severity [emergency|alert|...]
  set sniffer-traffic [enable|disable]
  set voip [enable|disable]
  set ztna-traffic [enable|disable]
end
```

config log null-device filter

Parameter	Description	Type	Size	Default
anomaly	Enable/disable anomaly logging.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable anomaly logging.		
	<i>disable</i>	Disable anomaly logging.		
forward-traffic	Enable/disable forward traffic logging.	option	-	enable

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>enable</i>	Enable forward traffic logging.		
	<i>disable</i>	Disable forward traffic logging.		
gtp *	Enable/disable GTP messages logging.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable GTP messages logging.		
	<i>disable</i>	Disable GTP messages logging.		
local-traffic	Enable/disable local in or out traffic logging.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable local in or out traffic logging.		
	<i>disable</i>	Disable local in or out traffic logging.		
multicast-traffic	Enable/disable multicast traffic logging.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable multicast traffic logging.		
	<i>disable</i>	Disable multicast traffic logging.		
severity	Lowest severity level to log.	option	-	information
	Option	Description		
	<i>emergency</i>	Emergency level.		
	<i>alert</i>	Alert level.		
	<i>critical</i>	Critical level.		
	<i>error</i>	Error level.		
	<i>warning</i>	Warning level.		
	<i>notification</i>	Notification level.		
	<i>information</i>	Information level.		
	<i>debug</i>	Debug level.		
sniffer-traffic	Enable/disable sniffer traffic logging.	option	-	enable

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>enable</i>	Enable sniffer traffic logging.		
	<i>disable</i>	Disable sniffer traffic logging.		
voip	Enable/disable VoIP logging.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable VoIP logging.		
	<i>disable</i>	Disable VoIP logging.		
ztna-traffic	Enable/disable ztna traffic logging.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable ztna traffic logging.		
	<i>disable</i>	Disable ztna traffic logging.		

* This parameter may not exist in some models.

config free-style

Parameter	Description	Type	Size	Default
category	Log category.	option	-	traffic
	Option	Description		
	<i>traffic</i>	Traffic log.		
	<i>event</i>	Event log.		
	<i>virus</i>	Antivirus log.		
	<i>webfilter</i>	Web filter log.		
	<i>attack</i>	Attack log.		
	<i>spam</i>	Antispam log.		
	<i>anomaly</i>	Anomaly log.		
	<i>voip</i>	VoIP log.		
	<i>dlp</i>	DLP log.		
	<i>app-ctrl</i>	Application control log.		
	<i>waf</i>	Web application firewall log.		

Parameter	Description	Type	Size	Default												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>dns</i></td><td>DNS detail log.</td></tr><tr><td><i>ssh</i></td><td>SSH log.</td></tr><tr><td><i>ssl</i></td><td>SSL log.</td></tr><tr><td><i>file-filter</i></td><td>File filter log.</td></tr><tr><td><i>icap</i></td><td>ICAP log.</td></tr></table>	Option	Description	<i>dns</i>	DNS detail log.	<i>ssh</i>	SSH log.	<i>ssl</i>	SSL log.	<i>file-filter</i>	File filter log.	<i>icap</i>	ICAP log.			
	Option	Description														
	<i>dns</i>	DNS detail log.														
	<i>ssh</i>	SSH log.														
	<i>ssl</i>	SSL log.														
	<i>file-filter</i>	File filter log.														
<i>icap</i>	ICAP log.															
filter	Free style filter string.	string	Maximum length: 1023													
filter-type	Include/exclude logs that match the filter.	option	-	include												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>include</i></td><td>Include logs that match the filter.</td></tr><tr><td><i>exclude</i></td><td>Exclude logs that match the filter.</td></tr></table>	Option	Description	<i>include</i>	Include logs that match the filter.	<i>exclude</i>	Exclude logs that match the filter.									
	Option	Description														
	<i>include</i>	Include logs that match the filter.														
<i>exclude</i>	Exclude logs that match the filter.															
id	Entry ID.	integer	Minimum value: 0 0 Maximum value: 4294967295													

config log null-device setting

Settings for null device logging.

```
config log null-device setting
    Description: Settings for null device logging.
    set status [enable|disable]
end
```

config log null-device setting

Parameter	Description	Type	Size	Default
status	Enable/disable statistics collection for when no external logging destination, such as FortiAnalyzer, is present (data is not saved).	option	-	disable

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>enable</i>	Enable statistics collection for when no external logging destination, such as FortiAnalyzer, is present (data is not saved).		
	<i>disable</i>	Disable statistics collection for when no external logging destination, such as FortiAnalyzer, is present (data is not saved).		

config log setting

Configure general log settings.

```
config log setting
    Description: Configure general log settings.
    set anonymization-hash {string}
    set brief-traffic-format [enable|disable]
    set custom-log-fields <field-id1>, <field-id2>, ...
    set daemon-log [enable|disable]
    set expolicy-implicit-log [enable|disable]
    set faz-override [enable|disable]
    set fortiview-weekly-data [enable|disable]
    set fwpolicy-implicit-log [enable|disable]
    set fwpolicy6-implicit-log [enable|disable]
    set local-in-allow [enable|disable]
    set local-in-deny-broadcast [enable|disable]
    set local-in-deny-unicast [enable|disable]
    set local-out [enable|disable]
    set local-out-ioc-detection [enable|disable]
    set log-invalid-packet [enable|disable]
    set log-policy-comment [enable|disable]
    set log-user-in-upper [enable|disable]
    set neighbor-event [enable|disable]
    set resolve-ip [enable|disable]
    set resolve-port [enable|disable]
    set rest-api-get [enable|disable]
    set rest-api-set [enable|disable]
    set syslog-override [enable|disable]
    set user-anonymize [enable|disable]
end
```

config log setting

Parameter	Description	Type	Size	Default
anonymization-hash	User name anonymization hash salt.	string	Maximum length: 32	

Parameter	Description	Type	Size	Default						
brief-traffic-format	Enable/disable brief format traffic logging.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable brief format traffic logging.</td></tr><tr><td><i>disable</i></td><td>Disable brief format traffic logging.</td></tr></table>	Option	Description	<i>enable</i>	Enable brief format traffic logging.	<i>disable</i>	Disable brief format traffic logging.			
Option	Description									
<i>enable</i>	Enable brief format traffic logging.									
<i>disable</i>	Disable brief format traffic logging.									
custom-log-fields <field-id>	Custom fields to append to all log messages. Custom log field.	string	Maximum length: 35							
daemon-log	Enable/disable daemon logging.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable daemon logging.</td></tr><tr><td><i>disable</i></td><td>Disable daemon logging.</td></tr></table>	Option	Description	<i>enable</i>	Enable daemon logging.	<i>disable</i>	Disable daemon logging.			
Option	Description									
<i>enable</i>	Enable daemon logging.									
<i>disable</i>	Disable daemon logging.									
expolicy-implicit-log	Enable/disable explicit proxy firewall implicit policy logging.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable explicit proxy firewall implicit policy logging.</td></tr><tr><td><i>disable</i></td><td>Disable explicit proxy firewall implicit policy logging.</td></tr></table>	Option	Description	<i>enable</i>	Enable explicit proxy firewall implicit policy logging.	<i>disable</i>	Disable explicit proxy firewall implicit policy logging.			
Option	Description									
<i>enable</i>	Enable explicit proxy firewall implicit policy logging.									
<i>disable</i>	Disable explicit proxy firewall implicit policy logging.									
faz-override	Enable/disable override FortiAnalyzer settings.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable override FortiAnalyzer settings.</td></tr><tr><td><i>disable</i></td><td>Disable override FortiAnalyzer settings.</td></tr></table>	Option	Description	<i>enable</i>	Enable override FortiAnalyzer settings.	<i>disable</i>	Disable override FortiAnalyzer settings.			
Option	Description									
<i>enable</i>	Enable override FortiAnalyzer settings.									
<i>disable</i>	Disable override FortiAnalyzer settings.									
fortiview-weekly-data *	Enable/disable FortiView weekly data.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable FortiView weekly data.</td></tr><tr><td><i>disable</i></td><td>Disable FortiView weekly data.</td></tr></table>	Option	Description	<i>enable</i>	Enable FortiView weekly data.	<i>disable</i>	Disable FortiView weekly data.			
Option	Description									
<i>enable</i>	Enable FortiView weekly data.									
<i>disable</i>	Disable FortiView weekly data.									
fwpolicy-implicit-log	Enable/disable implicit firewall policy logging.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable implicit firewall policy logging.</td></tr><tr><td><i>disable</i></td><td>Disable implicit firewall policy logging.</td></tr></table>	Option	Description	<i>enable</i>	Enable implicit firewall policy logging.	<i>disable</i>	Disable implicit firewall policy logging.			
Option	Description									
<i>enable</i>	Enable implicit firewall policy logging.									
<i>disable</i>	Disable implicit firewall policy logging.									

Parameter	Description	Type	Size	Default						
fwpolicy6-implicit-log	Enable/disable implicit firewall policy6 logging.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable implicit firewall policy6 logging.</td></tr><tr><td><i>disable</i></td><td>Disable implicit firewall policy6 logging.</td></tr></table>	Option	Description	<i>enable</i>	Enable implicit firewall policy6 logging.	<i>disable</i>	Disable implicit firewall policy6 logging.			
Option	Description									
<i>enable</i>	Enable implicit firewall policy6 logging.									
<i>disable</i>	Disable implicit firewall policy6 logging.									
local-in-allow	Enable/disable local-in-allow logging.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable local-in-allow logging.</td></tr><tr><td><i>disable</i></td><td>Disable local-in-allow logging.</td></tr></table>	Option	Description	<i>enable</i>	Enable local-in-allow logging.	<i>disable</i>	Disable local-in-allow logging.			
Option	Description									
<i>enable</i>	Enable local-in-allow logging.									
<i>disable</i>	Disable local-in-allow logging.									
local-in-deny-broadcast	Enable/disable local-in-deny-broadcast logging.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable local-in-deny-broadcast logging.</td></tr><tr><td><i>disable</i></td><td>Disable local-in-deny-broadcast logging.</td></tr></table>	Option	Description	<i>enable</i>	Enable local-in-deny-broadcast logging.	<i>disable</i>	Disable local-in-deny-broadcast logging.			
Option	Description									
<i>enable</i>	Enable local-in-deny-broadcast logging.									
<i>disable</i>	Disable local-in-deny-broadcast logging.									
local-in-deny-unicast	Enable/disable local-in-deny-unicast logging.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable local-in-deny-unicast logging.</td></tr><tr><td><i>disable</i></td><td>Disable local-in-deny-unicast logging.</td></tr></table>	Option	Description	<i>enable</i>	Enable local-in-deny-unicast logging.	<i>disable</i>	Disable local-in-deny-unicast logging.			
Option	Description									
<i>enable</i>	Enable local-in-deny-unicast logging.									
<i>disable</i>	Disable local-in-deny-unicast logging.									
local-out	Enable/disable local-out logging.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable local-out logging.</td></tr><tr><td><i>disable</i></td><td>Disable local-out logging.</td></tr></table>	Option	Description	<i>enable</i>	Enable local-out logging.	<i>disable</i>	Disable local-out logging.			
Option	Description									
<i>enable</i>	Enable local-out logging.									
<i>disable</i>	Disable local-out logging.									
local-out-ioc-detection	Enable/disable local-out traffic IoC detection. Requires local-out to be enabled.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable local-out traffic IoC detection. Requires local-out to be enabled.</td></tr><tr><td><i>disable</i></td><td>Disable local-out traffic IoC detection.</td></tr></table>	Option	Description	<i>enable</i>	Enable local-out traffic IoC detection. Requires local-out to be enabled.	<i>disable</i>	Disable local-out traffic IoC detection.			
Option	Description									
<i>enable</i>	Enable local-out traffic IoC detection. Requires local-out to be enabled.									
<i>disable</i>	Disable local-out traffic IoC detection.									

Parameter	Description	Type	Size	Default						
log-invalid-packet	Enable/disable invalid packet traffic logging.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable invalid packet traffic logging.</td></tr><tr><td><i>disable</i></td><td>Disable invalid packet traffic logging.</td></tr></table>	Option	Description	<i>enable</i>	Enable invalid packet traffic logging.	<i>disable</i>	Disable invalid packet traffic logging.			
Option	Description									
<i>enable</i>	Enable invalid packet traffic logging.									
<i>disable</i>	Disable invalid packet traffic logging.									
log-policy-comment	Enable/disable inserting policy comments into traffic logs.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable inserting policy comments into traffic logs.</td></tr><tr><td><i>disable</i></td><td>Disable inserting policy comments into traffic logs.</td></tr></table>	Option	Description	<i>enable</i>	Enable inserting policy comments into traffic logs.	<i>disable</i>	Disable inserting policy comments into traffic logs.			
Option	Description									
<i>enable</i>	Enable inserting policy comments into traffic logs.									
<i>disable</i>	Disable inserting policy comments into traffic logs.									
log-user-in-upper	Enable/disable logs with user-in-upper.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable logs with user-in-upper.</td></tr><tr><td><i>disable</i></td><td>Disable logs with user-in-upper.</td></tr></table>	Option	Description	<i>enable</i>	Enable logs with user-in-upper.	<i>disable</i>	Disable logs with user-in-upper.			
Option	Description									
<i>enable</i>	Enable logs with user-in-upper.									
<i>disable</i>	Disable logs with user-in-upper.									
neighbor-event	Enable/disable neighbor event logging.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable neighbor event logging.</td></tr><tr><td><i>disable</i></td><td>Disable neighbor event logging.</td></tr></table>	Option	Description	<i>enable</i>	Enable neighbor event logging.	<i>disable</i>	Disable neighbor event logging.			
Option	Description									
<i>enable</i>	Enable neighbor event logging.									
<i>disable</i>	Disable neighbor event logging.									
resolve-ip	Enable/disable adding resolved domain names to traffic logs if possible.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable adding resolved domain names to traffic logs.</td></tr><tr><td><i>disable</i></td><td>Disable adding resolved domain names to traffic logs.</td></tr></table>	Option	Description	<i>enable</i>	Enable adding resolved domain names to traffic logs.	<i>disable</i>	Disable adding resolved domain names to traffic logs.			
Option	Description									
<i>enable</i>	Enable adding resolved domain names to traffic logs.									
<i>disable</i>	Disable adding resolved domain names to traffic logs.									
resolve-port	Enable/disable adding resolved service names to traffic logs.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable adding resolved service names to traffic logs.</td></tr><tr><td><i>disable</i></td><td>Disable adding resolved service names to traffic logs.</td></tr></table>	Option	Description	<i>enable</i>	Enable adding resolved service names to traffic logs.	<i>disable</i>	Disable adding resolved service names to traffic logs.			
Option	Description									
<i>enable</i>	Enable adding resolved service names to traffic logs.									
<i>disable</i>	Disable adding resolved service names to traffic logs.									
rest-api-get	Enable/disable REST API GET request logging.	option	-	disable						

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>enable</i>	Enable GET REST API logging.		
	<i>disable</i>	Disable GET REST API logging.		
rest-api-set	Enable/disable REST API POST/PUT/DELETE request logging.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable POST/PUT/DELETE REST API logging.		
	<i>disable</i>	Disable POST/PUT/DELETE REST API logging.		
syslog-override	Enable/disable override Syslog settings.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable override Syslog settings.		
	<i>disable</i>	Disable override Syslog settings.		
user-anonymize	Enable/disable anonymizing user names in log messages.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable anonymizing user names in log messages.		
	<i>disable</i>	Disable anonymizing user names in log messages.		

* This parameter may not exist in some models.

config log syslogd filter

Filters for remote system server.

```

config log syslogd filter
  Description: Filters for remote system server.
  set anomaly [enable|disable]
  set forward-traffic [enable|disable]
  config free-style
    Description: Free style filters.
    edit <id>
      set category [traffic|event|...]
      set filter {string}
      set filter-type [include|exclude]
    next
  end
  set gtp [enable|disable]

```

```

set local-traffic [enable|disable]
set multicast-traffic [enable|disable]
set severity [emergency|alert|...]
set sniffer-traffic [enable|disable]
set voip [enable|disable]
set ztna-traffic [enable|disable]
end

```

config log syslogd filter

Parameter	Description	Type	Size	Default
anomaly	Enable/disable anomaly logging.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable anomaly logging.		
	<i>disable</i>	Disable anomaly logging.		
forward-traffic	Enable/disable forward traffic logging.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable forward traffic logging.		
	<i>disable</i>	Disable forward traffic logging.		
gtp *	Enable/disable GTP messages logging.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable GTP messages logging.		
	<i>disable</i>	Disable GTP messages logging.		
local-traffic	Enable/disable local in or out traffic logging.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable local in or out traffic logging.		
	<i>disable</i>	Disable local in or out traffic logging.		
multicast-traffic	Enable/disable multicast traffic logging.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable multicast traffic logging.		
	<i>disable</i>	Disable multicast traffic logging.		

Parameter	Description	Type	Size	Default																		
severity	Lowest severity level to log.	option	-	information																		
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>emergency</i></td><td>Emergency level.</td></tr><tr><td><i>alert</i></td><td>Alert level.</td></tr><tr><td><i>critical</i></td><td>Critical level.</td></tr><tr><td><i>error</i></td><td>Error level.</td></tr><tr><td><i>warning</i></td><td>Warning level.</td></tr><tr><td><i>notification</i></td><td>Notification level.</td></tr><tr><td><i>information</i></td><td>Information level.</td></tr><tr><td><i>debug</i></td><td>Debug level.</td></tr></table>	Option	Description	<i>emergency</i>	Emergency level.	<i>alert</i>	Alert level.	<i>critical</i>	Critical level.	<i>error</i>	Error level.	<i>warning</i>	Warning level.	<i>notification</i>	Notification level.	<i>information</i>	Information level.	<i>debug</i>	Debug level.			
Option	Description																					
<i>emergency</i>	Emergency level.																					
<i>alert</i>	Alert level.																					
<i>critical</i>	Critical level.																					
<i>error</i>	Error level.																					
<i>warning</i>	Warning level.																					
<i>notification</i>	Notification level.																					
<i>information</i>	Information level.																					
<i>debug</i>	Debug level.																					
sniffer-traffic	Enable/disable sniffer traffic logging.	option	-	enable																		
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable sniffer traffic logging.</td></tr><tr><td><i>disable</i></td><td>Disable sniffer traffic logging.</td></tr></table>	Option	Description	<i>enable</i>	Enable sniffer traffic logging.	<i>disable</i>	Disable sniffer traffic logging.															
Option	Description																					
<i>enable</i>	Enable sniffer traffic logging.																					
<i>disable</i>	Disable sniffer traffic logging.																					
voip	Enable/disable VoIP logging.	option	-	enable																		
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable VoIP logging.</td></tr><tr><td><i>disable</i></td><td>Disable VoIP logging.</td></tr></table>	Option	Description	<i>enable</i>	Enable VoIP logging.	<i>disable</i>	Disable VoIP logging.															
Option	Description																					
<i>enable</i>	Enable VoIP logging.																					
<i>disable</i>	Disable VoIP logging.																					
ztna-traffic	Enable/disable ztna traffic logging.	option	-	enable																		
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable ztna traffic logging.</td></tr><tr><td><i>disable</i></td><td>Disable ztna traffic logging.</td></tr></table>	Option	Description	<i>enable</i>	Enable ztna traffic logging.	<i>disable</i>	Disable ztna traffic logging.															
Option	Description																					
<i>enable</i>	Enable ztna traffic logging.																					
<i>disable</i>	Disable ztna traffic logging.																					

* This parameter may not exist in some models.

config free-style

Parameter	Description	Type	Size	Default
category	Log category.	option	-	traffic

Parameter	Description	Type	Size	Default																																		
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>traffic</td><td>Traffic log.</td></tr><tr><td>event</td><td>Event log.</td></tr><tr><td>virus</td><td>Antivirus log.</td></tr><tr><td>webfilter</td><td>Web filter log.</td></tr><tr><td>attack</td><td>Attack log.</td></tr><tr><td>spam</td><td>Antispam log.</td></tr><tr><td>anomaly</td><td>Anomaly log.</td></tr><tr><td>voip</td><td>VoIP log.</td></tr><tr><td>dlp</td><td>DLP log.</td></tr><tr><td>app-ctrl</td><td>Application control log.</td></tr><tr><td>waf</td><td>Web application firewall log.</td></tr><tr><td>dns</td><td>DNS detail log.</td></tr><tr><td>ssh</td><td>SSH log.</td></tr><tr><td>ssl</td><td>SSL log.</td></tr><tr><td>file-filter</td><td>File filter log.</td></tr><tr><td>icap</td><td>ICAP log.</td></tr></table>	Option	Description	traffic	Traffic log.	event	Event log.	virus	Antivirus log.	webfilter	Web filter log.	attack	Attack log.	spam	Antispam log.	anomaly	Anomaly log.	voip	VoIP log.	dlp	DLP log.	app-ctrl	Application control log.	waf	Web application firewall log.	dns	DNS detail log.	ssh	SSH log.	ssl	SSL log.	file-filter	File filter log.	icap	ICAP log.			
	Option	Description																																				
	traffic	Traffic log.																																				
	event	Event log.																																				
	virus	Antivirus log.																																				
	webfilter	Web filter log.																																				
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	voip	VoIP log.																																				
	dlp	DLP log.																																				
	app-ctrl	Application control log.																																				
	waf	Web application firewall log.																																				
	dns	DNS detail log.																																				
	ssh	SSH log.																																				
	ssl	SSL log.																																				
	file-filter	File filter log.																																				
icap	ICAP log.																																					
filter	Free style filter string.	string	Maximum length: 1023																																			
filter-type	Include/exclude logs that match the filter.	option	-	include																																		
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>include</td><td>Include logs that match the filter.</td></tr><tr><td>exclude</td><td>Exclude logs that match the filter.</td></tr></table>	Option	Description	include	Include logs that match the filter.	exclude	Exclude logs that match the filter.																															
	Option	Description																																				
	include	Include logs that match the filter.																																				
exclude	Exclude logs that match the filter.																																					
id	Entry ID.	integer	Minimum value: 0 0 Maximum value: 4294967295																																			

config log syslogd override-filter

Override filters for remote system server.

```

config log syslogd override-filter
    Description: Override filters for remote system server.
    set anomaly [enable|disable]
    set forward-traffic [enable|disable]
    config free-style
        Description: Free style filters.
        edit <id>
            set category [traffic|event|...]
            set filter {string}
            set filter-type [include|exclude]
        next
    end
    set gtp [enable|disable]
    set local-traffic [enable|disable]
    set multicast-traffic [enable|disable]
    set severity [emergency|alert|...]
    set sniffer-traffic [enable|disable]
    set voip [enable|disable]
    set ztna-traffic [enable|disable]
end

```

config log syslogd override-filter

Parameter	Description	Type	Size	Default
anomaly	Enable/disable anomaly logging.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable anomaly logging.		
	<i>disable</i>	Disable anomaly logging.		
forward-traffic	Enable/disable forward traffic logging.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable forward traffic logging.		
	<i>disable</i>	Disable forward traffic logging.		
gtp *	Enable/disable GTP messages logging.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable GTP messages logging.		
	<i>disable</i>	Disable GTP messages logging.		
local-traffic	Enable/disable local in or out traffic logging.	option	-	enable

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>enable</i>	Enable local in or out traffic logging.		
	<i>disable</i>	Disable local in or out traffic logging.		
multicast-traffic	Enable/disable multicast traffic logging.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable multicast traffic logging.		
	<i>disable</i>	Disable multicast traffic logging.		
severity	Lowest severity level to log.	option	-	information
	Option	Description		
	<i>emergency</i>	Emergency level.		
	<i>alert</i>	Alert level.		
	<i>critical</i>	Critical level.		
	<i>error</i>	Error level.		
	<i>warning</i>	Warning level.		
	<i>notification</i>	Notification level.		
	<i>information</i>	Information level.		
	<i>debug</i>	Debug level.		
sniffer-traffic	Enable/disable sniffer traffic logging.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable sniffer traffic logging.		
	<i>disable</i>	Disable sniffer traffic logging.		
voip	Enable/disable VoIP logging.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable VoIP logging.		
	<i>disable</i>	Disable VoIP logging.		
ztna-traffic	Enable/disable ztna traffic logging.	option	-	enable

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>enable</i>	Enable ztna traffic logging.		
	<i>disable</i>	Disable ztna traffic logging.		

* This parameter may not exist in some models.

config free-style

Parameter	Description	Type	Size	Default
category	Log category.	option	-	traffic
	Option	Description		
	<i>traffic</i>	Traffic log.		
	<i>event</i>	Event log.		
	<i>virus</i>	Antivirus log.		
	<i>webfilter</i>	Web filter log.		
	<i>attack</i>	Attack log.		
	<i>spam</i>	Antispam log.		
	<i>anomaly</i>	Anomaly log.		
	<i>voip</i>	VoIP log.		
	<i>dlp</i>	DLP log.		
	<i>app-ctrl</i>	Application control log.		
	<i>waf</i>	Web application firewall log.		
	<i>dns</i>	DNS detail log.		
	<i>ssh</i>	SSH log.		
	<i>ssl</i>	SSL log.		
	<i>file-filter</i>	File filter log.		
	<i>icap</i>	ICAP log.		
filter	Free style filter string.	string	Maximum length: 1023	
filter-type	Include/exclude logs that match the filter.	option	-	include

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>include</i>	Include logs that match the filter.		
	<i>exclude</i>	Exclude logs that match the filter.		
id	Entry ID.	integer	Minimum value: 0 Maximum value: 4294967295	

config log syslogd override-setting

Override settings for remote syslog server.

```

config log syslogd override-setting
    Description: Override settings for remote syslog server.
    set certificate {string}
    config custom-field-name
        Description: Custom field name for CEF format logging.
        edit <id>
            set custom {string}
            set name {string}
        next
    end
    set enc-algorithm [high-medium|high|...]
    set facility [kernel|user|...]
    set format [default|csv|...]
    set interface {string}
    set interface-select-method [auto|sdwan|...]
    set max-log-rate {integer}
    set mode [udp|legacy-reliable|...]
    set port {integer}
    set priority [default|low]
    set server {string}
    set source-ip {string}
    set ssl-min-proto-version [default|SSLv3|...]
    set status [enable|disable]
end

```

config log syslogd override-setting

Parameter	Description	Type	Size	Default
certificate	Certificate used to communicate with Syslog server.	string	Maximum length: 35	

Parameter	Description	Type	Size	Default																																										
enc-algorithm	Enable/disable reliable syslogging with TLS encryption.	option	-	disable																																										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>high-medium</td><td>SSL communication with high and medium encryption algorithms.</td></tr><tr><td>high</td><td>SSL communication with high encryption algorithms.</td></tr><tr><td>low</td><td>SSL communication with low encryption algorithms.</td></tr><tr><td>disable</td><td>Disable SSL communication.</td></tr></table>	Option	Description	high-medium	SSL communication with high and medium encryption algorithms.	high	SSL communication with high encryption algorithms.	low	SSL communication with low encryption algorithms.	disable	Disable SSL communication.																																			
	Option	Description																																												
	high-medium	SSL communication with high and medium encryption algorithms.																																												
	high	SSL communication with high encryption algorithms.																																												
	low	SSL communication with low encryption algorithms.																																												
disable	Disable SSL communication.																																													
facility	Remote syslog facility.	option	-	local7																																										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>kernel</td><td>Kernel messages.</td></tr><tr><td>user</td><td>Random user-level messages.</td></tr><tr><td>mail</td><td>Mail system.</td></tr><tr><td>daemon</td><td>System daemons.</td></tr><tr><td>auth</td><td>Security/authorization messages.</td></tr><tr><td>syslog</td><td>Messages generated internally by syslog.</td></tr><tr><td>lpr</td><td>Line printer subsystem.</td></tr><tr><td>news</td><td>Network news subsystem.</td></tr><tr><td>uucp</td><td>Network news subsystem.</td></tr><tr><td>cron</td><td>Clock daemon.</td></tr><tr><td>authpriv</td><td>Security/authorization messages (private).</td></tr><tr><td>ftp</td><td>FTP daemon.</td></tr><tr><td>ntp</td><td>NTP daemon.</td></tr><tr><td>audit</td><td>Log audit.</td></tr><tr><td>alert</td><td>Log alert.</td></tr><tr><td>clock</td><td>Clock daemon.</td></tr><tr><td>local0</td><td>Reserved for local use.</td></tr><tr><td>local1</td><td>Reserved for local use.</td></tr><tr><td>local2</td><td>Reserved for local use.</td></tr><tr><td>local3</td><td>Reserved for local use.</td></tr></table>	Option	Description	kernel	Kernel messages.	user	Random user-level messages.	mail	Mail system.	daemon	System daemons.	auth	Security/authorization messages.	syslog	Messages generated internally by syslog.	lpr	Line printer subsystem.	news	Network news subsystem.	uucp	Network news subsystem.	cron	Clock daemon.	authpriv	Security/authorization messages (private).	ftp	FTP daemon.	ntp	NTP daemon.	audit	Log audit.	alert	Log alert.	clock	Clock daemon.	local0	Reserved for local use.	local1	Reserved for local use.	local2	Reserved for local use.	local3	Reserved for local use.			
	Option	Description																																												
	kernel	Kernel messages.																																												
	user	Random user-level messages.																																												
	mail	Mail system.																																												
	daemon	System daemons.																																												
	auth	Security/authorization messages.																																												
	syslog	Messages generated internally by syslog.																																												
	lpr	Line printer subsystem.																																												
	news	Network news subsystem.																																												
	uucp	Network news subsystem.																																												
	cron	Clock daemon.																																												
	authpriv	Security/authorization messages (private).																																												
	ftp	FTP daemon.																																												
	ntp	NTP daemon.																																												
	audit	Log audit.																																												
	alert	Log alert.																																												
	clock	Clock daemon.																																												
	local0	Reserved for local use.																																												
local1	Reserved for local use.																																													
local2	Reserved for local use.																																													
local3	Reserved for local use.																																													

Parameter	Description	Type	Size	Default											
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>local4</i></td><td>Reserved for local use.</td></tr><tr><td><i>local5</i></td><td>Reserved for local use.</td></tr><tr><td><i>local6</i></td><td>Reserved for local use.</td></tr><tr><td><i>local7</i></td><td>Reserved for local use.</td></tr></table>		Option	Description	<i>local4</i>	Reserved for local use.	<i>local5</i>	Reserved for local use.	<i>local6</i>	Reserved for local use.	<i>local7</i>	Reserved for local use.			
	Option	Description													
	<i>local4</i>	Reserved for local use.													
	<i>local5</i>	Reserved for local use.													
	<i>local6</i>	Reserved for local use.													
<i>local7</i>	Reserved for local use.														
format	Log format.	option	-	default											
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>default</i></td><td>Syslog format.</td></tr><tr><td><i>csv</i></td><td>CSV (Comma Separated Values) format.</td></tr><tr><td><i>cef</i></td><td>CEF (Common Event Format) format.</td></tr><tr><td><i>rfc5424</i></td><td>Syslog RFC5424 format.</td></tr></table>		Option	Description	<i>default</i>	Syslog format.	<i>csv</i>	CSV (Comma Separated Values) format.	<i>cef</i>	CEF (Common Event Format) format.	<i>rfc5424</i>	Syslog RFC5424 format.			
	Option	Description													
	<i>default</i>	Syslog format.													
	<i>csv</i>	CSV (Comma Separated Values) format.													
	<i>cef</i>	CEF (Common Event Format) format.													
<i>rfc5424</i>	Syslog RFC5424 format.														
interface	Specify outgoing interface to reach server.	string	Maximum length: 15												
interface-select-method	Specify how to select outgoing interface to reach server.	option	-	auto											
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>auto</i></td><td>Set outgoing interface automatically.</td></tr><tr><td><i>sdwan</i></td><td>Set outgoing interface by SD-WAN or policy routing rules.</td></tr><tr><td><i>specify</i></td><td>Set outgoing interface manually.</td></tr></table>		Option	Description	<i>auto</i>	Set outgoing interface automatically.	<i>sdwan</i>	Set outgoing interface by SD-WAN or policy routing rules.	<i>specify</i>	Set outgoing interface manually.					
	Option	Description													
	<i>auto</i>	Set outgoing interface automatically.													
	<i>sdwan</i>	Set outgoing interface by SD-WAN or policy routing rules.													
<i>specify</i>	Set outgoing interface manually.														
max-log-rate	Syslog maximum log rate in MBps (0 = unlimited).	integer	Minimum value: 0 Maximum value: 100000	0											
mode	Remote syslog logging over UDP/Reliable TCP.	option	-	udp											
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>udp</i></td><td>Enable syslogging over UDP.</td></tr><tr><td><i>legacy-reliable</i></td><td>Enable legacy reliable syslogging by RFC3195 (Reliable Delivery for Syslog).</td></tr><tr><td><i>reliable</i></td><td>Enable reliable syslogging by RFC6587 (Transmission of Syslog Messages over TCP).</td></tr></table>		Option	Description	<i>udp</i>	Enable syslogging over UDP.	<i>legacy-reliable</i>	Enable legacy reliable syslogging by RFC3195 (Reliable Delivery for Syslog).	<i>reliable</i>	Enable reliable syslogging by RFC6587 (Transmission of Syslog Messages over TCP).					
	Option	Description													
	<i>udp</i>	Enable syslogging over UDP.													
	<i>legacy-reliable</i>	Enable legacy reliable syslogging by RFC3195 (Reliable Delivery for Syslog).													
<i>reliable</i>	Enable reliable syslogging by RFC6587 (Transmission of Syslog Messages over TCP).														

Parameter	Description	Type	Size	Default												
port	Server listen port.	integer	Minimum value: 0 Maximum value: 65535	514												
priority	Set log transmission priority.	option	-	default												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>default</td><td>Set Syslog transmission priority to default.</td></tr><tr><td>low</td><td>Set Syslog transmission priority to low.</td></tr></table>	Option	Description	default	Set Syslog transmission priority to default.	low	Set Syslog transmission priority to low.									
Option	Description															
default	Set Syslog transmission priority to default.															
low	Set Syslog transmission priority to low.															
server	Address of remote syslog server.	string	Maximum length: 127													
source-ip	Source IP address of syslog.	string	Maximum length: 63													
ssl-min-proto-version	Minimum supported protocol version for SSL/TLS connections (default is to follow system global setting).	option	-	default												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>default</td><td>Follow system global setting.</td></tr><tr><td>SSLv3</td><td>SSLv3.</td></tr><tr><td>TLSv1</td><td>TLSv1.</td></tr><tr><td>TLSv1-1</td><td>TLSv1.1.</td></tr><tr><td>TLSv1-2</td><td>TLSv1.2.</td></tr></table>	Option	Description	default	Follow system global setting.	SSLv3	SSLv3.	TLSv1	TLSv1.	TLSv1-1	TLSv1.1.	TLSv1-2	TLSv1.2.			
Option	Description															
default	Follow system global setting.															
SSLv3	SSLv3.															
TLSv1	TLSv1.															
TLSv1-1	TLSv1.1.															
TLSv1-2	TLSv1.2.															
status	Enable/disable remote syslog logging.	option	-	disable												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Log to remote syslog server.</td></tr><tr><td>disable</td><td>Do not log to remote syslog server.</td></tr></table>	Option	Description	enable	Log to remote syslog server.	disable	Do not log to remote syslog server.									
Option	Description															
enable	Log to remote syslog server.															
disable	Do not log to remote syslog server.															

config custom-field-name

Parameter	Description	Type	Size	Default
custom	Field custom name [A-Za-z0-9_].	string	Maximum length: 35	

Parameter	Description	Type	Size	Default
id	Entry ID.	integer	Minimum value: 0 Maximum value: 255	0
name	Field name [A-Za-z0-9_].	string	Maximum length: 35	

config log syslogd setting

Global settings for remote syslog server.

```

config log syslogd setting
    Description: Global settings for remote syslog server.
    set certificate {string}
    config custom-field-name
        Description: Custom field name for CEF format logging.
        edit <id>
            set custom {string}
            set name {string}
        next
    end
    set enc-algorithm [high-medium|high|...]
    set facility [kernel|user|...]
    set format [default|csv|...]
    set interface {string}
    set interface-select-method [auto|sdwan|...]
    set max-log-rate {integer}
    set mode [udp|legacy-reliable|...]
    set port {integer}
    set priority [default|low]
    set server {string}
    set source-ip {string}
    set ssl-min-proto-version [default|SSLv3|...]
    set status [enable|disable]
end

```

config log syslogd setting

Parameter	Description	Type	Size	Default
certificate	Certificate used to communicate with Syslog server.	string	Maximum length: 35	
enc-algorithm	Enable/disable reliable syslogging with TLS encryption.	option	-	disable

Parameter	Description	Type	Size	Default																																														
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>high-medium</i></td><td>SSL communication with high and medium encryption algorithms.</td></tr><tr><td><i>high</i></td><td>SSL communication with high encryption algorithms.</td></tr><tr><td><i>low</i></td><td>SSL communication with low encryption algorithms.</td></tr><tr><td><i>disable</i></td><td>Disable SSL communication.</td></tr></table>	Option	Description	<i>high-medium</i>	SSL communication with high and medium encryption algorithms.	<i>high</i>	SSL communication with high encryption algorithms.	<i>low</i>	SSL communication with low encryption algorithms.	<i>disable</i>	Disable SSL communication.																																							
	Option	Description																																																
	<i>high-medium</i>	SSL communication with high and medium encryption algorithms.																																																
	<i>high</i>	SSL communication with high encryption algorithms.																																																
	<i>low</i>	SSL communication with low encryption algorithms.																																																
<i>disable</i>	Disable SSL communication.																																																	
facility	Remote syslog facility.	option	-	local7																																														
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>kernel</i></td><td>Kernel messages.</td></tr><tr><td><i>user</i></td><td>Random user-level messages.</td></tr><tr><td><i>mail</i></td><td>Mail system.</td></tr><tr><td><i>daemon</i></td><td>System daemons.</td></tr><tr><td><i>auth</i></td><td>Security/authorization messages.</td></tr><tr><td><i>syslog</i></td><td>Messages generated internally by syslog.</td></tr><tr><td><i>lpr</i></td><td>Line printer subsystem.</td></tr><tr><td><i>news</i></td><td>Network news subsystem.</td></tr><tr><td><i>uucp</i></td><td>Network news subsystem.</td></tr><tr><td><i>cron</i></td><td>Clock daemon.</td></tr><tr><td><i>authpriv</i></td><td>Security/authorization messages (private).</td></tr><tr><td><i>ftp</i></td><td>FTP daemon.</td></tr><tr><td><i>ntp</i></td><td>NTP daemon.</td></tr><tr><td><i>audit</i></td><td>Log audit.</td></tr><tr><td><i>alert</i></td><td>Log alert.</td></tr><tr><td><i>clock</i></td><td>Clock daemon.</td></tr><tr><td><i>local0</i></td><td>Reserved for local use.</td></tr><tr><td><i>local1</i></td><td>Reserved for local use.</td></tr><tr><td><i>local2</i></td><td>Reserved for local use.</td></tr><tr><td><i>local3</i></td><td>Reserved for local use.</td></tr><tr><td><i>local4</i></td><td>Reserved for local use.</td></tr><tr><td><i>local5</i></td><td>Reserved for local use.</td></tr></table>	Option	Description	<i>kernel</i>	Kernel messages.	<i>user</i>	Random user-level messages.	<i>mail</i>	Mail system.	<i>daemon</i>	System daemons.	<i>auth</i>	Security/authorization messages.	<i>syslog</i>	Messages generated internally by syslog.	<i>lpr</i>	Line printer subsystem.	<i>news</i>	Network news subsystem.	<i>uucp</i>	Network news subsystem.	<i>cron</i>	Clock daemon.	<i>authpriv</i>	Security/authorization messages (private).	<i>ftp</i>	FTP daemon.	<i>ntp</i>	NTP daemon.	<i>audit</i>	Log audit.	<i>alert</i>	Log alert.	<i>clock</i>	Clock daemon.	<i>local0</i>	Reserved for local use.	<i>local1</i>	Reserved for local use.	<i>local2</i>	Reserved for local use.	<i>local3</i>	Reserved for local use.	<i>local4</i>	Reserved for local use.	<i>local5</i>	Reserved for local use.			
	Option	Description																																																
	<i>kernel</i>	Kernel messages.																																																
	<i>user</i>	Random user-level messages.																																																
	<i>mail</i>	Mail system.																																																
	<i>daemon</i>	System daemons.																																																
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<i>local5</i>	Reserved for local use.																																																	

Parameter	Description	Type	Size	Default										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>local6</i></td><td>Reserved for local use.</td></tr><tr><td><i>local7</i></td><td>Reserved for local use.</td></tr></table>	Option	Description	<i>local6</i>	Reserved for local use.	<i>local7</i>	Reserved for local use.							
	Option	Description												
	<i>local6</i>	Reserved for local use.												
<i>local7</i>	Reserved for local use.													
format	Log format.	option	-	default										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>default</i></td><td>Syslog format.</td></tr><tr><td><i>csv</i></td><td>CSV (Comma Separated Values) format.</td></tr><tr><td><i>cef</i></td><td>CEF (Common Event Format) format.</td></tr><tr><td><i>rfc5424</i></td><td>Syslog RFC5424 format.</td></tr></table>	Option	Description	<i>default</i>	Syslog format.	<i>csv</i>	CSV (Comma Separated Values) format.	<i>cef</i>	CEF (Common Event Format) format.	<i>rfc5424</i>	Syslog RFC5424 format.			
	Option	Description												
	<i>default</i>	Syslog format.												
	<i>csv</i>	CSV (Comma Separated Values) format.												
	<i>cef</i>	CEF (Common Event Format) format.												
<i>rfc5424</i>	Syslog RFC5424 format.													
interface	Specify outgoing interface to reach server.	string	Maximum length: 15											
interface-select-method	Specify how to select outgoing interface to reach server.	option	-	auto										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>auto</i></td><td>Set outgoing interface automatically.</td></tr><tr><td><i>sdwan</i></td><td>Set outgoing interface by SD-WAN or policy routing rules.</td></tr><tr><td><i>specify</i></td><td>Set outgoing interface manually.</td></tr></table>	Option	Description	<i>auto</i>	Set outgoing interface automatically.	<i>sdwan</i>	Set outgoing interface by SD-WAN or policy routing rules.	<i>specify</i>	Set outgoing interface manually.					
	Option	Description												
	<i>auto</i>	Set outgoing interface automatically.												
	<i>sdwan</i>	Set outgoing interface by SD-WAN or policy routing rules.												
<i>specify</i>	Set outgoing interface manually.													
max-log-rate	Syslog maximum log rate in MBps (0 = unlimited).	integer	Minimum value: 0 Maximum value: 100000	0										
mode	Remote syslog logging over UDP/Reliable TCP.	option	-	udp										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>udp</i></td><td>Enable syslogging over UDP.</td></tr><tr><td><i>legacy-reliable</i></td><td>Enable legacy reliable syslogging by RFC3195 (Reliable Delivery for Syslog).</td></tr><tr><td><i>reliable</i></td><td>Enable reliable syslogging by RFC6587 (Transmission of Syslog Messages over TCP).</td></tr></table>	Option	Description	<i>udp</i>	Enable syslogging over UDP.	<i>legacy-reliable</i>	Enable legacy reliable syslogging by RFC3195 (Reliable Delivery for Syslog).	<i>reliable</i>	Enable reliable syslogging by RFC6587 (Transmission of Syslog Messages over TCP).					
	Option	Description												
	<i>udp</i>	Enable syslogging over UDP.												
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<i>reliable</i>	Enable reliable syslogging by RFC6587 (Transmission of Syslog Messages over TCP).													

Parameter	Description	Type	Size	Default												
port	Server listen port.	integer	Minimum value: 0 Maximum value: 65535	514												
priority	Set log transmission priority.	option	-	default												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>default</td><td>Set Syslog transmission priority to default.</td></tr><tr><td>low</td><td>Set Syslog transmission priority to low.</td></tr></table>	Option	Description	default	Set Syslog transmission priority to default.	low	Set Syslog transmission priority to low.									
Option	Description															
default	Set Syslog transmission priority to default.															
low	Set Syslog transmission priority to low.															
server	Address of remote syslog server.	string	Maximum length: 127													
source-ip	Source IP address of syslog.	string	Maximum length: 63													
ssl-min-proto-version	Minimum supported protocol version for SSL/TLS connections (default is to follow system global setting).	option	-	default												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>default</td><td>Follow system global setting.</td></tr><tr><td>SSLv3</td><td>SSLv3.</td></tr><tr><td>TLSv1</td><td>TLSv1.</td></tr><tr><td>TLSv1-1</td><td>TLSv1.1.</td></tr><tr><td>TLSv1-2</td><td>TLSv1.2.</td></tr></table>	Option	Description	default	Follow system global setting.	SSLv3	SSLv3.	TLSv1	TLSv1.	TLSv1-1	TLSv1.1.	TLSv1-2	TLSv1.2.			
Option	Description															
default	Follow system global setting.															
SSLv3	SSLv3.															
TLSv1	TLSv1.															
TLSv1-1	TLSv1.1.															
TLSv1-2	TLSv1.2.															
status	Enable/disable remote syslog logging.	option	-	disable												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Log to remote syslog server.</td></tr><tr><td>disable</td><td>Do not log to remote syslog server.</td></tr></table>	Option	Description	enable	Log to remote syslog server.	disable	Do not log to remote syslog server.									
Option	Description															
enable	Log to remote syslog server.															
disable	Do not log to remote syslog server.															

config custom-field-name

Parameter	Description	Type	Size	Default
custom	Field custom name [A-Za-z0-9_].	string	Maximum length: 35	

Parameter	Description	Type	Size	Default
id	Entry ID.	integer	Minimum value: 0 Maximum value: 255	0
name	Field name [A-Za-z0-9_].	string	Maximum length: 35	

config log syslogd2 filter

Filters for remote system server.

```

config log syslogd2 filter
    Description: Filters for remote system server.
    set anomaly [enable|disable]
    set forward-traffic [enable|disable]
    config free-style
        Description: Free style filters.
        edit <id>
            set category [traffic|event|...]
            set filter {string}
            set filter-type [include|exclude]
        next
    end
    set gtp [enable|disable]
    set local-traffic [enable|disable]
    set multicast-traffic [enable|disable]
    set severity [emergency|alert|...]
    set sniffer-traffic [enable|disable]
    set voip [enable|disable]
    set ztna-traffic [enable|disable]
end

```

config log syslogd2 filter

Parameter	Description	Type	Size	Default
anomaly	Enable/disable anomaly logging.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable anomaly logging.		
	<i>disable</i>	Disable anomaly logging.		
forward-traffic	Enable/disable forward traffic logging.	option	-	enable

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>enable</i>	Enable forward traffic logging.		
	<i>disable</i>	Disable forward traffic logging.		
gtp *	Enable/disable GTP messages logging.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable GTP messages logging.		
	<i>disable</i>	Disable GTP messages logging.		
local-traffic	Enable/disable local in or out traffic logging.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable local in or out traffic logging.		
	<i>disable</i>	Disable local in or out traffic logging.		
multicast-traffic	Enable/disable multicast traffic logging.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable multicast traffic logging.		
	<i>disable</i>	Disable multicast traffic logging.		
severity	Lowest severity level to log.	option	-	information
	Option	Description		
	<i>emergency</i>	Emergency level.		
	<i>alert</i>	Alert level.		
	<i>critical</i>	Critical level.		
	<i>error</i>	Error level.		
	<i>warning</i>	Warning level.		
	<i>notification</i>	Notification level.		
	<i>information</i>	Information level.		
	<i>debug</i>	Debug level.		
sniffer-traffic	Enable/disable sniffer traffic logging.	option	-	enable

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>enable</i>	Enable sniffer traffic logging.		
	<i>disable</i>	Disable sniffer traffic logging.		
voip	Enable/disable VoIP logging.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable VoIP logging.		
	<i>disable</i>	Disable VoIP logging.		
ztna-traffic	Enable/disable ztna traffic logging.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable ztna traffic logging.		
	<i>disable</i>	Disable ztna traffic logging.		

* This parameter may not exist in some models.

config free-style

Parameter	Description	Type	Size	Default
category	Log category.	option	-	traffic
	Option	Description		
	<i>traffic</i>	Traffic log.		
	<i>event</i>	Event log.		
	<i>virus</i>	Antivirus log.		
	<i>webfilter</i>	Web filter log.		
	<i>attack</i>	Attack log.		
	<i>spam</i>	Antispam log.		
	<i>anomaly</i>	Anomaly log.		
	<i>voip</i>	VoIP log.		
	<i>dlp</i>	DLP log.		
	<i>app-ctrl</i>	Application control log.		
	<i>waf</i>	Web application firewall log.		

Parameter	Description	Type	Size	Default												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>dns</i></td><td>DNS detail log.</td></tr><tr><td><i>ssh</i></td><td>SSH log.</td></tr><tr><td><i>ssl</i></td><td>SSL log.</td></tr><tr><td><i>file-filter</i></td><td>File filter log.</td></tr><tr><td><i>icap</i></td><td>ICAP log.</td></tr></table>	Option	Description	<i>dns</i>	DNS detail log.	<i>ssh</i>	SSH log.	<i>ssl</i>	SSL log.	<i>file-filter</i>	File filter log.	<i>icap</i>	ICAP log.			
	Option	Description														
	<i>dns</i>	DNS detail log.														
	<i>ssh</i>	SSH log.														
	<i>ssl</i>	SSL log.														
	<i>file-filter</i>	File filter log.														
<i>icap</i>	ICAP log.															
filter	Free style filter string.	string	Maximum length: 1023													
filter-type	Include/exclude logs that match the filter.	option	-	include												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>include</i></td><td>Include logs that match the filter.</td></tr><tr><td><i>exclude</i></td><td>Exclude logs that match the filter.</td></tr></table>	Option	Description	<i>include</i>	Include logs that match the filter.	<i>exclude</i>	Exclude logs that match the filter.									
	Option	Description														
	<i>include</i>	Include logs that match the filter.														
<i>exclude</i>	Exclude logs that match the filter.															
id	Entry ID.	integer	Minimum value: 0 0 Maximum value: 4294967295													

config log syslogd2 override-filter

Override filters for remote system server.

```
config log syslogd2 override-filter
  Description: Override filters for remote system server.
  set anomaly [enable|disable]
  set forward-traffic [enable|disable]
  config free-style
    Description: Free style filters.
    edit <id>
      set category [traffic|event|...]
      set filter {string}
      set filter-type [include|exclude]
    next
  end
  set gtp [enable|disable]
  set local-traffic [enable|disable]
  set multicast-traffic [enable|disable]
  set severity [emergency|alert|...]
  set sniffer-traffic [enable|disable]
  set voip [enable|disable]
```

```

set ztna-traffic [enable|disable]
end

```

config log syslogd2 override-filter

Parameter	Description	Type	Size	Default
anomaly	Enable/disable anomaly logging.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable anomaly logging.		
	<i>disable</i>	Disable anomaly logging.		
forward-traffic	Enable/disable forward traffic logging.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable forward traffic logging.		
	<i>disable</i>	Disable forward traffic logging.		
gtp *	Enable/disable GTP messages logging.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable GTP messages logging.		
	<i>disable</i>	Disable GTP messages logging.		
local-traffic	Enable/disable local in or out traffic logging.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable local in or out traffic logging.		
	<i>disable</i>	Disable local in or out traffic logging.		
multicast-traffic	Enable/disable multicast traffic logging.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable multicast traffic logging.		
	<i>disable</i>	Disable multicast traffic logging.		
severity	Lowest severity level to log.	option	-	information
	Option	Description		
	<i>emergency</i>	Emergency level.		

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>alert</i>	Alert level.		
	<i>critical</i>	Critical level.		
	<i>error</i>	Error level.		
	<i>warning</i>	Warning level.		
	<i>notification</i>	Notification level.		
	<i>information</i>	Information level.		
	<i>debug</i>	Debug level.		
sniffer-traffic	Enable/disable sniffer traffic logging.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable sniffer traffic logging.		
	<i>disable</i>	Disable sniffer traffic logging.		
voip	Enable/disable VoIP logging.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable VoIP logging.		
	<i>disable</i>	Disable VoIP logging.		
ztna-traffic	Enable/disable ztna traffic logging.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable ztna traffic logging.		
	<i>disable</i>	Disable ztna traffic logging.		

* This parameter may not exist in some models.

config free-style

Parameter	Description	Type	Size	Default
category	Log category.	option	-	traffic
	Option	Description		
	<i>traffic</i>	Traffic log.		
	<i>event</i>	Event log.		

Parameter	Description	Type	Size	Default																														
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>virus</i></td><td>Antivirus log.</td></tr><tr><td><i>webfilter</i></td><td>Web filter log.</td></tr><tr><td><i>attack</i></td><td>Attack log.</td></tr><tr><td><i>spam</i></td><td>Antispam log.</td></tr><tr><td><i>anomaly</i></td><td>Anomaly log.</td></tr><tr><td><i>voip</i></td><td>VoIP log.</td></tr><tr><td><i>dlp</i></td><td>DLP log.</td></tr><tr><td><i>app-ctrl</i></td><td>Application control log.</td></tr><tr><td><i>waf</i></td><td>Web application firewall log.</td></tr><tr><td><i>dns</i></td><td>DNS detail log.</td></tr><tr><td><i>ssh</i></td><td>SSH log.</td></tr><tr><td><i>ssl</i></td><td>SSL log.</td></tr><tr><td><i>file-filter</i></td><td>File filter log.</td></tr><tr><td><i>icap</i></td><td>ICAP log.</td></tr></table>	Option	Description	<i>virus</i>	Antivirus log.	<i>webfilter</i>	Web filter log.	<i>attack</i>	Attack log.	<i>spam</i>	Antispam log.	<i>anomaly</i>	Anomaly log.	<i>voip</i>	VoIP log.	<i>dlp</i>	DLP log.	<i>app-ctrl</i>	Application control log.	<i>waf</i>	Web application firewall log.	<i>dns</i>	DNS detail log.	<i>ssh</i>	SSH log.	<i>ssl</i>	SSL log.	<i>file-filter</i>	File filter log.	<i>icap</i>	ICAP log.			
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<i>icap</i>	ICAP log.																																	
filter	Free style filter string.	string	Maximum length: 1023																															
filter-type	Include/exclude logs that match the filter.	option	-	include																														
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	<i>include</i>	Include logs that match the filter.																																
<i>exclude</i>	Exclude logs that match the filter.																																	
id	Entry ID.	integer	Minimum value: 0 0 Maximum value: 4294967295																															

config log syslogd2 override-setting

Override settings for remote syslog server.

```
config log syslogd2 override-setting
  Description: Override settings for remote syslog server.
  set certificate {string}
  config custom-field-name
```

```

Description: Custom field name for CEF format logging.
edit <id>
    set custom {string}
    set name {string}
next
end
set enc-algorithm [high-medium|high|...]
set facility [kernel|user|...]
set format [default|csv|...]
set interface {string}
set interface-select-method [auto|sdwan|...]
set max-log-rate {integer}
set mode [udp|legacy-reliable|...]
set port {integer}
set priority [default|low]
set server {string}
set source-ip {string}
set ssl-min-proto-version [default|SSLv3|...]
set status [enable|disable]
end

```

config log syslogd2 override-setting

Parameter	Description	Type	Size	Default
certificate	Certificate used to communicate with Syslog server.	string	Maximum length: 35	
enc-algorithm	Enable/disable reliable syslogging with TLS encryption.	option	-	disable
	Option		Description	
	high-medium	SSL communication with high and medium encryption algorithms.		
	high	SSL communication with high encryption algorithms.		
	low	SSL communication with low encryption algorithms.		
	disable	Disable SSL communication.		
facility	Remote syslog facility.	option	-	local7
	Option		Description	
	kernel	Kernel messages.		
	user	Random user-level messages.		
	mail	Mail system.		
	daemon	System daemons.		

Parameter	Description	Type	Size	Default																																										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>auth</i></td><td>Security/authorization messages.</td></tr><tr><td><i>syslog</i></td><td>Messages generated internally by syslog.</td></tr><tr><td><i>lpr</i></td><td>Line printer subsystem.</td></tr><tr><td><i>news</i></td><td>Network news subsystem.</td></tr><tr><td><i>uucp</i></td><td>Network news subsystem.</td></tr><tr><td><i>cron</i></td><td>Clock daemon.</td></tr><tr><td><i>authpriv</i></td><td>Security/authorization messages (private).</td></tr><tr><td><i>ftp</i></td><td>FTP daemon.</td></tr><tr><td><i>ntp</i></td><td>NTP daemon.</td></tr><tr><td><i>audit</i></td><td>Log audit.</td></tr><tr><td><i>alert</i></td><td>Log alert.</td></tr><tr><td><i>clock</i></td><td>Clock daemon.</td></tr><tr><td><i>local0</i></td><td>Reserved for local use.</td></tr><tr><td><i>local1</i></td><td>Reserved for local use.</td></tr><tr><td><i>local2</i></td><td>Reserved for local use.</td></tr><tr><td><i>local3</i></td><td>Reserved for local use.</td></tr><tr><td><i>local4</i></td><td>Reserved for local use.</td></tr><tr><td><i>local5</i></td><td>Reserved for local use.</td></tr><tr><td><i>local6</i></td><td>Reserved for local use.</td></tr><tr><td><i>local7</i></td><td>Reserved for local use.</td></tr></table>	Option	Description	<i>auth</i>	Security/authorization messages.	<i>syslog</i>	Messages generated internally by syslog.	<i>lpr</i>	Line printer subsystem.	<i>news</i>	Network news subsystem.	<i>uucp</i>	Network news subsystem.	<i>cron</i>	Clock daemon.	<i>authpriv</i>	Security/authorization messages (private).	<i>ftp</i>	FTP daemon.	<i>ntp</i>	NTP daemon.	<i>audit</i>	Log audit.	<i>alert</i>	Log alert.	<i>clock</i>	Clock daemon.	<i>local0</i>	Reserved for local use.	<i>local1</i>	Reserved for local use.	<i>local2</i>	Reserved for local use.	<i>local3</i>	Reserved for local use.	<i>local4</i>	Reserved for local use.	<i>local5</i>	Reserved for local use.	<i>local6</i>	Reserved for local use.	<i>local7</i>	Reserved for local use.			
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	<i>local6</i>	Reserved for local use.																																												
<i>local7</i>	Reserved for local use.																																													
format	Log format.	option	-	default																																										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>default</i></td><td>Syslog format.</td></tr><tr><td><i>csv</i></td><td>CSV (Comma Separated Values) format.</td></tr><tr><td><i>cef</i></td><td>CEF (Common Event Format) format.</td></tr><tr><td><i>rfc5424</i></td><td>Syslog RFC5424 format.</td></tr></table>	Option	Description	<i>default</i>	Syslog format.	<i>csv</i>	CSV (Comma Separated Values) format.	<i>cef</i>	CEF (Common Event Format) format.	<i>rfc5424</i>	Syslog RFC5424 format.																																			
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<i>rfc5424</i>	Syslog RFC5424 format.																																													
interface	Specify outgoing interface to reach server.	string	Maximum length: 15																																											

Parameter	Description	Type	Size	Default
interface-select-method	Specify how to select outgoing interface to reach server.	option	-	auto
	Option	Description		
	<i>auto</i>	Set outgoing interface automatically.		
	<i>sdwan</i>	Set outgoing interface by SD-WAN or policy routing rules.		
	<i>specify</i>	Set outgoing interface manually.		
max-log-rate	Syslog maximum log rate in MBps (0 = unlimited).	integer	Minimum value: 0 Maximum value: 100000	0
mode	Remote syslog logging over UDP/Reliable TCP.	option	-	udp
	Option	Description		
	<i>udp</i>	Enable syslogging over UDP.		
	<i>legacy-reliable</i>	Enable legacy reliable syslogging by RFC3195 (Reliable Delivery for Syslog).		
	<i>reliable</i>	Enable reliable syslogging by RFC6587 (Transmission of Syslog Messages over TCP).		
port	Server listen port.	integer	Minimum value: 0 Maximum value: 65535	514
priority	Set log transmission priority.	option	-	default
	Option	Description		
	<i>default</i>	Set Syslog transmission priority to default.		
	<i>low</i>	Set Syslog transmission priority to low.		
server	Address of remote syslog server.	string	Maximum length: 127	
source-ip	Source IP address of syslog.	string	Maximum length: 63	
ssl-min-proto-version	Minimum supported protocol version for SSL/TLS connections (default is to follow system global setting).	option	-	default

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>default</i>	Follow system global setting.		
	<i>SSLv3</i>	SSLv3.		
	<i>TLSv1</i>	TLSv1.		
	<i>TLSv1-1</i>	TLSv1.1.		
	<i>TLSv1-2</i>	TLSv1.2.		
status	Enable/disable remote syslog logging.	option	-	disable
	Option	Description		
	<i>enable</i>	Log to remote syslog server.		
	<i>disable</i>	Do not log to remote syslog server.		

config custom-field-name

Parameter	Description	Type	Size	Default
custom	Field custom name [A-Za-z0-9_].	string	Maximum length: 35	
id	Entry ID.	integer	Minimum value: 0 Maximum value: 255	0
name	Field name [A-Za-z0-9_].	string	Maximum length: 35	

config log syslogd2 setting

Global settings for remote syslog server.

```

config log syslogd2 setting
  Description: Global settings for remote syslog server.
  set certificate {string}
  config custom-field-name
    Description: Custom field name for CEF format logging.
    edit <id>
      set custom {string}
      set name {string}
    next
  end
  set enc-algorithm [high-medium|high|...]

```

```

set facility [kernel|user|...]
set format [default|csv|...]
set interface {string}
set interface-select-method [auto|sdwan|...]
set max-log-rate {integer}
set mode [udp|legacy-reliable|...]
set port {integer}
set priority [default|low]
set server {string}
set source-ip {string}
set ssl-min-proto-version [default|SSLv3|...]
set status [enable|disable]
end

```

config log syslogd2 setting

Parameter	Description	Type	Size	Default																		
certificate	Certificate used to communicate with Syslog server.	string	Maximum length: 35																			
enc-algorithm	Enable/disable reliable syslogging with TLS encryption.	option	-	disable																		
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>high-medium</td><td>SSL communication with high and medium encryption algorithms.</td></tr><tr><td>high</td><td>SSL communication with high encryption algorithms.</td></tr><tr><td>low</td><td>SSL communication with low encryption algorithms.</td></tr><tr><td>disable</td><td>Disable SSL communication.</td></tr></table>	Option	Description	high-medium	SSL communication with high and medium encryption algorithms.	high	SSL communication with high encryption algorithms.	low	SSL communication with low encryption algorithms.	disable	Disable SSL communication.											
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facility	Remote syslog facility.	option	-	local7																		
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interface	Specify outgoing interface to reach server.	string	Maximum length: 15																																			
interface-select-method	Specify how to select outgoing interface to reach server.	option	-	auto																																		
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Parameter	Description	Type	Size	Default								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>sdwan</i></td><td>Set outgoing interface by SD-WAN or policy routing rules.</td></tr><tr><td><i>specify</i></td><td>Set outgoing interface manually.</td></tr></table>	Option	Description	<i>sdwan</i>	Set outgoing interface by SD-WAN or policy routing rules.	<i>specify</i>	Set outgoing interface manually.					
Option	Description											
<i>sdwan</i>	Set outgoing interface by SD-WAN or policy routing rules.											
<i>specify</i>	Set outgoing interface manually.											
max-log-rate	Syslog maximum log rate in MBps (0 = unlimited).	integer	Minimum value: 0 Maximum value: 100000	0								
mode	Remote syslog logging over UDP/Reliable TCP.	option	-	udp								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>udp</i></td><td>Enable syslogging over UDP.</td></tr><tr><td><i>legacy-reliable</i></td><td>Enable legacy reliable syslogging by RFC3195 (Reliable Delivery for Syslog).</td></tr><tr><td><i>reliable</i></td><td>Enable reliable syslogging by RFC6587 (Transmission of Syslog Messages over TCP).</td></tr></table>	Option	Description	<i>udp</i>	Enable syslogging over UDP.	<i>legacy-reliable</i>	Enable legacy reliable syslogging by RFC3195 (Reliable Delivery for Syslog).	<i>reliable</i>	Enable reliable syslogging by RFC6587 (Transmission of Syslog Messages over TCP).			
Option	Description											
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<i>legacy-reliable</i>	Enable legacy reliable syslogging by RFC3195 (Reliable Delivery for Syslog).											
<i>reliable</i>	Enable reliable syslogging by RFC6587 (Transmission of Syslog Messages over TCP).											
port	Server listen port.	integer	Minimum value: 0 Maximum value: 65535	514								
priority	Set log transmission priority.	option	-	default								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>default</i></td><td>Set Syslog transmission priority to default.</td></tr><tr><td><i>low</i></td><td>Set Syslog transmission priority to low.</td></tr></table>	Option	Description	<i>default</i>	Set Syslog transmission priority to default.	<i>low</i>	Set Syslog transmission priority to low.					
Option	Description											
<i>default</i>	Set Syslog transmission priority to default.											
<i>low</i>	Set Syslog transmission priority to low.											
server	Address of remote syslog server.	string	Maximum length: 127									
source-ip	Source IP address of syslog.	string	Maximum length: 63									
ssl-min-proto-version	Minimum supported protocol version for SSL/TLS connections (default is to follow system global setting).	option	-	default								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>default</i></td><td>Follow system global setting.</td></tr></table>	Option	Description	<i>default</i>	Follow system global setting.							
Option	Description											
<i>default</i>	Follow system global setting.											

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>SSLv3</i>	SSLv3.		
	<i>TLSv1</i>	TLSv1.		
	<i>TLSv1-1</i>	TLSv1.1.		
	<i>TLSv1-2</i>	TLSv1.2.		
status	Enable/disable remote syslog logging.	option	-	disable
	Option	Description		
	<i>enable</i>	Log to remote syslog server.		
	<i>disable</i>	Do not log to remote syslog server.		

config custom-field-name

Parameter	Description	Type	Size	Default
custom	Field custom name [A-Za-z0-9_].	string	Maximum length: 35	
id	Entry ID.	integer	Minimum value: 0 Maximum value: 255	0
name	Field name [A-Za-z0-9_].	string	Maximum length: 35	

config log syslogd3 filter

Filters for remote system server.

```

config log syslogd3 filter
    Description: Filters for remote system server.
    set anomaly [enable|disable]
    set forward-traffic [enable|disable]
    config free-style
        Description: Free style filters.
        edit <id>
            set category [traffic|event|...]
            set filter {string}
            set filter-type [include|exclude]
        next
    end

```

```

set gtp [enable|disable]
set local-traffic [enable|disable]
set multicast-traffic [enable|disable]
set severity [emergency|alert|...]
set sniffer-traffic [enable|disable]
set voip [enable|disable]
set ztna-traffic [enable|disable]
end

```

config log syslogd3 filter

Parameter	Description	Type	Size	Default						
anomaly	Enable/disable anomaly logging.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable anomaly logging.</td></tr><tr><td><i>disable</i></td><td>Disable anomaly logging.</td></tr></table>	Option	Description	<i>enable</i>	Enable anomaly logging.	<i>disable</i>	Disable anomaly logging.			
Option	Description									
<i>enable</i>	Enable anomaly logging.									
<i>disable</i>	Disable anomaly logging.									
forward-traffic	Enable/disable forward traffic logging.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable forward traffic logging.</td></tr><tr><td><i>disable</i></td><td>Disable forward traffic logging.</td></tr></table>	Option	Description	<i>enable</i>	Enable forward traffic logging.	<i>disable</i>	Disable forward traffic logging.			
Option	Description									
<i>enable</i>	Enable forward traffic logging.									
<i>disable</i>	Disable forward traffic logging.									
gtp *	Enable/disable GTP messages logging.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable GTP messages logging.</td></tr><tr><td><i>disable</i></td><td>Disable GTP messages logging.</td></tr></table>	Option	Description	<i>enable</i>	Enable GTP messages logging.	<i>disable</i>	Disable GTP messages logging.			
Option	Description									
<i>enable</i>	Enable GTP messages logging.									
<i>disable</i>	Disable GTP messages logging.									
local-traffic	Enable/disable local in or out traffic logging.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable local in or out traffic logging.</td></tr><tr><td><i>disable</i></td><td>Disable local in or out traffic logging.</td></tr></table>	Option	Description	<i>enable</i>	Enable local in or out traffic logging.	<i>disable</i>	Disable local in or out traffic logging.			
Option	Description									
<i>enable</i>	Enable local in or out traffic logging.									
<i>disable</i>	Disable local in or out traffic logging.									
multicast-traffic	Enable/disable multicast traffic logging.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable multicast traffic logging.</td></tr><tr><td><i>disable</i></td><td>Disable multicast traffic logging.</td></tr></table>	Option	Description	<i>enable</i>	Enable multicast traffic logging.	<i>disable</i>	Disable multicast traffic logging.			
Option	Description									
<i>enable</i>	Enable multicast traffic logging.									
<i>disable</i>	Disable multicast traffic logging.									

Parameter	Description	Type	Size	Default
severity	Lowest severity level to log.	option	-	information
	Option	Description		
	<i>emergency</i>	Emergency level.		
	<i>alert</i>	Alert level.		
	<i>critical</i>	Critical level.		
	<i>error</i>	Error level.		
	<i>warning</i>	Warning level.		
	<i>notification</i>	Notification level.		
	<i>information</i>	Information level.		
	<i>debug</i>	Debug level.		
sniffer-traffic	Enable/disable sniffer traffic logging.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable sniffer traffic logging.		
	<i>disable</i>	Disable sniffer traffic logging.		
voip	Enable/disable VoIP logging.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable VoIP logging.		
	<i>disable</i>	Disable VoIP logging.		
ztna-traffic	Enable/disable ztna traffic logging.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable ztna traffic logging.		
	<i>disable</i>	Disable ztna traffic logging.		

* This parameter may not exist in some models.

config free-style

Parameter	Description	Type	Size	Default
category	Log category.	option	-	traffic

Parameter	Description	Type	Size	Default																																		
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>traffic</td><td>Traffic log.</td></tr><tr><td>event</td><td>Event log.</td></tr><tr><td>virus</td><td>Antivirus log.</td></tr><tr><td>webfilter</td><td>Web filter log.</td></tr><tr><td>attack</td><td>Attack log.</td></tr><tr><td>spam</td><td>Antispam log.</td></tr><tr><td>anomaly</td><td>Anomaly log.</td></tr><tr><td>voip</td><td>VoIP log.</td></tr><tr><td>dlp</td><td>DLP log.</td></tr><tr><td>app-ctrl</td><td>Application control log.</td></tr><tr><td>waf</td><td>Web application firewall log.</td></tr><tr><td>dns</td><td>DNS detail log.</td></tr><tr><td>ssh</td><td>SSH log.</td></tr><tr><td>ssl</td><td>SSL log.</td></tr><tr><td>file-filter</td><td>File filter log.</td></tr><tr><td>icap</td><td>ICAP log.</td></tr></table>	Option	Description	traffic	Traffic log.	event	Event log.	virus	Antivirus log.	webfilter	Web filter log.	attack	Attack log.	spam	Antispam log.	anomaly	Anomaly log.	voip	VoIP log.	dlp	DLP log.	app-ctrl	Application control log.	waf	Web application firewall log.	dns	DNS detail log.	ssh	SSH log.	ssl	SSL log.	file-filter	File filter log.	icap	ICAP log.			
	Option	Description																																				
	traffic	Traffic log.																																				
	event	Event log.																																				
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	dns	DNS detail log.																																				
	ssh	SSH log.																																				
	ssl	SSL log.																																				
	file-filter	File filter log.																																				
icap	ICAP log.																																					
filter	Free style filter string.	string	Maximum length: 1023																																			
filter-type	Include/exclude logs that match the filter.	option	-	include																																		
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>include</td><td>Include logs that match the filter.</td></tr><tr><td>exclude</td><td>Exclude logs that match the filter.</td></tr></table>	Option	Description	include	Include logs that match the filter.	exclude	Exclude logs that match the filter.																															
	Option	Description																																				
	include	Include logs that match the filter.																																				
exclude	Exclude logs that match the filter.																																					
id	Entry ID.	integer	Minimum value: 0 0 Maximum value: 4294967295																																			

config log syslogd3 override-filter

Override filters for remote system server.

```

config log syslogd3 override-filter
    Description: Override filters for remote system server.
    set anomaly [enable|disable]
    set forward-traffic [enable|disable]
    config free-style
        Description: Free style filters.
        edit <id>
            set category [traffic|event|...]
            set filter {string}
            set filter-type [include|exclude]
        next
    end
    set gtp [enable|disable]
    set local-traffic [enable|disable]
    set multicast-traffic [enable|disable]
    set severity [emergency|alert|...]
    set sniffer-traffic [enable|disable]
    set voip [enable|disable]
    set ztna-traffic [enable|disable]
end

```

config log syslogd3 override-filter

Parameter	Description	Type	Size	Default						
anomaly	Enable/disable anomaly logging.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable anomaly logging.</td></tr><tr><td><i>disable</i></td><td>Disable anomaly logging.</td></tr></table>	Option	Description	<i>enable</i>	Enable anomaly logging.	<i>disable</i>	Disable anomaly logging.			
Option	Description									
<i>enable</i>	Enable anomaly logging.									
<i>disable</i>	Disable anomaly logging.									
forward-traffic	Enable/disable forward traffic logging.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable forward traffic logging.</td></tr><tr><td><i>disable</i></td><td>Disable forward traffic logging.</td></tr></table>	Option	Description	<i>enable</i>	Enable forward traffic logging.	<i>disable</i>	Disable forward traffic logging.			
Option	Description									
<i>enable</i>	Enable forward traffic logging.									
<i>disable</i>	Disable forward traffic logging.									
gtp *	Enable/disable GTP messages logging.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable GTP messages logging.</td></tr><tr><td><i>disable</i></td><td>Disable GTP messages logging.</td></tr></table>	Option	Description	<i>enable</i>	Enable GTP messages logging.	<i>disable</i>	Disable GTP messages logging.			
Option	Description									
<i>enable</i>	Enable GTP messages logging.									
<i>disable</i>	Disable GTP messages logging.									
local-traffic	Enable/disable local in or out traffic logging.	option	-	enable						

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>enable</i>	Enable local in or out traffic logging.		
	<i>disable</i>	Disable local in or out traffic logging.		
multicast-traffic	Enable/disable multicast traffic logging.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable multicast traffic logging.		
	<i>disable</i>	Disable multicast traffic logging.		
severity	Lowest severity level to log.	option	-	information
	Option	Description		
	<i>emergency</i>	Emergency level.		
	<i>alert</i>	Alert level.		
	<i>critical</i>	Critical level.		
	<i>error</i>	Error level.		
	<i>warning</i>	Warning level.		
	<i>notification</i>	Notification level.		
	<i>information</i>	Information level.		
	<i>debug</i>	Debug level.		
sniffer-traffic	Enable/disable sniffer traffic logging.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable sniffer traffic logging.		
	<i>disable</i>	Disable sniffer traffic logging.		
voip	Enable/disable VoIP logging.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable VoIP logging.		
	<i>disable</i>	Disable VoIP logging.		
ztna-traffic	Enable/disable ztna traffic logging.	option	-	enable

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>enable</i>	Enable ztna traffic logging.		
	<i>disable</i>	Disable ztna traffic logging.		

* This parameter may not exist in some models.

config free-style

Parameter	Description	Type	Size	Default
category	Log category.	option	-	traffic
	Option	Description		
	<i>traffic</i>	Traffic log.		
	<i>event</i>	Event log.		
	<i>virus</i>	Antivirus log.		
	<i>webfilter</i>	Web filter log.		
	<i>attack</i>	Attack log.		
	<i>spam</i>	Antispam log.		
	<i>anomaly</i>	Anomaly log.		
	<i>voip</i>	VoIP log.		
	<i>dlp</i>	DLP log.		
	<i>app-ctrl</i>	Application control log.		
	<i>waf</i>	Web application firewall log.		
	<i>dns</i>	DNS detail log.		
	<i>ssh</i>	SSH log.		
	<i>ssl</i>	SSL log.		
	<i>file-filter</i>	File filter log.		
	<i>icap</i>	ICAP log.		
filter	Free style filter string.	string	Maximum length: 1023	
filter-type	Include/exclude logs that match the filter.	option	-	include

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>include</i>	Include logs that match the filter.		
	<i>exclude</i>	Exclude logs that match the filter.		
id	Entry ID.	integer	Minimum value: 0 Maximum value: 4294967295	

config log syslogd3 override-setting

Override settings for remote syslog server.

```

config log syslogd3 override-setting
    Description: Override settings for remote syslog server.
    set certificate {string}
    config custom-field-name
        Description: Custom field name for CEF format logging.
        edit <id>
            set custom {string}
            set name {string}
        next
    end
    set enc-algorithm [high-medium|high|...]
    set facility [kernel|user|...]
    set format [default|csv|...]
    set interface {string}
    set interface-select-method [auto|sdwan|...]
    set max-log-rate {integer}
    set mode [udp|legacy-reliable|...]
    set port {integer}
    set priority [default|low]
    set server {string}
    set source-ip {string}
    set ssl-min-proto-version [default|SSLv3|...]
    set status [enable|disable]
end

```

config log syslogd3 override-setting

Parameter	Description	Type	Size	Default
certificate	Certificate used to communicate with Syslog server.	string	Maximum length: 35	

Parameter	Description	Type	Size	Default
enc-algorithm	Enable/disable reliable syslogging with TLS encryption.	option	-	disable
	Option	Description		
	<i>high-medium</i>	SSL communication with high and medium encryption algorithms.		
	<i>high</i>	SSL communication with high encryption algorithms.		
	<i>low</i>	SSL communication with low encryption algorithms.		
	<i>disable</i>	Disable SSL communication.		
facility	Remote syslog facility.	option	-	local7
	Option	Description		
	<i>kernel</i>	Kernel messages.		
	<i>user</i>	Random user-level messages.		
	<i>mail</i>	Mail system.		
	<i>daemon</i>	System daemons.		
	<i>auth</i>	Security/authorization messages.		
	<i>syslog</i>	Messages generated internally by syslog.		
	<i>lpr</i>	Line printer subsystem.		
	<i>news</i>	Network news subsystem.		
	<i>uucp</i>	Network news subsystem.		
	<i>cron</i>	Clock daemon.		
	<i>authpriv</i>	Security/authorization messages (private).		
	<i>ftp</i>	FTP daemon.		
	<i>ntp</i>	NTP daemon.		
	<i>audit</i>	Log audit.		
	<i>alert</i>	Log alert.		
	<i>clock</i>	Clock daemon.		
	<i>local0</i>	Reserved for local use.		
	<i>local1</i>	Reserved for local use.		
	<i>local2</i>	Reserved for local use.		
	<i>local3</i>	Reserved for local use.		

Parameter	Description	Type	Size	Default											
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>local4</i></td><td>Reserved for local use.</td></tr><tr><td><i>local5</i></td><td>Reserved for local use.</td></tr><tr><td><i>local6</i></td><td>Reserved for local use.</td></tr><tr><td><i>local7</i></td><td>Reserved for local use.</td></tr></table>		Option	Description	<i>local4</i>	Reserved for local use.	<i>local5</i>	Reserved for local use.	<i>local6</i>	Reserved for local use.	<i>local7</i>	Reserved for local use.			
	Option	Description													
	<i>local4</i>	Reserved for local use.													
	<i>local5</i>	Reserved for local use.													
	<i>local6</i>	Reserved for local use.													
<i>local7</i>	Reserved for local use.														
format	Log format.	option	-	default											
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>default</i></td><td>Syslog format.</td></tr><tr><td><i>csv</i></td><td>CSV (Comma Separated Values) format.</td></tr><tr><td><i>cef</i></td><td>CEF (Common Event Format) format.</td></tr><tr><td><i>rfc5424</i></td><td>Syslog RFC5424 format.</td></tr></table>		Option	Description	<i>default</i>	Syslog format.	<i>csv</i>	CSV (Comma Separated Values) format.	<i>cef</i>	CEF (Common Event Format) format.	<i>rfc5424</i>	Syslog RFC5424 format.			
	Option	Description													
	<i>default</i>	Syslog format.													
	<i>csv</i>	CSV (Comma Separated Values) format.													
	<i>cef</i>	CEF (Common Event Format) format.													
<i>rfc5424</i>	Syslog RFC5424 format.														
interface	Specify outgoing interface to reach server.	string	Maximum length: 15												
interface-select-method	Specify how to select outgoing interface to reach server.	option	-	auto											
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>auto</i></td><td>Set outgoing interface automatically.</td></tr><tr><td><i>sdwan</i></td><td>Set outgoing interface by SD-WAN or policy routing rules.</td></tr><tr><td><i>specify</i></td><td>Set outgoing interface manually.</td></tr></table>		Option	Description	<i>auto</i>	Set outgoing interface automatically.	<i>sdwan</i>	Set outgoing interface by SD-WAN or policy routing rules.	<i>specify</i>	Set outgoing interface manually.					
	Option	Description													
	<i>auto</i>	Set outgoing interface automatically.													
	<i>sdwan</i>	Set outgoing interface by SD-WAN or policy routing rules.													
<i>specify</i>	Set outgoing interface manually.														
max-log-rate	Syslog maximum log rate in MBps (0 = unlimited).	integer	Minimum value: 0 Maximum value: 100000	0											
mode	Remote syslog logging over UDP/Reliable TCP.	option	-	udp											
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>udp</i></td><td>Enable syslogging over UDP.</td></tr><tr><td><i>legacy-reliable</i></td><td>Enable legacy reliable syslogging by RFC3195 (Reliable Delivery for Syslog).</td></tr><tr><td><i>reliable</i></td><td>Enable reliable syslogging by RFC6587 (Transmission of Syslog Messages over TCP).</td></tr></table>		Option	Description	<i>udp</i>	Enable syslogging over UDP.	<i>legacy-reliable</i>	Enable legacy reliable syslogging by RFC3195 (Reliable Delivery for Syslog).	<i>reliable</i>	Enable reliable syslogging by RFC6587 (Transmission of Syslog Messages over TCP).					
	Option	Description													
	<i>udp</i>	Enable syslogging over UDP.													
	<i>legacy-reliable</i>	Enable legacy reliable syslogging by RFC3195 (Reliable Delivery for Syslog).													
<i>reliable</i>	Enable reliable syslogging by RFC6587 (Transmission of Syslog Messages over TCP).														

Parameter	Description	Type	Size	Default												
port	Server listen port.	integer	Minimum value: 0 Maximum value: 65535	514												
priority	Set log transmission priority.	option	-	default												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>default</td><td>Set Syslog transmission priority to default.</td></tr><tr><td>low</td><td>Set Syslog transmission priority to low.</td></tr></table>	Option	Description	default	Set Syslog transmission priority to default.	low	Set Syslog transmission priority to low.									
Option	Description															
default	Set Syslog transmission priority to default.															
low	Set Syslog transmission priority to low.															
server	Address of remote syslog server.	string	Maximum length: 127													
source-ip	Source IP address of syslog.	string	Maximum length: 63													
ssl-min-proto-version	Minimum supported protocol version for SSL/TLS connections (default is to follow system global setting).	option	-	default												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>default</td><td>Follow system global setting.</td></tr><tr><td>SSLv3</td><td>SSLv3.</td></tr><tr><td>TLSv1</td><td>TLSv1.</td></tr><tr><td>TLSv1-1</td><td>TLSv1.1.</td></tr><tr><td>TLSv1-2</td><td>TLSv1.2.</td></tr></table>	Option	Description	default	Follow system global setting.	SSLv3	SSLv3.	TLSv1	TLSv1.	TLSv1-1	TLSv1.1.	TLSv1-2	TLSv1.2.			
Option	Description															
default	Follow system global setting.															
SSLv3	SSLv3.															
TLSv1	TLSv1.															
TLSv1-1	TLSv1.1.															
TLSv1-2	TLSv1.2.															
status	Enable/disable remote syslog logging.	option	-	disable												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Log to remote syslog server.</td></tr><tr><td>disable</td><td>Do not log to remote syslog server.</td></tr></table>	Option	Description	enable	Log to remote syslog server.	disable	Do not log to remote syslog server.									
Option	Description															
enable	Log to remote syslog server.															
disable	Do not log to remote syslog server.															

config custom-field-name

Parameter	Description	Type	Size	Default
custom	Field custom name [A-Za-z0-9_].	string	Maximum length: 35	

Parameter	Description	Type	Size	Default
id	Entry ID.	integer	Minimum value: 0 Maximum value: 255	0
name	Field name [A-Za-z0-9_].	string	Maximum length: 35	

config log syslogd3 setting

Global settings for remote syslog server.

```

config log syslogd3 setting
    Description: Global settings for remote syslog server.
    set certificate {string}
    config custom-field-name
        Description: Custom field name for CEF format logging.
        edit <id>
            set custom {string}
            set name {string}
        next
    end
    set enc-algorithm [high-medium|high|...]
    set facility [kernel|user|...]
    set format [default|csv|...]
    set interface {string}
    set interface-select-method [auto|sdwan|...]
    set max-log-rate {integer}
    set mode [udp|legacy-reliable|...]
    set port {integer}
    set priority [default|low]
    set server {string}
    set source-ip {string}
    set ssl-min-proto-version [default|SSLv3|...]
    set status [enable|disable]
end

```

config log syslogd3 setting

Parameter	Description	Type	Size	Default
certificate	Certificate used to communicate with Syslog server.	string	Maximum length: 35	
enc-algorithm	Enable/disable reliable syslogging with TLS encryption.	option	-	disable

Parameter	Description	Type	Size	Default																																														
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>high-medium</i></td><td>SSL communication with high and medium encryption algorithms.</td></tr><tr><td><i>high</i></td><td>SSL communication with high encryption algorithms.</td></tr><tr><td><i>low</i></td><td>SSL communication with low encryption algorithms.</td></tr><tr><td><i>disable</i></td><td>Disable SSL communication.</td></tr></table>	Option	Description	<i>high-medium</i>	SSL communication with high and medium encryption algorithms.	<i>high</i>	SSL communication with high encryption algorithms.	<i>low</i>	SSL communication with low encryption algorithms.	<i>disable</i>	Disable SSL communication.																																							
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	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>kernel</i></td><td>Kernel messages.</td></tr><tr><td><i>user</i></td><td>Random user-level messages.</td></tr><tr><td><i>mail</i></td><td>Mail system.</td></tr><tr><td><i>daemon</i></td><td>System daemons.</td></tr><tr><td><i>auth</i></td><td>Security/authorization messages.</td></tr><tr><td><i>syslog</i></td><td>Messages generated internally by syslog.</td></tr><tr><td><i>lpr</i></td><td>Line printer subsystem.</td></tr><tr><td><i>news</i></td><td>Network news subsystem.</td></tr><tr><td><i>uucp</i></td><td>Network news subsystem.</td></tr><tr><td><i>cron</i></td><td>Clock daemon.</td></tr><tr><td><i>authpriv</i></td><td>Security/authorization messages (private).</td></tr><tr><td><i>ftp</i></td><td>FTP daemon.</td></tr><tr><td><i>ntp</i></td><td>NTP daemon.</td></tr><tr><td><i>audit</i></td><td>Log audit.</td></tr><tr><td><i>alert</i></td><td>Log alert.</td></tr><tr><td><i>clock</i></td><td>Clock daemon.</td></tr><tr><td><i>local0</i></td><td>Reserved for local use.</td></tr><tr><td><i>local1</i></td><td>Reserved for local use.</td></tr><tr><td><i>local2</i></td><td>Reserved for local use.</td></tr><tr><td><i>local3</i></td><td>Reserved for local use.</td></tr><tr><td><i>local4</i></td><td>Reserved for local use.</td></tr><tr><td><i>local5</i></td><td>Reserved for local use.</td></tr></table>	Option	Description	<i>kernel</i>	Kernel messages.	<i>user</i>	Random user-level messages.	<i>mail</i>	Mail system.	<i>daemon</i>	System daemons.	<i>auth</i>	Security/authorization messages.	<i>syslog</i>	Messages generated internally by syslog.	<i>lpr</i>	Line printer subsystem.	<i>news</i>	Network news subsystem.	<i>uucp</i>	Network news subsystem.	<i>cron</i>	Clock daemon.	<i>authpriv</i>	Security/authorization messages (private).	<i>ftp</i>	FTP daemon.	<i>ntp</i>	NTP daemon.	<i>audit</i>	Log audit.	<i>alert</i>	Log alert.	<i>clock</i>	Clock daemon.	<i>local0</i>	Reserved for local use.	<i>local1</i>	Reserved for local use.	<i>local2</i>	Reserved for local use.	<i>local3</i>	Reserved for local use.	<i>local4</i>	Reserved for local use.	<i>local5</i>	Reserved for local use.			
	Option	Description																																																
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	<i>uucp</i>	Network news subsystem.																																																
	<i>cron</i>	Clock daemon.																																																
	<i>authpriv</i>	Security/authorization messages (private).																																																
	<i>ftp</i>	FTP daemon.																																																
	<i>ntp</i>	NTP daemon.																																																
	<i>audit</i>	Log audit.																																																
	<i>alert</i>	Log alert.																																																
	<i>clock</i>	Clock daemon.																																																
	<i>local0</i>	Reserved for local use.																																																
	<i>local1</i>	Reserved for local use.																																																
	<i>local2</i>	Reserved for local use.																																																
	<i>local3</i>	Reserved for local use.																																																
<i>local4</i>	Reserved for local use.																																																	
<i>local5</i>	Reserved for local use.																																																	

Parameter	Description	Type	Size	Default										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>local6</i></td><td>Reserved for local use.</td></tr><tr><td><i>local7</i></td><td>Reserved for local use.</td></tr></table>	Option	Description	<i>local6</i>	Reserved for local use.	<i>local7</i>	Reserved for local use.							
	Option	Description												
	<i>local6</i>	Reserved for local use.												
<i>local7</i>	Reserved for local use.													
format	Log format.	option	-	default										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>default</i></td><td>Syslog format.</td></tr><tr><td><i>csv</i></td><td>CSV (Comma Separated Values) format.</td></tr><tr><td><i>cef</i></td><td>CEF (Common Event Format) format.</td></tr><tr><td><i>rfc5424</i></td><td>Syslog RFC5424 format.</td></tr></table>	Option	Description	<i>default</i>	Syslog format.	<i>csv</i>	CSV (Comma Separated Values) format.	<i>cef</i>	CEF (Common Event Format) format.	<i>rfc5424</i>	Syslog RFC5424 format.			
	Option	Description												
	<i>default</i>	Syslog format.												
	<i>csv</i>	CSV (Comma Separated Values) format.												
	<i>cef</i>	CEF (Common Event Format) format.												
<i>rfc5424</i>	Syslog RFC5424 format.													
interface	Specify outgoing interface to reach server.	string	Maximum length: 15											
interface-select-method	Specify how to select outgoing interface to reach server.	option	-	auto										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>auto</i></td><td>Set outgoing interface automatically.</td></tr><tr><td><i>sdwan</i></td><td>Set outgoing interface by SD-WAN or policy routing rules.</td></tr><tr><td><i>specify</i></td><td>Set outgoing interface manually.</td></tr></table>	Option	Description	<i>auto</i>	Set outgoing interface automatically.	<i>sdwan</i>	Set outgoing interface by SD-WAN or policy routing rules.	<i>specify</i>	Set outgoing interface manually.					
	Option	Description												
	<i>auto</i>	Set outgoing interface automatically.												
	<i>sdwan</i>	Set outgoing interface by SD-WAN or policy routing rules.												
<i>specify</i>	Set outgoing interface manually.													
max-log-rate	Syslog maximum log rate in MBps (0 = unlimited).	integer	Minimum value: 0 Maximum value: 100000	0										
mode	Remote syslog logging over UDP/Reliable TCP.	option	-	udp										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>udp</i></td><td>Enable syslogging over UDP.</td></tr><tr><td><i>legacy-reliable</i></td><td>Enable legacy reliable syslogging by RFC3195 (Reliable Delivery for Syslog).</td></tr><tr><td><i>reliable</i></td><td>Enable reliable syslogging by RFC6587 (Transmission of Syslog Messages over TCP).</td></tr></table>	Option	Description	<i>udp</i>	Enable syslogging over UDP.	<i>legacy-reliable</i>	Enable legacy reliable syslogging by RFC3195 (Reliable Delivery for Syslog).	<i>reliable</i>	Enable reliable syslogging by RFC6587 (Transmission of Syslog Messages over TCP).					
	Option	Description												
	<i>udp</i>	Enable syslogging over UDP.												
<i>legacy-reliable</i>	Enable legacy reliable syslogging by RFC3195 (Reliable Delivery for Syslog).													
<i>reliable</i>	Enable reliable syslogging by RFC6587 (Transmission of Syslog Messages over TCP).													

Parameter	Description	Type	Size	Default												
port	Server listen port.	integer	Minimum value: 0 Maximum value: 65535	514												
priority	Set log transmission priority.	option	-	default												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>default</td><td>Set Syslog transmission priority to default.</td></tr><tr><td>low</td><td>Set Syslog transmission priority to low.</td></tr></table>				Option	Description	default	Set Syslog transmission priority to default.	low	Set Syslog transmission priority to low.						
Option	Description															
default	Set Syslog transmission priority to default.															
low	Set Syslog transmission priority to low.															
server	Address of remote syslog server.	string	Maximum length: 127													
source-ip	Source IP address of syslog.	string	Maximum length: 63													
ssl-min-proto-version	Minimum supported protocol version for SSL/TLS connections (default is to follow system global setting).	option	-	default												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>default</td><td>Follow system global setting.</td></tr><tr><td>SSLv3</td><td>SSLv3.</td></tr><tr><td>TLSv1</td><td>TLSv1.</td></tr><tr><td>TLSv1-1</td><td>TLSv1.1.</td></tr><tr><td>TLSv1-2</td><td>TLSv1.2.</td></tr></table>				Option	Description	default	Follow system global setting.	SSLv3	SSLv3.	TLSv1	TLSv1.	TLSv1-1	TLSv1.1.	TLSv1-2	TLSv1.2.
Option	Description															
default	Follow system global setting.															
SSLv3	SSLv3.															
TLSv1	TLSv1.															
TLSv1-1	TLSv1.1.															
TLSv1-2	TLSv1.2.															
status	Enable/disable remote syslog logging.	option	-	disable												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Log to remote syslog server.</td></tr><tr><td>disable</td><td>Do not log to remote syslog server.</td></tr></table>				Option	Description	enable	Log to remote syslog server.	disable	Do not log to remote syslog server.						
Option	Description															
enable	Log to remote syslog server.															
disable	Do not log to remote syslog server.															

config custom-field-name

Parameter	Description	Type	Size	Default
custom	Field custom name [A-Za-z0-9_].	string	Maximum length: 35	

Parameter	Description	Type	Size	Default
id	Entry ID.	integer	Minimum value: 0 Maximum value: 255	0
name	Field name [A-Za-z0-9_].	string	Maximum length: 35	

config log syslogd4 filter

Filters for remote system server.

```

config log syslogd4 filter
    Description: Filters for remote system server.
    set anomaly [enable|disable]
    set forward-traffic [enable|disable]
    config free-style
        Description: Free style filters.
        edit <id>
            set category [traffic|event|...]
            set filter {string}
            set filter-type [include|exclude]
        next
    end
    set gtp [enable|disable]
    set local-traffic [enable|disable]
    set multicast-traffic [enable|disable]
    set severity [emergency|alert|...]
    set sniffer-traffic [enable|disable]
    set voip [enable|disable]
    set ztna-traffic [enable|disable]
end

```

config log syslogd4 filter

Parameter	Description	Type	Size	Default
anomaly	Enable/disable anomaly logging.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable anomaly logging.		
	<i>disable</i>	Disable anomaly logging.		
forward-traffic	Enable/disable forward traffic logging.	option	-	enable

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>enable</i>	Enable forward traffic logging.		
	<i>disable</i>	Disable forward traffic logging.		
gtp *	Enable/disable GTP messages logging.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable GTP messages logging.		
	<i>disable</i>	Disable GTP messages logging.		
local-traffic	Enable/disable local in or out traffic logging.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable local in or out traffic logging.		
	<i>disable</i>	Disable local in or out traffic logging.		
multicast-traffic	Enable/disable multicast traffic logging.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable multicast traffic logging.		
	<i>disable</i>	Disable multicast traffic logging.		
severity	Lowest severity level to log.	option	-	information
	Option	Description		
	<i>emergency</i>	Emergency level.		
	<i>alert</i>	Alert level.		
	<i>critical</i>	Critical level.		
	<i>error</i>	Error level.		
	<i>warning</i>	Warning level.		
	<i>notification</i>	Notification level.		
	<i>information</i>	Information level.		
	<i>debug</i>	Debug level.		
sniffer-traffic	Enable/disable sniffer traffic logging.	option	-	enable

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>enable</i>	Enable sniffer traffic logging.		
	<i>disable</i>	Disable sniffer traffic logging.		
voip	Enable/disable VoIP logging.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable VoIP logging.		
	<i>disable</i>	Disable VoIP logging.		
ztna-traffic	Enable/disable ztna traffic logging.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable ztna traffic logging.		
	<i>disable</i>	Disable ztna traffic logging.		

* This parameter may not exist in some models.

config free-style

Parameter	Description	Type	Size	Default
category	Log category.	option	-	traffic
	Option	Description		
	<i>traffic</i>	Traffic log.		
	<i>event</i>	Event log.		
	<i>virus</i>	Antivirus log.		
	<i>webfilter</i>	Web filter log.		
	<i>attack</i>	Attack log.		
	<i>spam</i>	Antispam log.		
	<i>anomaly</i>	Anomaly log.		
	<i>voip</i>	VoIP log.		
	<i>dlp</i>	DLP log.		
	<i>app-ctrl</i>	Application control log.		
	<i>waf</i>	Web application firewall log.		

Parameter	Description	Type	Size	Default												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>dns</i></td><td>DNS detail log.</td></tr><tr><td><i>ssh</i></td><td>SSH log.</td></tr><tr><td><i>ssl</i></td><td>SSL log.</td></tr><tr><td><i>file-filter</i></td><td>File filter log.</td></tr><tr><td><i>icap</i></td><td>ICAP log.</td></tr></table>	Option	Description	<i>dns</i>	DNS detail log.	<i>ssh</i>	SSH log.	<i>ssl</i>	SSL log.	<i>file-filter</i>	File filter log.	<i>icap</i>	ICAP log.			
	Option	Description														
	<i>dns</i>	DNS detail log.														
	<i>ssh</i>	SSH log.														
	<i>ssl</i>	SSL log.														
	<i>file-filter</i>	File filter log.														
<i>icap</i>	ICAP log.															
filter	Free style filter string.	string	Maximum length: 1023													
filter-type	Include/exclude logs that match the filter.	option	-	include												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>include</i></td><td>Include logs that match the filter.</td></tr><tr><td><i>exclude</i></td><td>Exclude logs that match the filter.</td></tr></table>	Option	Description	<i>include</i>	Include logs that match the filter.	<i>exclude</i>	Exclude logs that match the filter.									
	Option	Description														
	<i>include</i>	Include logs that match the filter.														
<i>exclude</i>	Exclude logs that match the filter.															
id	Entry ID.	integer	Minimum value: 0 Maximum value: 4294967295													

config log syslogd4 override-filter

Override filters for remote system server.

```

config log syslogd4 override-filter
  Description: Override filters for remote system server.
  set anomaly [enable|disable]
  set forward-traffic [enable|disable]
  config free-style
    Description: Free style filters.
    edit <id>
      set category [traffic|event|...]
      set filter {string}
      set filter-type [include|exclude]
    next
  end
  set gtp [enable|disable]
  set local-traffic [enable|disable]
  set multicast-traffic [enable|disable]
  set severity [emergency|alert|...]
  set sniffer-traffic [enable|disable]
  set voip [enable|disable]

```

```

set ztna-traffic [enable|disable]
end

```

config log syslogd4 override-filter

Parameter	Description	Type	Size	Default						
anomaly	Enable/disable anomaly logging.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable anomaly logging.</td></tr><tr><td><i>disable</i></td><td>Disable anomaly logging.</td></tr></table>	Option	Description	<i>enable</i>	Enable anomaly logging.	<i>disable</i>	Disable anomaly logging.			
Option	Description									
<i>enable</i>	Enable anomaly logging.									
<i>disable</i>	Disable anomaly logging.									
forward-traffic	Enable/disable forward traffic logging.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable forward traffic logging.</td></tr><tr><td><i>disable</i></td><td>Disable forward traffic logging.</td></tr></table>	Option	Description	<i>enable</i>	Enable forward traffic logging.	<i>disable</i>	Disable forward traffic logging.			
Option	Description									
<i>enable</i>	Enable forward traffic logging.									
<i>disable</i>	Disable forward traffic logging.									
gtp *	Enable/disable GTP messages logging.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable GTP messages logging.</td></tr><tr><td><i>disable</i></td><td>Disable GTP messages logging.</td></tr></table>	Option	Description	<i>enable</i>	Enable GTP messages logging.	<i>disable</i>	Disable GTP messages logging.			
Option	Description									
<i>enable</i>	Enable GTP messages logging.									
<i>disable</i>	Disable GTP messages logging.									
local-traffic	Enable/disable local in or out traffic logging.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable local in or out traffic logging.</td></tr><tr><td><i>disable</i></td><td>Disable local in or out traffic logging.</td></tr></table>	Option	Description	<i>enable</i>	Enable local in or out traffic logging.	<i>disable</i>	Disable local in or out traffic logging.			
Option	Description									
<i>enable</i>	Enable local in or out traffic logging.									
<i>disable</i>	Disable local in or out traffic logging.									
multicast-traffic	Enable/disable multicast traffic logging.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable multicast traffic logging.</td></tr><tr><td><i>disable</i></td><td>Disable multicast traffic logging.</td></tr></table>	Option	Description	<i>enable</i>	Enable multicast traffic logging.	<i>disable</i>	Disable multicast traffic logging.			
Option	Description									
<i>enable</i>	Enable multicast traffic logging.									
<i>disable</i>	Disable multicast traffic logging.									
severity	Lowest severity level to log.	option	-	information						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>emergency</i></td><td>Emergency level.</td></tr></table>	Option	Description	<i>emergency</i>	Emergency level.					
Option	Description									
<i>emergency</i>	Emergency level.									

Parameter	Description	Type	Size	Default																
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>alert</i></td><td>Alert level.</td></tr><tr><td><i>critical</i></td><td>Critical level.</td></tr><tr><td><i>error</i></td><td>Error level.</td></tr><tr><td><i>warning</i></td><td>Warning level.</td></tr><tr><td><i>notification</i></td><td>Notification level.</td></tr><tr><td><i>information</i></td><td>Information level.</td></tr><tr><td><i>debug</i></td><td>Debug level.</td></tr></table>	Option	Description	<i>alert</i>	Alert level.	<i>critical</i>	Critical level.	<i>error</i>	Error level.	<i>warning</i>	Warning level.	<i>notification</i>	Notification level.	<i>information</i>	Information level.	<i>debug</i>	Debug level.			
	Option	Description																		
	<i>alert</i>	Alert level.																		
	<i>critical</i>	Critical level.																		
	<i>error</i>	Error level.																		
	<i>warning</i>	Warning level.																		
	<i>notification</i>	Notification level.																		
	<i>information</i>	Information level.																		
<i>debug</i>	Debug level.																			
sniffer-traffic	Enable/disable sniffer traffic logging.	option	-	enable																
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable sniffer traffic logging.</td></tr><tr><td><i>disable</i></td><td>Disable sniffer traffic logging.</td></tr></table>	Option	Description	<i>enable</i>	Enable sniffer traffic logging.	<i>disable</i>	Disable sniffer traffic logging.													
	Option	Description																		
	<i>enable</i>	Enable sniffer traffic logging.																		
<i>disable</i>	Disable sniffer traffic logging.																			
voip	Enable/disable VoIP logging.	option	-	enable																
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable VoIP logging.</td></tr><tr><td><i>disable</i></td><td>Disable VoIP logging.</td></tr></table>	Option	Description	<i>enable</i>	Enable VoIP logging.	<i>disable</i>	Disable VoIP logging.													
	Option	Description																		
	<i>enable</i>	Enable VoIP logging.																		
<i>disable</i>	Disable VoIP logging.																			
ztna-traffic	Enable/disable ztna traffic logging.	option	-	enable																
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable ztna traffic logging.</td></tr><tr><td><i>disable</i></td><td>Disable ztna traffic logging.</td></tr></table>	Option	Description	<i>enable</i>	Enable ztna traffic logging.	<i>disable</i>	Disable ztna traffic logging.													
	Option	Description																		
	<i>enable</i>	Enable ztna traffic logging.																		
<i>disable</i>	Disable ztna traffic logging.																			

* This parameter may not exist in some models.

config free-style

Parameter	Description	Type	Size	Default
category	Log category.	option	-	traffic
	Option	Description		
	<i>traffic</i>	Traffic log.		
	<i>event</i>	Event log.		

Parameter	Description	Type	Size	Default																														
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>virus</i></td><td>Antivirus log.</td></tr><tr><td><i>webfilter</i></td><td>Web filter log.</td></tr><tr><td><i>attack</i></td><td>Attack log.</td></tr><tr><td><i>spam</i></td><td>Antispam log.</td></tr><tr><td><i>anomaly</i></td><td>Anomaly log.</td></tr><tr><td><i>voip</i></td><td>VoIP log.</td></tr><tr><td><i>dlp</i></td><td>DLP log.</td></tr><tr><td><i>app-ctrl</i></td><td>Application control log.</td></tr><tr><td><i>waf</i></td><td>Web application firewall log.</td></tr><tr><td><i>dns</i></td><td>DNS detail log.</td></tr><tr><td><i>ssh</i></td><td>SSH log.</td></tr><tr><td><i>ssl</i></td><td>SSL log.</td></tr><tr><td><i>file-filter</i></td><td>File filter log.</td></tr><tr><td><i>icap</i></td><td>ICAP log.</td></tr></table>	Option	Description	<i>virus</i>	Antivirus log.	<i>webfilter</i>	Web filter log.	<i>attack</i>	Attack log.	<i>spam</i>	Antispam log.	<i>anomaly</i>	Anomaly log.	<i>voip</i>	VoIP log.	<i>dlp</i>	DLP log.	<i>app-ctrl</i>	Application control log.	<i>waf</i>	Web application firewall log.	<i>dns</i>	DNS detail log.	<i>ssh</i>	SSH log.	<i>ssl</i>	SSL log.	<i>file-filter</i>	File filter log.	<i>icap</i>	ICAP log.			
	Option	Description																																
	<i>virus</i>	Antivirus log.																																
	<i>webfilter</i>	Web filter log.																																
	<i>attack</i>	Attack log.																																
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	<i>ssl</i>	SSL log.																																
	<i>file-filter</i>	File filter log.																																
<i>icap</i>	ICAP log.																																	
filter	Free style filter string.	string	Maximum length: 1023																															
filter-type	Include/exclude logs that match the filter.	option	-	include																														
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>include</i></td><td>Include logs that match the filter.</td></tr><tr><td><i>exclude</i></td><td>Exclude logs that match the filter.</td></tr></table>	Option	Description	<i>include</i>	Include logs that match the filter.	<i>exclude</i>	Exclude logs that match the filter.																											
	Option	Description																																
	<i>include</i>	Include logs that match the filter.																																
<i>exclude</i>	Exclude logs that match the filter.																																	
id	Entry ID.	integer	Minimum value: 0 0 Maximum value: 4294967295																															

config log syslogd4 override-setting

Override settings for remote syslog server.

```
config log syslogd4 override-setting
  Description: Override settings for remote syslog server.
  set certificate {string}
  config custom-field-name
```

```

Description: Custom field name for CEF format logging.
edit <id>
    set custom {string}
    set name {string}
next
end
set enc-algorithm [high-medium|high|...]
set facility [kernel|user|...]
set format [default|csv|...]
set interface {string}
set interface-select-method [auto|sdwan|...]
set max-log-rate {integer}
set mode [udp|legacy-reliable|...]
set port {integer}
set priority [default|low]
set server {string}
set source-ip {string}
set ssl-min-proto-version [default|SSLv3|...]
set status [enable|disable]
end

```

config log syslogd4 override-setting

Parameter	Description	Type	Size	Default
certificate	Certificate used to communicate with Syslog server.	string	Maximum length: 35	
enc-algorithm	Enable/disable reliable syslogging with TLS encryption.	option	-	disable
	Option Description			
	high-medium	SSL communication with high and medium encryption algorithms.		
	high	SSL communication with high encryption algorithms.		
	low	SSL communication with low encryption algorithms.		
	disable	Disable SSL communication.		
facility	Remote syslog facility.	option	-	local7
	Option Description			
	kernel	Kernel messages.		
	user	Random user-level messages.		
	mail	Mail system.		
	daemon	System daemons.		

Parameter	Description	Type	Size	Default																																										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>auth</i></td><td>Security/authorization messages.</td></tr><tr><td><i>syslog</i></td><td>Messages generated internally by syslog.</td></tr><tr><td><i>lpr</i></td><td>Line printer subsystem.</td></tr><tr><td><i>news</i></td><td>Network news subsystem.</td></tr><tr><td><i>uucp</i></td><td>Network news subsystem.</td></tr><tr><td><i>cron</i></td><td>Clock daemon.</td></tr><tr><td><i>authpriv</i></td><td>Security/authorization messages (private).</td></tr><tr><td><i>ftp</i></td><td>FTP daemon.</td></tr><tr><td><i>ntp</i></td><td>NTP daemon.</td></tr><tr><td><i>audit</i></td><td>Log audit.</td></tr><tr><td><i>alert</i></td><td>Log alert.</td></tr><tr><td><i>clock</i></td><td>Clock daemon.</td></tr><tr><td><i>local0</i></td><td>Reserved for local use.</td></tr><tr><td><i>local1</i></td><td>Reserved for local use.</td></tr><tr><td><i>local2</i></td><td>Reserved for local use.</td></tr><tr><td><i>local3</i></td><td>Reserved for local use.</td></tr><tr><td><i>local4</i></td><td>Reserved for local use.</td></tr><tr><td><i>local5</i></td><td>Reserved for local use.</td></tr><tr><td><i>local6</i></td><td>Reserved for local use.</td></tr><tr><td><i>local7</i></td><td>Reserved for local use.</td></tr></table>	Option	Description	<i>auth</i>	Security/authorization messages.	<i>syslog</i>	Messages generated internally by syslog.	<i>lpr</i>	Line printer subsystem.	<i>news</i>	Network news subsystem.	<i>uucp</i>	Network news subsystem.	<i>cron</i>	Clock daemon.	<i>authpriv</i>	Security/authorization messages (private).	<i>ftp</i>	FTP daemon.	<i>ntp</i>	NTP daemon.	<i>audit</i>	Log audit.	<i>alert</i>	Log alert.	<i>clock</i>	Clock daemon.	<i>local0</i>	Reserved for local use.	<i>local1</i>	Reserved for local use.	<i>local2</i>	Reserved for local use.	<i>local3</i>	Reserved for local use.	<i>local4</i>	Reserved for local use.	<i>local5</i>	Reserved for local use.	<i>local6</i>	Reserved for local use.	<i>local7</i>	Reserved for local use.			
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interface	Specify outgoing interface to reach server.	string	Maximum length: 15																																											

Parameter	Description	Type	Size	Default
interface-select-method	Specify how to select outgoing interface to reach server.	option	-	auto
	Option	Description		
	<i>auto</i>	Set outgoing interface automatically.		
	<i>sdwan</i>	Set outgoing interface by SD-WAN or policy routing rules.		
	<i>specify</i>	Set outgoing interface manually.		
max-log-rate	Syslog maximum log rate in MBps (0 = unlimited).	integer	Minimum value: 0 Maximum value: 100000	0
mode	Remote syslog logging over UDP/Reliable TCP.	option	-	udp
	Option	Description		
	<i>udp</i>	Enable syslogging over UDP.		
	<i>legacy-reliable</i>	Enable legacy reliable syslogging by RFC3195 (Reliable Delivery for Syslog).		
	<i>reliable</i>	Enable reliable syslogging by RFC6587 (Transmission of Syslog Messages over TCP).		
port	Server listen port.	integer	Minimum value: 0 Maximum value: 65535	514
priority	Set log transmission priority.	option	-	default
	Option	Description		
	<i>default</i>	Set Syslog transmission priority to default.		
	<i>low</i>	Set Syslog transmission priority to low.		
server	Address of remote syslog server.	string	Maximum length: 127	
source-ip	Source IP address of syslog.	string	Maximum length: 63	
ssl-min-proto-version	Minimum supported protocol version for SSL/TLS connections (default is to follow system global setting).	option	-	default

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>default</i>	Follow system global setting.		
	<i>SSLv3</i>	SSLv3.		
	<i>TLSv1</i>	TLSv1.		
	<i>TLSv1-1</i>	TLSv1.1.		
	<i>TLSv1-2</i>	TLSv1.2.		
status	Enable/disable remote syslog logging.	option	-	disable
	Option	Description		
	<i>enable</i>	Log to remote syslog server.		
	<i>disable</i>	Do not log to remote syslog server.		

config custom-field-name

Parameter	Description	Type	Size	Default
custom	Field custom name [A-Za-z0-9_].	string	Maximum length: 35	
id	Entry ID.	integer	Minimum value: 0 Maximum value: 255	0
name	Field name [A-Za-z0-9_].	string	Maximum length: 35	

config log syslogd4 setting

Global settings for remote syslog server.

```

config log syslogd4 setting
  Description: Global settings for remote syslog server.
  set certificate {string}
  config custom-field-name
    Description: Custom field name for CEF format logging.
    edit <id>
      set custom {string}
      set name {string}
    next
  end
  set enc-algorithm [high-medium|high|...]

```



```

set facility [kernel|user|...]
set format [default|csv|...]
set interface {string}
set interface-select-method [auto|sdwan|...]
set max-log-rate {integer}
set mode [udp|legacy-reliable|...]
set port {integer}
set priority [default|low]
set server {string}
set source-ip {string}
set ssl-min-proto-version [default|SSLv3|...]
set status [enable|disable]
end

```

config log syslogd4 setting

Parameter	Description	Type	Size	Default																		
certificate	Certificate used to communicate with Syslog server.	string	Maximum length: 35																			
enc-algorithm	Enable/disable reliable syslogging with TLS encryption.	option	-	disable																		
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>high-medium</td><td>SSL communication with high and medium encryption algorithms.</td></tr><tr><td>high</td><td>SSL communication with high encryption algorithms.</td></tr><tr><td>low</td><td>SSL communication with low encryption algorithms.</td></tr><tr><td>disable</td><td>Disable SSL communication.</td></tr></table>	Option	Description	high-medium	SSL communication with high and medium encryption algorithms.	high	SSL communication with high encryption algorithms.	low	SSL communication with low encryption algorithms.	disable	Disable SSL communication.											
Option	Description																					
high-medium	SSL communication with high and medium encryption algorithms.																					
high	SSL communication with high encryption algorithms.																					
low	SSL communication with low encryption algorithms.																					
disable	Disable SSL communication.																					
facility	Remote syslog facility.	option	-	local7																		
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>kernel</td><td>Kernel messages.</td></tr><tr><td>user</td><td>Random user-level messages.</td></tr><tr><td>mail</td><td>Mail system.</td></tr><tr><td>daemon</td><td>System daemons.</td></tr><tr><td>auth</td><td>Security/authorization messages.</td></tr><tr><td>syslog</td><td>Messages generated internally by syslog.</td></tr><tr><td>lpr</td><td>Line printer subsystem.</td></tr><tr><td>news</td><td>Network news subsystem.</td></tr></table>	Option	Description	kernel	Kernel messages.	user	Random user-level messages.	mail	Mail system.	daemon	System daemons.	auth	Security/authorization messages.	syslog	Messages generated internally by syslog.	lpr	Line printer subsystem.	news	Network news subsystem.			
Option	Description																					
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daemon	System daemons.																					
auth	Security/authorization messages.																					
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Parameter	Description	Type	Size	Default																																		
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>uucp</i></td><td>Network news subsystem.</td></tr><tr><td><i>cron</i></td><td>Clock daemon.</td></tr><tr><td><i>authpriv</i></td><td>Security/authorization messages (private).</td></tr><tr><td><i>ftp</i></td><td>FTP daemon.</td></tr><tr><td><i>ntp</i></td><td>NTP daemon.</td></tr><tr><td><i>audit</i></td><td>Log audit.</td></tr><tr><td><i>alert</i></td><td>Log alert.</td></tr><tr><td><i>clock</i></td><td>Clock daemon.</td></tr><tr><td><i>local0</i></td><td>Reserved for local use.</td></tr><tr><td><i>local1</i></td><td>Reserved for local use.</td></tr><tr><td><i>local2</i></td><td>Reserved for local use.</td></tr><tr><td><i>local3</i></td><td>Reserved for local use.</td></tr><tr><td><i>local4</i></td><td>Reserved for local use.</td></tr><tr><td><i>local5</i></td><td>Reserved for local use.</td></tr><tr><td><i>local6</i></td><td>Reserved for local use.</td></tr><tr><td><i>local7</i></td><td>Reserved for local use.</td></tr></table>	Option	Description	<i>uucp</i>	Network news subsystem.	<i>cron</i>	Clock daemon.	<i>authpriv</i>	Security/authorization messages (private).	<i>ftp</i>	FTP daemon.	<i>ntp</i>	NTP daemon.	<i>audit</i>	Log audit.	<i>alert</i>	Log alert.	<i>clock</i>	Clock daemon.	<i>local0</i>	Reserved for local use.	<i>local1</i>	Reserved for local use.	<i>local2</i>	Reserved for local use.	<i>local3</i>	Reserved for local use.	<i>local4</i>	Reserved for local use.	<i>local5</i>	Reserved for local use.	<i>local6</i>	Reserved for local use.	<i>local7</i>	Reserved for local use.			
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interface	Specify outgoing interface to reach server.	string	Maximum length: 15																																			
interface-select-method	Specify how to select outgoing interface to reach server.	option	-	auto																																		
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Parameter	Description	Type	Size	Default								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>sdwan</i></td><td>Set outgoing interface by SD-WAN or policy routing rules.</td></tr><tr><td><i>specify</i></td><td>Set outgoing interface manually.</td></tr></table>	Option	Description	<i>sdwan</i>	Set outgoing interface by SD-WAN or policy routing rules.	<i>specify</i>	Set outgoing interface manually.					
Option	Description											
<i>sdwan</i>	Set outgoing interface by SD-WAN or policy routing rules.											
<i>specify</i>	Set outgoing interface manually.											
max-log-rate	Syslog maximum log rate in MBps (0 = unlimited).	integer	Minimum value: 0 Maximum value: 100000	0								
mode	Remote syslog logging over UDP/Reliable TCP.	option	-	udp								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>udp</i></td><td>Enable syslogging over UDP.</td></tr><tr><td><i>legacy-reliable</i></td><td>Enable legacy reliable syslogging by RFC3195 (Reliable Delivery for Syslog).</td></tr><tr><td><i>reliable</i></td><td>Enable reliable syslogging by RFC6587 (Transmission of Syslog Messages over TCP).</td></tr></table>	Option	Description	<i>udp</i>	Enable syslogging over UDP.	<i>legacy-reliable</i>	Enable legacy reliable syslogging by RFC3195 (Reliable Delivery for Syslog).	<i>reliable</i>	Enable reliable syslogging by RFC6587 (Transmission of Syslog Messages over TCP).			
Option	Description											
<i>udp</i>	Enable syslogging over UDP.											
<i>legacy-reliable</i>	Enable legacy reliable syslogging by RFC3195 (Reliable Delivery for Syslog).											
<i>reliable</i>	Enable reliable syslogging by RFC6587 (Transmission of Syslog Messages over TCP).											
port	Server listen port.	integer	Minimum value: 0 Maximum value: 65535	514								
priority	Set log transmission priority.	option	-	default								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>default</i></td><td>Set Syslog transmission priority to default.</td></tr><tr><td><i>low</i></td><td>Set Syslog transmission priority to low.</td></tr></table>	Option	Description	<i>default</i>	Set Syslog transmission priority to default.	<i>low</i>	Set Syslog transmission priority to low.					
Option	Description											
<i>default</i>	Set Syslog transmission priority to default.											
<i>low</i>	Set Syslog transmission priority to low.											
server	Address of remote syslog server.	string	Maximum length: 127									
source-ip	Source IP address of syslog.	string	Maximum length: 63									
ssl-min-proto-version	Minimum supported protocol version for SSL/TLS connections (default is to follow system global setting).	option	-	default								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>default</i></td><td>Follow system global setting.</td></tr></table>	Option	Description	<i>default</i>	Follow system global setting.							
Option	Description											
<i>default</i>	Follow system global setting.											

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>SSLv3</i>	SSLv3.		
	<i>TLSv1</i>	TLSv1.		
	<i>TLSv1-1</i>	TLSv1.1.		
	<i>TLSv1-2</i>	TLSv1.2.		
status	Enable/disable remote syslog logging.	option	-	disable
	Option	Description		
	<i>enable</i>	Log to remote syslog server.		
	<i>disable</i>	Do not log to remote syslog server.		

config custom-field-name

Parameter	Description	Type	Size	Default
custom	Field custom name [A-Za-z0-9_].	string	Maximum length: 35	
id	Entry ID.	integer	Minimum value: 0 Maximum value: 255	0
name	Field name [A-Za-z0-9_].	string	Maximum length: 35	

config log tacacs+accounting filter

Settings for TACACS+ accounting events filter.

```

config log tacacs+accounting filter
  Description: Settings for TACACS+ accounting events filter.
  set cli-cmd-audit [enable|disable]
  set config-change-audit [enable|disable]
  set login-audit [enable|disable]
end

```

config log tacacs+accounting filter

Parameter	Description	Type	Size	Default						
cli-cmd-audit	Enable/disable TACACS+ accounting for CLI commands audit.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable TACACS+ accounting for CLI commands audit.</td></tr><tr><td><i>disable</i></td><td>Disable TACACS+ accounting for CLI commands audit.</td></tr></table>	Option	Description	<i>enable</i>	Enable TACACS+ accounting for CLI commands audit.	<i>disable</i>	Disable TACACS+ accounting for CLI commands audit.			
Option	Description									
<i>enable</i>	Enable TACACS+ accounting for CLI commands audit.									
<i>disable</i>	Disable TACACS+ accounting for CLI commands audit.									
config-change-audit	Enable/disable TACACS+ accounting for configuration change events audit.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable TACACS+ accounting for configuration change events audit.</td></tr><tr><td><i>disable</i></td><td>Disable TACACS+ accounting for configuration change events audit.</td></tr></table>	Option	Description	<i>enable</i>	Enable TACACS+ accounting for configuration change events audit.	<i>disable</i>	Disable TACACS+ accounting for configuration change events audit.			
Option	Description									
<i>enable</i>	Enable TACACS+ accounting for configuration change events audit.									
<i>disable</i>	Disable TACACS+ accounting for configuration change events audit.									
login-audit	Enable/disable TACACS+ accounting for login events audit.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable TACACS+ accounting for login events audit.</td></tr><tr><td><i>disable</i></td><td>Disable TACACS+ accounting for login events audit.</td></tr></table>	Option	Description	<i>enable</i>	Enable TACACS+ accounting for login events audit.	<i>disable</i>	Disable TACACS+ accounting for login events audit.			
Option	Description									
<i>enable</i>	Enable TACACS+ accounting for login events audit.									
<i>disable</i>	Disable TACACS+ accounting for login events audit.									

config log tacacs+accounting setting

Settings for TACACS+ accounting.

```
config log tacacs+accounting setting
  Description: Settings for TACACS+ accounting.
  set interface {string}
  set interface-select-method [auto|sdwan|...]
  set server {string}
  set server-key {password}
  set source-ip {string}
  set status [enable|disable]
end
```

config log tacacs+accounting setting

Parameter	Description	Type	Size	Default
interface	Specify outgoing interface to reach server.	string	Maximum length: 15	
interface-select-method	Specify how to select outgoing interface to reach server.	option	-	auto
	Option	Description		
	auto	Set outgoing interface automatically.		
	sdwan	Set outgoing interface by SD-WAN or policy routing rules.		
	specify	Set outgoing interface manually.		
server	Address of TACACS+ server.	string	Maximum length: 63	
server-key	Key to access the TACACS+ server.	password	Not Specified	
source-ip	Source IP address for communication to TACACS+ server.	string	Maximum length: 63	
status	Enable/disable TACACS+ accounting.	option	-	disable
	Option	Description		
	enable	Enable TACACS+ accounting.		
	disable	Disable TACACS+ accounting.		

config log tacacs+accounting2 filter

Settings for TACACS+ accounting events filter.

```
config log tacacs+accounting2 filter
  Description: Settings for TACACS+ accounting events filter.
  set cli-cmd-audit [enable|disable]
  set config-change-audit [enable|disable]
  set login-audit [enable|disable]
end
```

config log tacacs+accounting2 filter

Parameter	Description	Type	Size	Default						
cli-cmd-audit	Enable/disable TACACS+ accounting for CLI commands audit.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable TACACS+ accounting for CLI commands audit.</td></tr><tr><td><i>disable</i></td><td>Disable TACACS+ accounting for CLI commands audit.</td></tr></table>	Option	Description	<i>enable</i>	Enable TACACS+ accounting for CLI commands audit.	<i>disable</i>	Disable TACACS+ accounting for CLI commands audit.			
Option	Description									
<i>enable</i>	Enable TACACS+ accounting for CLI commands audit.									
<i>disable</i>	Disable TACACS+ accounting for CLI commands audit.									
config-change-audit	Enable/disable TACACS+ accounting for configuration change events audit.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable TACACS+ accounting for configuration change events audit.</td></tr><tr><td><i>disable</i></td><td>Disable TACACS+ accounting for configuration change events audit.</td></tr></table>	Option	Description	<i>enable</i>	Enable TACACS+ accounting for configuration change events audit.	<i>disable</i>	Disable TACACS+ accounting for configuration change events audit.			
Option	Description									
<i>enable</i>	Enable TACACS+ accounting for configuration change events audit.									
<i>disable</i>	Disable TACACS+ accounting for configuration change events audit.									
login-audit	Enable/disable TACACS+ accounting for login events audit.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable TACACS+ accounting for login events audit.</td></tr><tr><td><i>disable</i></td><td>Disable TACACS+ accounting for login events audit.</td></tr></table>	Option	Description	<i>enable</i>	Enable TACACS+ accounting for login events audit.	<i>disable</i>	Disable TACACS+ accounting for login events audit.			
Option	Description									
<i>enable</i>	Enable TACACS+ accounting for login events audit.									
<i>disable</i>	Disable TACACS+ accounting for login events audit.									

config log tacacs+accounting2 setting

Settings for TACACS+ accounting.

```
config log tacacs+accounting2 setting
  Description: Settings for TACACS+ accounting.
  set interface {string}
  set interface-select-method [auto|sdwan|...]
  set server {string}
  set server-key {password}
  set source-ip {string}
  set status [enable|disable]
end
```

config log tacacs+accounting2 setting

Parameter	Description	Type	Size	Default
interface	Specify outgoing interface to reach server.	string	Maximum length: 15	
interface-select-method	Specify how to select outgoing interface to reach server.	option	-	auto
	Option	Description		
	auto	Set outgoing interface automatically.		
	sdwan	Set outgoing interface by SD-WAN or policy routing rules.		
	specify	Set outgoing interface manually.		
server	Address of TACACS+ server.	string	Maximum length: 63	
server-key	Key to access the TACACS+ server.	password	Not Specified	
source-ip	Source IP address for communication to TACACS+ server.	string	Maximum length: 63	
status	Enable/disable TACACS+ accounting.	option	-	disable
	Option	Description		
	enable	Enable TACACS+ accounting.		
	disable	Disable TACACS+ accounting.		

config log tacacs+accounting3 filter

Settings for TACACS+ accounting events filter.

```
config log tacacs+accounting3 filter
  Description: Settings for TACACS+ accounting events filter.
  set cli-cmd-audit [enable|disable]
  set config-change-audit [enable|disable]
  set login-audit [enable|disable]
end
```


config log tacacs+accounting3 filter

Parameter	Description	Type	Size	Default						
cli-cmd-audit	Enable/disable TACACS+ accounting for CLI commands audit.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable TACACS+ accounting for CLI commands audit.</td></tr><tr><td><i>disable</i></td><td>Disable TACACS+ accounting for CLI commands audit.</td></tr></table>	Option	Description	<i>enable</i>	Enable TACACS+ accounting for CLI commands audit.	<i>disable</i>	Disable TACACS+ accounting for CLI commands audit.			
Option	Description									
<i>enable</i>	Enable TACACS+ accounting for CLI commands audit.									
<i>disable</i>	Disable TACACS+ accounting for CLI commands audit.									
config-change-audit	Enable/disable TACACS+ accounting for configuration change events audit.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable TACACS+ accounting for configuration change events audit.</td></tr><tr><td><i>disable</i></td><td>Disable TACACS+ accounting for configuration change events audit.</td></tr></table>	Option	Description	<i>enable</i>	Enable TACACS+ accounting for configuration change events audit.	<i>disable</i>	Disable TACACS+ accounting for configuration change events audit.			
Option	Description									
<i>enable</i>	Enable TACACS+ accounting for configuration change events audit.									
<i>disable</i>	Disable TACACS+ accounting for configuration change events audit.									
login-audit	Enable/disable TACACS+ accounting for login events audit.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable TACACS+ accounting for login events audit.</td></tr><tr><td><i>disable</i></td><td>Disable TACACS+ accounting for login events audit.</td></tr></table>	Option	Description	<i>enable</i>	Enable TACACS+ accounting for login events audit.	<i>disable</i>	Disable TACACS+ accounting for login events audit.			
Option	Description									
<i>enable</i>	Enable TACACS+ accounting for login events audit.									
<i>disable</i>	Disable TACACS+ accounting for login events audit.									

config log tacacs+accounting3 setting

Settings for TACACS+ accounting.

```
config log tacacs+accounting3 setting
  Description: Settings for TACACS+ accounting.
  set interface {string}
  set interface-select-method [auto|sdwan|...]
  set server {string}
  set server-key {password}
  set source-ip {string}
  set status [enable|disable]
end
```

config log tacacs+accounting3 setting

Parameter	Description	Type	Size	Default								
interface	Specify outgoing interface to reach server.	string	Maximum length: 15									
interface-select-method	Specify how to select outgoing interface to reach server.	option	-	auto								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>auto</td><td>Set outgoing interface automatically.</td></tr><tr><td>sdwan</td><td>Set outgoing interface by SD-WAN or policy routing rules.</td></tr><tr><td>specify</td><td>Set outgoing interface manually.</td></tr></table>	Option	Description	auto	Set outgoing interface automatically.	sdwan	Set outgoing interface by SD-WAN or policy routing rules.	specify	Set outgoing interface manually.			
Option	Description											
auto	Set outgoing interface automatically.											
sdwan	Set outgoing interface by SD-WAN or policy routing rules.											
specify	Set outgoing interface manually.											
server	Address of TACACS+ server.	string	Maximum length: 63									
server-key	Key to access the TACACS+ server.	password	Not Specified									
source-ip	Source IP address for communication to TACACS+ server.	string	Maximum length: 63									
status	Enable/disable TACACS+ accounting.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable TACACS+ accounting.</td></tr><tr><td>disable</td><td>Disable TACACS+ accounting.</td></tr></table>	Option	Description	enable	Enable TACACS+ accounting.	disable	Disable TACACS+ accounting.					
Option	Description											
enable	Enable TACACS+ accounting.											
disable	Disable TACACS+ accounting.											

config log threat-weight

Configure threat weight settings.

```
config log threat-weight
  Description: Configure threat weight settings.
  config application
    Description: Application-control threat weight settings.
    edit <id>
      set category {integer}
      set level [disable|low|...]
    next
  end
  set blocked-connection [disable|low|...]
  set botnet-connection-detected [disable|low|...]
  set failed-connection [disable|low|...]
```

```

config geolocation
    Description: Geolocation-based threat weight settings.
    edit <id>
        set country {string}
        set level [disable|low|...]
    next
end
config ips
    Description: IPS threat weight settings.
    set critical-severity [disable|low|...]
    set high-severity [disable|low|...]
    set info-severity [disable|low|...]
    set low-severity [disable|low|...]
    set medium-severity [disable|low|...]
end
config level
    Description: Score mapping for threat weight levels.
    set critical {integer}
    set high {integer}
    set low {integer}
    set medium {integer}
end
config malware
    Description: Anti-virus malware threat weight settings.
    set command-blocked [disable|low|...]
    set content-disarm [disable|low|...]
    set ems-threat-feed [disable|low|...]
    set file-blocked [disable|low|...]
    set fortindr [disable|low|...]
    set fortisandbox [disable|low|...]
    set fsa-high-risk [disable|low|...]
    set fsa-malicious [disable|low|...]
    set fsa-medium-risk [disable|low|...]
    set malware-list [disable|low|...]
    set mimefragmented [disable|low|...]
    set oversized [disable|low|...]
    set switch-proto [disable|low|...]
    set virus-file-type-executable [disable|low|...]
    set virus-infected [disable|low|...]
    set virus-outbreak-prevention [disable|low|...]
    set virus-scan-error [disable|low|...]
end
set status [enable|disable]
set url-block-detected [disable|low|...]
config web
    Description: Web filtering threat weight settings.
    edit <id>
        set category {integer}
        set level [disable|low|...]
    next
end
end

```

config log threat-weight

Parameter	Description	Type	Size	Default
blocked-connection	Threat weight score for blocked connections.	option	-	high
	Option	Description		
	<i>disable</i>	Disable threat weight scoring for blocked connections.		
	<i>low</i>	Use the low level score for blocked connections.		
	<i>medium</i>	Use the medium level score for blocked connections.		
	<i>high</i>	Use the high level score for blocked connections.		
	<i>critical</i>	Use the critical level score for blocked connections.		
botnet-connection-detected	Threat weight score for detected botnet connections.	option	-	critical
	Option	Description		
	<i>disable</i>	Disable threat weight scoring for detected botnet connections.		
	<i>low</i>	Use the low level score for detected botnet connections.		
	<i>medium</i>	Use the medium level score for detected botnet connections.		
	<i>high</i>	Use the high level score for detected botnet connections.		
	<i>critical</i>	Use the critical level score for detected botnet connections.		
failed-connection	Threat weight score for failed connections.	option	-	low
	Option	Description		
	<i>disable</i>	Disable threat weight scoring for failed connections.		
	<i>low</i>	Use the low level score for failed connections.		
	<i>medium</i>	Use the medium level score for failed connections.		
	<i>high</i>	Use the high level score for failed connections.		
	<i>critical</i>	Use the critical level score for failed connections.		
status	Enable/disable the threat weight feature.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable the threat weight feature.		
	<i>disable</i>	Disable the threat weight feature.		

Parameter	Description	Type	Size	Default
url-block-detected	Threat weight score for URL blocking.	option	-	high
	Option	Description		
	<i>disable</i>	Disable threat weight scoring for URL blocking.		
	<i>low</i>	Use the low level score for URL blocking.		
	<i>medium</i>	Use the medium level score for URL blocking.		
	<i>high</i>	Use the high level score for URL blocking.		
	<i>critical</i>	Use the critical level score for URL blocking.		

config application

Parameter	Description	Type	Size	Default
category	Application category.	integer	Minimum value: 0 Maximum value: 65535	0
id	Entry ID.	integer	Minimum value: 0 Maximum value: 255	0
level	Threat weight score for Application events.	option	-	low
	Option	Description		
	<i>disable</i>	Disable threat weight scoring for Application events.		
	<i>low</i>	Use the low level score for Application events.		
	<i>medium</i>	Use the medium level score for Application events.		
	<i>high</i>	Use the high level score for Application events.		
	<i>critical</i>	Use the critical level score for Application events.		

config geolocation

Parameter	Description	Type	Size	Default
country	Country code.	string	Maximum length: 2	

Parameter	Description	Type	Size	Default												
id	Entry ID.	integer	Minimum value: 0 Maximum value: 255	0												
level	Threat weight score for Geolocation-based events.	option	-	low												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Disable threat weight scoring for Geolocation-based events.</td></tr><tr><td>low</td><td>Use the low level score for Geolocation-based events.</td></tr><tr><td>medium</td><td>Use the medium level score for Geolocation-based events.</td></tr><tr><td>high</td><td>Use the high level score for Geolocation-based events.</td></tr><tr><td>critical</td><td>Use the critical level score for Geolocation-based events.</td></tr></table>				Option	Description	disable	Disable threat weight scoring for Geolocation-based events.	low	Use the low level score for Geolocation-based events.	medium	Use the medium level score for Geolocation-based events.	high	Use the high level score for Geolocation-based events.	critical	Use the critical level score for Geolocation-based events.
Option	Description															
disable	Disable threat weight scoring for Geolocation-based events.															
low	Use the low level score for Geolocation-based events.															
medium	Use the medium level score for Geolocation-based events.															
high	Use the high level score for Geolocation-based events.															
critical	Use the critical level score for Geolocation-based events.															

config ips

Parameter	Description	Type	Size	Default												
critical-severity	Threat weight score for IPS critical severity events.	option	-	critical												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Disable threat weight scoring for IPS critical severity events.</td></tr><tr><td>low</td><td>Use the low level score for IPS critical severity events.</td></tr><tr><td>medium</td><td>Use the medium level score for IPS critical severity events.</td></tr><tr><td>high</td><td>Use the high level score for IPS critical severity events.</td></tr><tr><td>critical</td><td>Use the critical level score for IPS critical severity events.</td></tr></table>	Option	Description	disable	Disable threat weight scoring for IPS critical severity events.	low	Use the low level score for IPS critical severity events.	medium	Use the medium level score for IPS critical severity events.	high	Use the high level score for IPS critical severity events.	critical	Use the critical level score for IPS critical severity events.			
Option	Description															
disable	Disable threat weight scoring for IPS critical severity events.															
low	Use the low level score for IPS critical severity events.															
medium	Use the medium level score for IPS critical severity events.															
high	Use the high level score for IPS critical severity events.															
critical	Use the critical level score for IPS critical severity events.															
high-severity	Threat weight score for IPS high severity events.	option	-	high												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Disable threat weight scoring for IPS high severity events.</td></tr><tr><td>low</td><td>Use the low level score for IPS high severity events.</td></tr><tr><td>medium</td><td>Use the medium level score for IPS high severity events.</td></tr><tr><td>high</td><td>Use the high level score for IPS high severity events.</td></tr><tr><td>critical</td><td>Use the critical level score for IPS high severity events.</td></tr></table>	Option	Description	disable	Disable threat weight scoring for IPS high severity events.	low	Use the low level score for IPS high severity events.	medium	Use the medium level score for IPS high severity events.	high	Use the high level score for IPS high severity events.	critical	Use the critical level score for IPS high severity events.			
Option	Description															
disable	Disable threat weight scoring for IPS high severity events.															
low	Use the low level score for IPS high severity events.															
medium	Use the medium level score for IPS high severity events.															
high	Use the high level score for IPS high severity events.															
critical	Use the critical level score for IPS high severity events.															
info-severity	Threat weight score for IPS info severity events.	option	-	disable												

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>disable</i>	Disable threat weight scoring for IPS info severity events.		
	<i>low</i>	Use the low level score for IPS info severity events.		
	<i>medium</i>	Use the medium level score for IPS info severity events.		
	<i>high</i>	Use the high level score for IPS info severity events.		
	<i>critical</i>	Use the critical level score for IPS info severity events.		
low-severity	Threat weight score for IPS low severity events.	option	-	low
	Option	Description		
	<i>disable</i>	Disable threat weight scoring for IPS low severity events.		
	<i>low</i>	Use the low level score for IPS low severity events.		
	<i>medium</i>	Use the medium level score for IPS low severity events.		
	<i>high</i>	Use the high level score for IPS low severity events.		
	<i>critical</i>	Use the critical level score for IPS low severity events.		
medium-severity	Threat weight score for IPS medium severity events.	option	-	medium
	Option	Description		
	<i>disable</i>	Disable threat weight scoring for IPS medium severity events.		
	<i>low</i>	Use the low level score for IPS medium severity events.		
	<i>medium</i>	Use the medium level score for IPS medium severity events.		
	<i>high</i>	Use the high level score for IPS medium severity events.		
	<i>critical</i>	Use the critical level score for IPS medium severity events.		

config level

Parameter	Description	Type	Size	Default
critical	Critical level score value (1 - 100).	integer	Minimum value: 1 Maximum value: 100	50
high	High level score value (1 - 100).	integer	Minimum value: 1 Maximum value: 100	30

Parameter	Description	Type	Size	Default
low	Low level score value (1 - 100).	integer	Minimum value: 1 Maximum value: 100	5
medium	Medium level score value (1 - 100).	integer	Minimum value: 1 Maximum value: 100	10

config malware

Parameter	Description	Type	Size	Default
command-blocked	Threat weight score for blocked command detected.	option	-	disable
	Option	Description		
	disable	Disable threat weight scoring for blocked command detected.		
	low	Use the low level score for blocked command detected.		
	medium	Use the medium level score for blocked command detected.		
	high	Use the high level score for blocked command detected.		
	critical	Use the critical level score for blocked command detected.		
content-disarm	Threat weight score for virus (content disarm) detected.	option	-	medium
	Option	Description		
	disable	Disable threat weight scoring for virus (content disarm) detected.		
	low	Use the low level score for virus (content disarm) detected.		
	medium	Use the medium level score for virus (content disarm) detected.		
	high	Use the high level score for virus (content disarm) detected.		
	critical	Use the critical level score for virus (content disarm) detected.		
ems-threat-feed	Threat weight score for virus (EMS threat feed) detected.	option	-	medium
	Option	Description		
	disable	Disable threat weight scoring for virus (EMS threat feed) detected.		
	low	Use the low level score for virus (EMS threat feed) detected.		

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>medium</i>	Use the medium level score for virus (EMS threat feed) detected.		
	<i>high</i>	Use the high level score for virus (EMS threat feed) detected.		
	<i>critical</i>	Use the critical level score for virus (EMS threat feed) detected.		
file-blocked	Threat weight score for blocked file detected.	option	-	low
	Option	Description		
	<i>disable</i>	Disable threat weight scoring for blocked file detected.		
	<i>low</i>	Use the low level score for blocked file detected.		
	<i>medium</i>	Use the medium level score for blocked file detected.		
	<i>high</i>	Use the high level score for blocked file detected.		
	<i>critical</i>	Use the critical level score for blocked file detected.		
fortindr	Threat weight score for FortiNDR-detected virus.	option	-	critical
	Option	Description		
	<i>disable</i>	Disable threat weight scoring for virus detected by FortiNDR.		
	<i>low</i>	Use the low level score for virus detected by FortiNDR.		
	<i>medium</i>	Use the medium level score for virus detected by FortiNDR.		
	<i>high</i>	Use the high level score for virus detected by FortiNDR.		
	<i>critical</i>	Use the critical level score for virus detected by FortiNDR.		
fortisandbox	Threat weight score for FortiSandbox-detected virus.	option	-	critical
	Option	Description		
	<i>disable</i>	Disable threat weight scoring for virus detected by FortiSandbox.		
	<i>low</i>	Use the low level score for virus detected by FortiSandbox.		
	<i>medium</i>	Use the medium level score for virus detected by FortiSandbox.		
	<i>high</i>	Use the high level score for virus detected by FortiSandbox.		
	<i>critical</i>	Use the critical level score for virus detected by FortiSandbox.		
fsa-high-risk	Threat weight score for FortiSandbox high risk malware detected.	option	-	high

Parameter	Description	Type	Size	Default												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>disable</i></td><td>Disable threat weight scoring for FortiSandbox high risk malware detected.</td></tr><tr><td><i>low</i></td><td>Use the low level score for FortiSandbox high risk malware detected.</td></tr><tr><td><i>medium</i></td><td>Use the medium level score for FortiSandbox high risk malware detected.</td></tr><tr><td><i>high</i></td><td>Use the high level score for FortiSandbox high risk malware detected.</td></tr><tr><td><i>critical</i></td><td>Use the critical level score for FortiSandbox high risk malware detected.</td></tr></table>	Option	Description	<i>disable</i>	Disable threat weight scoring for FortiSandbox high risk malware detected.	<i>low</i>	Use the low level score for FortiSandbox high risk malware detected.	<i>medium</i>	Use the medium level score for FortiSandbox high risk malware detected.	<i>high</i>	Use the high level score for FortiSandbox high risk malware detected.	<i>critical</i>	Use the critical level score for FortiSandbox high risk malware detected.			
	Option	Description														
	<i>disable</i>	Disable threat weight scoring for FortiSandbox high risk malware detected.														
	<i>low</i>	Use the low level score for FortiSandbox high risk malware detected.														
	<i>medium</i>	Use the medium level score for FortiSandbox high risk malware detected.														
	<i>high</i>	Use the high level score for FortiSandbox high risk malware detected.														
<i>critical</i>	Use the critical level score for FortiSandbox high risk malware detected.															
fsa-malicious	Threat weight score for FortiSandbox malicious malware detected.	option	-	critical												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>disable</i></td><td>Disable threat weight scoring for FortiSandbox malicious malware detected.</td></tr><tr><td><i>low</i></td><td>Use the low level score for FortiSandbox malicious malware detected.</td></tr><tr><td><i>medium</i></td><td>Use the medium level score for FortiSandbox malicious malware detected.</td></tr><tr><td><i>high</i></td><td>Use the high level score for FortiSandbox malicious malware detected.</td></tr><tr><td><i>critical</i></td><td>Use the critical level score for FortiSandbox malicious malware detected.</td></tr></table>	Option	Description	<i>disable</i>	Disable threat weight scoring for FortiSandbox malicious malware detected.	<i>low</i>	Use the low level score for FortiSandbox malicious malware detected.	<i>medium</i>	Use the medium level score for FortiSandbox malicious malware detected.	<i>high</i>	Use the high level score for FortiSandbox malicious malware detected.	<i>critical</i>	Use the critical level score for FortiSandbox malicious malware detected.			
	Option	Description														
	<i>disable</i>	Disable threat weight scoring for FortiSandbox malicious malware detected.														
	<i>low</i>	Use the low level score for FortiSandbox malicious malware detected.														
	<i>medium</i>	Use the medium level score for FortiSandbox malicious malware detected.														
	<i>high</i>	Use the high level score for FortiSandbox malicious malware detected.														
<i>critical</i>	Use the critical level score for FortiSandbox malicious malware detected.															
fsa-medium-risk	Threat weight score for FortiSandbox medium risk malware detected.	option	-	medium												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>disable</i></td><td>Disable threat weight scoring for FortiSandbox medium risk malware detected.</td></tr><tr><td><i>low</i></td><td>Use the low level score for FortiSandbox medium risk malware detected.</td></tr><tr><td><i>medium</i></td><td>Use the medium level score for FortiSandbox medium risk malware detected.</td></tr></table>	Option	Description	<i>disable</i>	Disable threat weight scoring for FortiSandbox medium risk malware detected.	<i>low</i>	Use the low level score for FortiSandbox medium risk malware detected.	<i>medium</i>	Use the medium level score for FortiSandbox medium risk malware detected.							
	Option	Description														
	<i>disable</i>	Disable threat weight scoring for FortiSandbox medium risk malware detected.														
<i>low</i>	Use the low level score for FortiSandbox medium risk malware detected.															
<i>medium</i>	Use the medium level score for FortiSandbox medium risk malware detected.															

Parameter	Description	Type	Size	Default												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>high</td><td>Use the high level score for FortiSandbox medium risk malware detected.</td></tr><tr><td>critical</td><td>Use the critical level score for FortiSandbox medium risk malware detected.</td></tr></table>	Option	Description	high	Use the high level score for FortiSandbox medium risk malware detected.	critical	Use the critical level score for FortiSandbox medium risk malware detected.									
	Option	Description														
	high	Use the high level score for FortiSandbox medium risk malware detected.														
critical	Use the critical level score for FortiSandbox medium risk malware detected.															
malware-list	Threat weight score for virus (malware list) detected.	option	-	medium												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Disable threat weight scoring for virus (malware list) detected.</td></tr><tr><td>low</td><td>Use the low level score for virus (malware list) detected.</td></tr><tr><td>medium</td><td>Use the medium level score for virus (malware list) detected.</td></tr><tr><td>high</td><td>Use the high level score for virus (malware list) detected.</td></tr><tr><td>critical</td><td>Use the critical level score for virus (malware list) detected.</td></tr></table>	Option	Description	disable	Disable threat weight scoring for virus (malware list) detected.	low	Use the low level score for virus (malware list) detected.	medium	Use the medium level score for virus (malware list) detected.	high	Use the high level score for virus (malware list) detected.	critical	Use the critical level score for virus (malware list) detected.			
	Option	Description														
	disable	Disable threat weight scoring for virus (malware list) detected.														
	low	Use the low level score for virus (malware list) detected.														
	medium	Use the medium level score for virus (malware list) detected.														
	high	Use the high level score for virus (malware list) detected.														
critical	Use the critical level score for virus (malware list) detected.															
mimefragmented	Threat weight score for mimefragmented detected.	option	-	disable												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Disable threat weight scoring for mimefragmented detected.</td></tr><tr><td>low</td><td>Use the low level score for mimefragmented detected.</td></tr><tr><td>medium</td><td>Use the medium level score for mimefragmented detected.</td></tr><tr><td>high</td><td>Use the high level score for mimefragmented detected.</td></tr><tr><td>critical</td><td>Use the critical level score for mimefragmented detected.</td></tr></table>	Option	Description	disable	Disable threat weight scoring for mimefragmented detected.	low	Use the low level score for mimefragmented detected.	medium	Use the medium level score for mimefragmented detected.	high	Use the high level score for mimefragmented detected.	critical	Use the critical level score for mimefragmented detected.			
	Option	Description														
	disable	Disable threat weight scoring for mimefragmented detected.														
	low	Use the low level score for mimefragmented detected.														
	medium	Use the medium level score for mimefragmented detected.														
	high	Use the high level score for mimefragmented detected.														
critical	Use the critical level score for mimefragmented detected.															
oversized	Threat weight score for oversized file detected.	option	-	disable												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Disable threat weight scoring for oversized file detected.</td></tr><tr><td>low</td><td>Use the low level score for oversized file detected.</td></tr><tr><td>medium</td><td>Use the medium level score for oversized file detected.</td></tr><tr><td>high</td><td>Use the high level score for oversized file detected.</td></tr><tr><td>critical</td><td>Use the critical level score for oversized file detected.</td></tr></table>	Option	Description	disable	Disable threat weight scoring for oversized file detected.	low	Use the low level score for oversized file detected.	medium	Use the medium level score for oversized file detected.	high	Use the high level score for oversized file detected.	critical	Use the critical level score for oversized file detected.			
	Option	Description														
	disable	Disable threat weight scoring for oversized file detected.														
	low	Use the low level score for oversized file detected.														
	medium	Use the medium level score for oversized file detected.														
	high	Use the high level score for oversized file detected.														
critical	Use the critical level score for oversized file detected.															
switch-proto	Threat weight score for switch proto detected.	option	-	disable												

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>disable</i>	Disable threat weight scoring for switch proto detected.		
	<i>low</i>	Use the low level score for switch proto detected.		
	<i>medium</i>	Use the medium level score for switch proto detected.		
	<i>high</i>	Use the high level score for switch proto detected.		
	<i>critical</i>	Use the critical level score for switch proto detected.		
virus-file-type-executable	Threat weight score for virus (file type executable) detected.	option	-	medium
	Option	Description		
	<i>disable</i>	Disable threat weight scoring for virus (filetype executable) detected.		
	<i>low</i>	Use the low level score for virus (filetype executable) detected.		
	<i>medium</i>	Use the medium level score for virus (filetype executable) detected.		
	<i>high</i>	Use the high level score for virus (filetype executable) detected.		
	<i>critical</i>	Use the critical level score for virus (filetype executable) detected.		
virus-infected	Threat weight score for virus (infected) detected.	option	-	critical
	Option	Description		
	<i>disable</i>	Disable threat weight scoring for virus (infected) detected.		
	<i>low</i>	Use the low level score for virus (infected) detected.		
	<i>medium</i>	Use the medium level score for virus (infected) detected.		
	<i>high</i>	Use the high level score for virus (infected) detected.		
	<i>critical</i>	Use the critical level score for virus (infected) detected.		
virus-outbreak-prevention	Threat weight score for virus (outbreak prevention) event.	option	-	critical
	Option	Description		
	<i>disable</i>	Disable threat weight scoring for virus (outbreak prevention) event.		
	<i>low</i>	Use the low level score for virus (outbreak prevention) event.		
	<i>medium</i>	Use the medium level score for virus (outbreak prevention) event.		
	<i>high</i>	Use the high level score for virus (outbreak prevention) event.		

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>critical</i>	Use the critical level score for virus (outbreak prevention) event.		
virus-scan-error	Threat weight score for virus (scan error) detected.	option	-	high
	Option	Description		
	<i>disable</i>	Disable threat weight scoring for virus (scan error) detected.		
	<i>low</i>	Use the low level score for virus (scan error) detected.		
	<i>medium</i>	Use the medium level score for virus (scan error) detected.		
	<i>high</i>	Use the high level score for virus (scan error) detected.		
	<i>critical</i>	Use the critical level score for virus (scan error) detected.		

config web

Parameter	Description	Type	Size	Default
category	Threat weight score for web category filtering matches.	integer	Minimum value: 0 Maximum value: 255	0
id	Entry ID.	integer	Minimum value: 0 Maximum value: 255	0
level	Threat weight score for web category filtering matches.	option	-	low
	Option	Description		
	<i>disable</i>	Disable threat weight scoring for web category filtering matches.		
	<i>low</i>	Use the low level score for web category filtering matches.		
	<i>medium</i>	Use the medium level score for web category filtering matches.		
	<i>high</i>	Use the high level score for web category filtering matches.		
	<i>critical</i>	Use the critical level score for web category filtering matches.		

config log webtrends filter

Filters for WebTrends.

```

config log webtrends filter
    Description: Filters for WebTrends.
    set anomaly [enable|disable]
    set forward-traffic [enable|disable]
    config free-style
        Description: Free style filters.
        edit <id>
            set category [traffic|event|...]
            set filter {string}
            set filter-type [include|exclude]
        next
    end
    set gtp [enable|disable]
    set local-traffic [enable|disable]
    set multicast-traffic [enable|disable]
    set severity [emergency|alert|...]
    set sniffer-traffic [enable|disable]
    set voip [enable|disable]
    set ztna-traffic [enable|disable]
end

```

config log webtrends filter

Parameter	Description	Type	Size	Default						
anomaly	Enable/disable anomaly logging.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable anomaly logging.</td></tr><tr><td><i>disable</i></td><td>Disable anomaly logging.</td></tr></table>	Option	Description	<i>enable</i>	Enable anomaly logging.	<i>disable</i>	Disable anomaly logging.			
Option	Description									
<i>enable</i>	Enable anomaly logging.									
<i>disable</i>	Disable anomaly logging.									
forward-traffic	Enable/disable forward traffic logging.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable forward traffic logging.</td></tr><tr><td><i>disable</i></td><td>Disable forward traffic logging.</td></tr></table>	Option	Description	<i>enable</i>	Enable forward traffic logging.	<i>disable</i>	Disable forward traffic logging.			
Option	Description									
<i>enable</i>	Enable forward traffic logging.									
<i>disable</i>	Disable forward traffic logging.									
gtp *	Enable/disable GTP messages logging.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable GTP messages logging.</td></tr><tr><td><i>disable</i></td><td>Disable GTP messages logging.</td></tr></table>	Option	Description	<i>enable</i>	Enable GTP messages logging.	<i>disable</i>	Disable GTP messages logging.			
Option	Description									
<i>enable</i>	Enable GTP messages logging.									
<i>disable</i>	Disable GTP messages logging.									
local-traffic	Enable/disable local in or out traffic logging.	option	-	enable						

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>enable</i>	Enable local in or out traffic logging.		
	<i>disable</i>	Disable local in or out traffic logging.		
multicast-traffic	Enable/disable multicast traffic logging.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable multicast traffic logging.		
	<i>disable</i>	Disable multicast traffic logging.		
severity	Lowest severity level to log to WebTrends.	option	-	information
	Option	Description		
	<i>emergency</i>	Emergency level.		
	<i>alert</i>	Alert level.		
	<i>critical</i>	Critical level.		
	<i>error</i>	Error level.		
	<i>warning</i>	Warning level.		
	<i>notification</i>	Notification level.		
	<i>information</i>	Information level.		
	Option	Description		
	<i>enable</i>	Enable sniffer traffic logging.		
	<i>disable</i>	Disable sniffer traffic logging.		
sniffer-traffic	Enable/disable sniffer traffic logging.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable VoIP logging.		
	<i>disable</i>	Disable VoIP logging.		
voip	Enable/disable VoIP logging.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable VoIP logging.		
	<i>disable</i>	Disable VoIP logging.		
ztna-traffic	Enable/disable ztna traffic logging.	option	-	enable

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>enable</i>	Enable ztna traffic logging.		
	<i>disable</i>	Disable ztna traffic logging.		

* This parameter may not exist in some models.

config free-style

Parameter	Description	Type	Size	Default
category	Log category.	option	-	traffic
	Option	Description		
	<i>traffic</i>	Traffic log.		
	<i>event</i>	Event log.		
	<i>virus</i>	Antivirus log.		
	<i>webfilter</i>	Web filter log.		
	<i>attack</i>	Attack log.		
	<i>spam</i>	Antispam log.		
	<i>anomaly</i>	Anomaly log.		
	<i>voip</i>	VoIP log.		
	<i>dlp</i>	DLP log.		
	<i>app-ctrl</i>	Application control log.		
	<i>waf</i>	Web application firewall log.		
	<i>dns</i>	DNS detail log.		
	<i>ssh</i>	SSH log.		
	<i>ssl</i>	SSL log.		
	<i>file-filter</i>	File filter log.		
	<i>icap</i>	ICAP log.		
filter	Free style filter string.	string	Maximum length: 1023	
filter-type	Include/exclude logs that match the filter.	option	-	include

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>include</i>	Include logs that match the filter.		
	<i>exclude</i>	Exclude logs that match the filter.		
id	Entry ID.	integer	Minimum value: 0 Maximum value: 4294967295	

config log webtrends setting

Settings for WebTrends.

```
config log webtrends setting
    Description: Settings for WebTrends.
    set server {string}
    set status [enable|disable]
end
```

config log webtrends setting

Parameter	Description	Type	Size	Default
server	Address of the remote WebTrends server.	string	Maximum length: 63	
status	Enable/disable logging to WebTrends.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable logging to WebTrends.		
	<i>disable</i>	Disable logging to WebTrends.		

monitoring

This section includes syntax for the following commands:

- [config monitoring np6-ipsec-engine on page 851](#)
- [config monitoring npu-hpe on page 852](#)

config monitoring np6-ipsec-engine



This command is available for model(s): FortiGate 1000D, FortiGate 1100E, FortiGate 1101E, FortiGate 1500DT, FortiGate 1500D, FortiGate 2000E, FortiGate 2201E, FortiGate 2500E, FortiGate 3000D, FortiGate 300E, FortiGate 301E, FortiGate 3100D, FortiGate 3200D, FortiGate 3300E, FortiGate 3301E, FortiGate 3400E, FortiGate 3401E, FortiGate 3600E, FortiGate 3601E, FortiGate 3700D, FortiGate 3960E, FortiGate 3980E, FortiGate 400E Bypass, FortiGate 400E, FortiGate 401E, FortiGate 5001E1, FortiGate 5001E, FortiGate 500E, FortiGate 501E, FortiGate 600E, FortiGate 601E, FortiGate 800D, FortiGate 900D.

It is not available for: FortiGate 1000F, FortiGate 1001F, FortiGate 100EF, FortiGate 100E, FortiGate 100F, FortiGate 101F, FortiGate 140E-POE, FortiGate 140E, FortiGate 1800F, FortiGate 1801F, FortiGate 200E, FortiGate 200F, FortiGate 201E, FortiGate 201F, FortiGate 2600F, FortiGate 2601F, FortiGate 3000F, FortiGate 3001F, FortiGate 3200F, FortiGate 3201F, FortiGate 3501F, FortiGate 3700F, FortiGate 3701F, FortiGate 400F, FortiGate 401F, FortiGate 40F 3G4G, FortiGate 4200F, FortiGate 4201F, FortiGate 4400F, FortiGate 4401F, FortiGate 60E-POE, FortiGate 60E, FortiGate 60F, FortiGate 61E, FortiGate 70F, FortiGate 71F, FortiGate 80E-POE, FortiGate 80E, FortiGate 80F Bypass, FortiGate 80F DSL, FortiGate 80F-POE, FortiGate 80F, FortiGate 81E-POE, FortiGate 81E, FortiGate 81F-POE, FortiGate 81F, FortiGate 90E, FortiGate 91E, FortiGate-VM64 Aliyun, FortiGate-VM64 AWS, FortiGate-VM64 Azure, FortiGate-VM64 GCP, FortiGate-VM64 OPC, FortiGate-VM64, FortiGateRugged 60F 3G4G, FortiGateRugged 60F, FortiGateRugged 70F 3G4G, FortiGateRugged 70F, FortiWiFi 40F 3G4G, FortiWiFi 40F, FortiWiFi 60E, FortiWiFi 60F, FortiWiFi 61E, FortiWiFi 61F, FortiWiFi 80F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G-POE, FortiWiFi 81F 2R-POE, FortiWiFi 81F 2R.

Configure NP6 IPsec engine status monitoring.

```
config monitoring np6-ipsec-engine
  Description: Configure NP6 IPsec engine status monitoring.
  set interval {integer}
  set status [enable|disable]
  set threshold {user}
end
```

config monitoring np6-ipsec-engine

Parameter	Description	Type	Size	Default
interval	IPsec engine status check interval (1 - 60 seconds, default = 1).	integer	Minimum value: 1 Maximum value: 60	1
status	Enable/disable NP6 IPsec engine status monitoring.	option	-	disable
	Option	Description		
	enable	Enable setting.		
	disable	Disable setting.		
threshold	IPsec engine status check threshold (x x x x x x x x, 8 integers from <1> to <255>, default = 15 15 12 12 8 8 5 5). Example: Log is generated if IPsec engine 0 is busy each of every 15 consecutive interval checks.	user	Not Specified	

config monitoring npu-hpe



This command is available for model(s): FortiGate 1000D, FortiGate 1000F, FortiGate 1001F, FortiGate 1100E, FortiGate 1101E, FortiGate 1500DT, FortiGate 1500D, FortiGate 1800F, FortiGate 1801F, FortiGate 2000E, FortiGate 2201E, FortiGate 2500E, FortiGate 2600F, FortiGate 2601F, FortiGate 3000D, FortiGate 3000F, FortiGate 3001F, FortiGate 300E, FortiGate 301E, FortiGate 3100D, FortiGate 3200D, FortiGate 3200F, FortiGate 3201F, FortiGate 3300E, FortiGate 3301E, FortiGate 3400E, FortiGate 3401E, FortiGate 3501F, FortiGate 3600E, FortiGate 3601E, FortiGate 3700D, FortiGate 3700F, FortiGate 3701F, FortiGate 3960E, FortiGate 3980E, FortiGate 400E Bypass, FortiGate 400E, FortiGate 400F, FortiGate 401E, FortiGate 401F, FortiGate 4200F, FortiGate 4201F, FortiGate 4400F, FortiGate 4401F, FortiGate 5001E1, FortiGate 5001E, FortiGate 500E, FortiGate 501E, FortiGate 600E, FortiGate 601E, FortiGate 800D, FortiGate 900D.

It is not available for: FortiGate 100EF, FortiGate 100E, FortiGate 100F, FortiGate 101F, FortiGate 140E-POE, FortiGate 140E, FortiGate 200E, FortiGate 200F, FortiGate 201E, FortiGate 201F, FortiGate 40F 3G4G, FortiGate 60E-POE, FortiGate 60E, FortiGate 60F, FortiGate 61E, FortiGate 70F, FortiGate 71F, FortiGate 80E-POE, FortiGate 80E, FortiGate 80F Bypass, FortiGate 80F DSL, FortiGate 80F-POE, FortiGate 80F, FortiGate 81E-POE, FortiGate 81E, FortiGate 81F-POE, FortiGate 81F, FortiGate 90E, FortiGate 91E, FortiGate-VM64 Aliyun, FortiGate-VM64 AWS, FortiGate-VM64 Azure, FortiGate-VM64 GCP, FortiGate-VM64 OPC, FortiGate-VM64, FortiGateRugged 60F 3G4G, FortiGateRugged 60F, FortiGateRugged 70F 3G4G, FortiGateRugged 70F, FortiWiFi 40F 3G4G, FortiWiFi 40F, FortiWiFi 60E, FortiWiFi 60F, FortiWiFi 61E, FortiWiFi 61F, FortiWiFi 80F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G-POE, FortiWiFi 81F 2R-POE, FortiWiFi 81F 2R.

Configure npu-hpe status monitoring.

```
config monitoring npu-hpe
  Description: Configure npu-hpe status monitoring.
  set interval {integer}
  set multipliers {user}
  set status [enable|disable]
end
```

config monitoring npu-hpe

Parameter	Description	Type	Size	Default
interval	HPE status check interval (1 - 60 seconds, default = 1 second).	integer	Minimum value: 1 Maximum value: 60	1
multipliers	HPE type interval multipliers (12 integers from <1> to <255>, default = 4, 4, 4, 4, 8, 8, 8, 8, 8, 8, 8, 8). An event log is generated after every (interval * multiplier)seconds as configured for any HPE type when drops occur for that HPE type. An attack log is generated after every (4 * multiplier) number of continuous event logs.	user	Not Specified	
status	Enable/disable HPE status monitoring.	option	-	disable
		Option	Description	
		enable	Enable setting.	
		disable	Disable setting.	

nsxt

This section includes syntax for the following commands:

- [config nsxt service-chain on page 854](#)
- [config nsxt setting on page 856](#)

config nsxt service-chain



This command is available for model(s): FortiGate-VM64.

It is not available for: FortiGate 1000D, FortiGate 1000F, FortiGate 1001F, FortiGate 100EF, FortiGate 100E, FortiGate 100F, FortiGate 101F, FortiGate 1100E, FortiGate 1101E, FortiGate 140E-POE, FortiGate 140E, FortiGate 1500DT, FortiGate 1500D, FortiGate 1800F, FortiGate 1801F, FortiGate 2000E, FortiGate 200E, FortiGate 200F, FortiGate 201E, FortiGate 201F, FortiGate 2201E, FortiGate 2500E, FortiGate 2600F, FortiGate 2601F, FortiGate 3000D, FortiGate 3000F, FortiGate 3001F, FortiGate 300E, FortiGate 301E, FortiGate 3100D, FortiGate 3200D, FortiGate 3200F, FortiGate 3201F, FortiGate 3300E, FortiGate 3301E, FortiGate 3400E, FortiGate 3401E, FortiGate 3501F, FortiGate 3600E, FortiGate 3601E, FortiGate 3700D, FortiGate 3700F, FortiGate 3701F, FortiGate 3960E, FortiGate 3980E, FortiGate 400E Bypass, FortiGate 400E, FortiGate 400F, FortiGate 401E, FortiGate 401F, FortiGate 40F 3G4G, FortiGate 4200F, FortiGate 4201F, FortiGate 4400F, FortiGate 4401F, FortiGate 5001E1, FortiGate 5001E, FortiGate 500E, FortiGate 501E, FortiGate 600E, FortiGate 601E, FortiGate 60E-POE, FortiGate 60E, FortiGate 60F, FortiGate 61E, FortiGate 70F, FortiGate 71F, FortiGate 800D, FortiGate 80E-POE, FortiGate 80E, FortiGate 80F Bypass, FortiGate 80F DSL, FortiGate 80F-POE, FortiGate 80F, FortiGate 81E-POE, FortiGate 81E, FortiGate 81F-POE, FortiGate 81F, FortiGate 900D, FortiGate 90E, FortiGate 91E, FortiGate-VM64 Aliyun, FortiGate-VM64 AWS, FortiGate-VM64 Azure, FortiGate-VM64 GCP, FortiGate-VM64 OPC, FortiGateRugged 60F 3G4G, FortiGateRugged 60F, FortiGateRugged 70F 3G4G, FortiGateRugged 70F, FortiWiFi 40F 3G4G, FortiWiFi 40F, FortiWiFi 60E, FortiWiFi 60F, FortiWiFi 61E, FortiWiFi 61F, FortiWiFi 80F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G-POE, FortiWiFi 81F 2R-POE, FortiWiFi 81F 2R.

Configure NSX-T service chain.

```
config nsxt service-chain
  Description: Configure NSX-T service chain.
  edit <id>
    set name {string}
    config service-index
      Description: Configure service index.
      edit <id>
        set name {string}
        set reverse-index {integer}
```

```

        set vd {string}
      next
    end
  next
end

```

config nsxt service-chain

Parameter	Description	Type	Size	Default
id	Chain ID.	integer	Minimum value: 0 Maximum value: 1023	0
name	Chain name.	string	Maximum length: 63	

config service-index

Parameter	Description	Type	Size	Default
id	Service index.	integer	Minimum value: 0 Maximum value: 255	0
name	Index name.	string	Maximum length: 63	
reverse-index	Reverse service index.	integer	Minimum value: 1 Maximum value: 255	1
vd	VDOM name.	string	Maximum length: 31	

config nsxt setting



This command is available for model(s): FortiGate-VM64.

It is not available for: FortiGate 1000D, FortiGate 1000F, FortiGate 1001F, FortiGate 100EF, FortiGate 100E, FortiGate 100F, FortiGate 101F, FortiGate 1100E, FortiGate 1101E, FortiGate 140E-POE, FortiGate 140E, FortiGate 1500DT, FortiGate 1500D, FortiGate 1800F, FortiGate 1801F, FortiGate 2000E, FortiGate 200E, FortiGate 200F, FortiGate 201E, FortiGate 201F, FortiGate 2201E, FortiGate 2500E, FortiGate 2600F, FortiGate 2601F, FortiGate 3000D, FortiGate 3000F, FortiGate 3001F, FortiGate 300E, FortiGate 301E, FortiGate 3100D, FortiGate 3200D, FortiGate 3200F, FortiGate 3201F, FortiGate 3300E, FortiGate 3301E, FortiGate 3400E, FortiGate 3401E, FortiGate 3501F, FortiGate 3600E, FortiGate 3601E, FortiGate 3700D, FortiGate 3700F, FortiGate 3701F, FortiGate 3960E, FortiGate 3980E, FortiGate 400E Bypass, FortiGate 400E, FortiGate 400F, FortiGate 401E, FortiGate 401F, FortiGate 40F 3G4G, FortiGate 4200F, FortiGate 4201F, FortiGate 4400F, FortiGate 4401F, FortiGate 5001E1, FortiGate 5001E, FortiGate 500E, FortiGate 501E, FortiGate 600E, FortiGate 601E, FortiGate 60E-POE, FortiGate 60E, FortiGate 60F, FortiGate 61E, FortiGate 70F, FortiGate 71F, FortiGate 800D, FortiGate 80E-POE, FortiGate 80E, FortiGate 80F Bypass, FortiGate 80F DSL, FortiGate 80F-POE, FortiGate 80F, FortiGate 81E-POE, FortiGate 81E, FortiGate 81F-POE, FortiGate 81F, FortiGate 900D, FortiGate 90E, FortiGate 91E, FortiGate-VM64 Aliyun, FortiGate-VM64 AWS, FortiGate-VM64 Azure, FortiGate-VM64 GCP, FortiGate-VM64 OPC, FortiGateRugged 60F 3G4G, FortiGateRugged 60F, FortiGateRugged 70F 3G4G, FortiGateRugged 70F, FortiWiFi 40F 3G4G, FortiWiFi 40F, FortiWiFi 60E, FortiWiFi 60F, FortiWiFi 61E, FortiWiFi 61F, FortiWiFi 80F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G-POE, FortiWiFi 81F 2R-POE, FortiWiFi 81F 2R.

Configure NSX-T setting.

```
config nsxt setting
  Description: Configure NSX-T setting.
  set liveness [enable|disable]
  set service {string}
end
```

config nsxt setting

Parameter	Description	Type	Size	Default
liveness	Enable/disable liveness detection packet forwarding.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable liveness detection packet forwarding.		
	<i>disable</i>	Disable liveness detection packet forwarding.		
service	Service name.	string	Maximum length: 63	

report

This section includes syntax for the following commands:

- [config report layout on page 857](#)
- [config report setting on page 866](#)

config report layout



This command is available for model(s): FortiGate 1000D, FortiGate 1001F, FortiGate 101F, FortiGate 1101E, FortiGate 1500DT, FortiGate 1500D, FortiGate 1801F, FortiGate 2000E, FortiGate 201E, FortiGate 201F, FortiGate 2201E, FortiGate 2500E, FortiGate 2600F, FortiGate 2601F, FortiGate 3000D, FortiGate 3001F, FortiGate 301E, FortiGate 3100D, FortiGate 3200D, FortiGate 3201F, FortiGate 3301E, FortiGate 3401E, FortiGate 3501F, FortiGate 3601E, FortiGate 3700D, FortiGate 3701F, FortiGate 401E, FortiGate 401F, FortiGate 4201F, FortiGate 4401F, FortiGate 5001E1, FortiGate 501E, FortiGate 601E, FortiGate 61E, FortiGate 71F, FortiGate 800D, FortiGate 81E-POE, FortiGate 81E, FortiGate 81F-POE, FortiGate 81F, FortiGate 900D, FortiGate 91E, FortiGate-VM64 Aliyun, FortiGate-VM64 AWS, FortiGate-VM64 Azure, FortiGate-VM64 GCP, FortiGate-VM64 OPC, FortiGate-VM64, FortiGateRugged 70F 3G4G, FortiGateRugged 70F, FortiWiFi 61E, FortiWiFi 61F, FortiWiFi 81F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G-POE, FortiWiFi 81F 2R-POE, FortiWiFi 81F 2R.

It is not available for: FortiGate 1000F, FortiGate 100EF, FortiGate 100E, FortiGate 100F, FortiGate 1100E, FortiGate 140E-POE, FortiGate 140E, FortiGate 1800F, FortiGate 200E, FortiGate 200F, FortiGate 3000F, FortiGate 300E, FortiGate 3200F, FortiGate 3300E, FortiGate 3400E, FortiGate 3600E, FortiGate 3700F, FortiGate 3960E, FortiGate 3980E, FortiGate 400E Bypass, FortiGate 400E, FortiGate 400F, FortiGate 40F 3G4G, FortiGate 4200F, FortiGate 4400F, FortiGate 5001E, FortiGate 500E, FortiGate 600E, FortiGate 60E-POE, FortiGate 60E, FortiGate 60F, FortiGate 70F, FortiGate 80E-POE, FortiGate 80E, FortiGate 80F Bypass, FortiGate 80F DSL, FortiGate 80F-POE, FortiGate 80F, FortiGate 90E, FortiGateRugged 60F 3G4G, FortiGateRugged 60F, FortiWiFi 40F 3G4G, FortiWiFi 40F, FortiWiFi 60E, FortiWiFi 60F, FortiWiFi 80F 2R 3G4G DSL.

Report layout configuration.

```
config report layout
  Description: Report layout configuration.
  edit <name>
    config body-item
      Description: Configure report body item.
      edit <id>
        set chart {string}
        set chart-options {option1}, {option2}, ...
        set content {string}
```



```

    set description {string}
    set img-src {string}
    set misc-component [hline|page-break|...]
    config parameters
        Description: Parameters.
        edit <id>
            set name {string}
            set value {string}
        next
    end
    set style {string}
    set text-component [text|heading1|...]
    set title {string}
    set top-n {integer}
    set type [text|image|...]
next
end
set cutoff-option [run-time|custom]
set cutoff-time {user}
set day [sunday|monday|...]
set description {string}
set email-recipients {string}
set email-send [enable|disable]
set format {option1}, {option2}, ...
set max-pdf-report {integer}
set options {option1}, {option2}, ...
config page
    Description: Configure report page.
    set column-break-before {option1}, {option2}, ...
    config footer
        Description: Configure report page footer.
        config footer-item
            Description: Configure report footer item.
            edit <id>
                set content {string}
                set description {string}
                set img-src {string}
                set style {string}
                set type [text|image]
            next
        end
        set style {string}
    end
config header
    Description: Configure report page header.
    config header-item
        Description: Configure report header item.
        edit <id>
            set content {string}
            set description {string}
            set img-src {string}
            set style {string}

```

```

        set type [text|image]
    next
    end
    set style {string}
end
set options {option1}, {option2}, ...
set page-break-before {option1}, {option2}, ...
set paper [a4|letter]
end
set schedule-type [demand|daily|...]
set style-theme {string}
set subtitle {string}
set time {user}
set title {string}
next
end

```

config report layout

Parameter	Description	Type	Size	Default																
cutoff-option	Cutoff-option is either run-time or custom.	option	-	run-time																
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>run-time</td><td>Run time.</td></tr><tr><td>custom</td><td>Custom.</td></tr></table>				Option	Description	run-time	Run time.	custom	Custom.										
	Option	Description																		
	run-time	Run time.																		
custom	Custom.																			
cutoff-time	Custom cutoff time to generate report (format = hh:mm).	user	Not Specified																	
day	Schedule days of week to generate report.	option	-	sunday																
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>sunday</td><td>Sunday.</td></tr><tr><td>monday</td><td>Monday.</td></tr><tr><td>tuesday</td><td>Tuesday.</td></tr><tr><td>wednesday</td><td>Wednesday.</td></tr><tr><td>thursday</td><td>Thursday.</td></tr><tr><td>friday</td><td>Friday.</td></tr><tr><td>saturday</td><td>Saturday.</td></tr></table>				Option	Description	sunday	Sunday.	monday	Monday.	tuesday	Tuesday.	wednesday	Wednesday.	thursday	Thursday.	friday	Friday.	saturday	Saturday.
	Option	Description																		
	sunday	Sunday.																		
	monday	Monday.																		
	tuesday	Tuesday.																		
	wednesday	Wednesday.																		
	thursday	Thursday.																		
	friday	Friday.																		
saturday	Saturday.																			
description	Description.	string	Maximum length: 127																	

Parameter	Description	Type	Size	Default										
email-recipients	Email recipients for generated reports.	string	Maximum length: 511											
email-send	Enable/disable sending emails after reports are generated.	option	-	disable										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable sending emails after generating reports.</td></tr><tr><td>disable</td><td>Disable sending emails after generating reports.</td></tr></table>				Option	Description	enable	Enable sending emails after generating reports.	disable	Disable sending emails after generating reports.				
	Option	Description												
	enable	Enable sending emails after generating reports.												
disable	Disable sending emails after generating reports.													
format	Report format.	option	-	pdf										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>pdf</td><td>PDF.</td></tr></table>				Option	Description	pdf	PDF.						
	Option	Description												
pdf	PDF.													
max-pdf-report	Maximum number of PDF reports to keep at one time (oldest report is overwritten).	integer	Minimum value: 1 Maximum value: 365	31										
name	Report layout name.	string	Maximum length: 35											
options	Report layout options.	option	-	include-table-of-content auto-numbering-heading view-chart-as-heading										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>include-table-of-content</td><td>Include table of content in the report.</td></tr><tr><td>auto-numbering-heading</td><td>Prepend heading with auto numbering.</td></tr><tr><td>view-chart-as-heading</td><td>Auto add heading for each chart.</td></tr><tr><td>show-html-navbar-before-heading</td><td>Show HTML navigation bar before each heading.</td></tr></table>				Option	Description	include-table-of-content	Include table of content in the report.	auto-numbering-heading	Prepend heading with auto numbering.	view-chart-as-heading	Auto add heading for each chart.	show-html-navbar-before-heading	Show HTML navigation bar before each heading.
	Option	Description												
	include-table-of-content	Include table of content in the report.												
	auto-numbering-heading	Prepend heading with auto numbering.												
	view-chart-as-heading	Auto add heading for each chart.												
show-html-navbar-before-heading	Show HTML navigation bar before each heading.													
	dummy-option	Use this option if you need none of the above options.												

Parameter	Description	Type	Size	Default								
schedule-type	Report schedule type.	option	-	daily								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>demand</i></td><td>Run on demand.</td></tr><tr><td><i>daily</i></td><td>Schedule daily.</td></tr><tr><td><i>weekly</i></td><td>Schedule weekly.</td></tr></table>				Option	Description	<i>demand</i>	Run on demand.	<i>daily</i>	Schedule daily.	<i>weekly</i>	Schedule weekly.
	Option	Description										
	<i>demand</i>	Run on demand.										
	<i>daily</i>	Schedule daily.										
<i>weekly</i>	Schedule weekly.											
style-theme	Report style theme.	string	Maximum length: 35									
subtitle	Report subtitle.	string	Maximum length: 127									
time	Schedule time to generate report (format = hh:mm).	user	Not Specified									
title	Report title.	string	Maximum length: 127									

config body-item

Parameter	Description	Type	Size	Default								
chart	Report item chart name.	string	Maximum length: 71									
chart-options	Report chart options.	option	-	include-no-data hide-title show-caption								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>include-no-data</td><td>Include chart with no data.</td></tr><tr><td>hide-title</td><td>Hide chart title.</td></tr><tr><td>show-caption</td><td>Show chart caption.</td></tr></table>				Option	Description	include-no-data	Include chart with no data.	hide-title	Hide chart title.	show-caption	Show chart caption.
	Option	Description										
	include-no-data	Include chart with no data.										
	hide-title	Hide chart title.										
show-caption	Show chart caption.											
content	Report item text content.	string	Maximum length: 511									
description	Description.	string	Maximum length: 63									

Parameter	Description	Type	Size	Default										
id	Report item ID.	integer	Minimum value: 0 0 Maximum value: 4294967295											
img-src	Report item image file name.	string	Maximum length: 127											
misc-component	Report item miscellaneous component.	option	-	hline										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>hline</td><td>Horizontal line.</td></tr><tr><td>page-break</td><td>Page break.</td></tr><tr><td>column-break</td><td>Column break.</td></tr><tr><td>section-start</td><td>Section start.</td></tr></table>				Option	Description	hline	Horizontal line.	page-break	Page break.	column-break	Column break.	section-start	Section start.
	Option	Description												
	hline	Horizontal line.												
	page-break	Page break.												
	column-break	Column break.												
section-start	Section start.													
style	Report item style.	string	Maximum length: 71											
text-component	Report item text component.	option	-	text										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>text</td><td>Normal text.</td></tr><tr><td>heading1</td><td>Heading 1.</td></tr><tr><td>heading2</td><td>Heading 2.</td></tr><tr><td>heading3</td><td>Heading 3.</td></tr></table>				Option	Description	text	Normal text.	heading1	Heading 1.	heading2	Heading 2.	heading3	Heading 3.
	Option	Description												
	text	Normal text.												
	heading1	Heading 1.												
	heading2	Heading 2.												
heading3	Heading 3.													
title	Report section title.	string	Maximum length: 511											
top-n	Value of top.	integer	Minimum value: 0 0 Maximum value: 4294967295											
type	Report item type.	option	-	text										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>text</td><td>Text.</td></tr><tr><td>image</td><td>Image.</td></tr><tr><td>chart</td><td>Chart.</td></tr><tr><td>misc</td><td>Miscellaneous.</td></tr></table>				Option	Description	text	Text.	image	Image.	chart	Chart.	misc	Miscellaneous.
	Option	Description												
	text	Text.												
	image	Image.												
	chart	Chart.												
misc	Miscellaneous.													

config parameters

Parameter	Description	Type	Size	Default
id	ID.	integer	Minimum value: 0 Maximum value: 4294967295	0
name	Field name that match field of parameters defined in dataset.	string	Maximum length: 127	
value	Value to replace corresponding field of parameters defined in dataset.	string	Maximum length: 1023	

config page

Parameter	Description	Type	Size	Default								
column-break-before	Report page auto column break before heading.	option	-									
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>heading1</td><td>Column break before heading 1.</td></tr><tr><td>heading2</td><td>Column break before heading 2.</td></tr><tr><td>heading3</td><td>Column break before heading 3.</td></tr></table>	Option	Description	heading1	Column break before heading 1.	heading2	Column break before heading 2.	heading3	Column break before heading 3.			
Option	Description											
heading1	Column break before heading 1.											
heading2	Column break before heading 2.											
heading3	Column break before heading 3.											
options	Report page options.	option	-									
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>header-on-first-page</td><td>Show header on first page.</td></tr><tr><td>footer-on-first-page</td><td>Show footer on first page.</td></tr></table>	Option	Description	header-on-first-page	Show header on first page.	footer-on-first-page	Show footer on first page.					
Option	Description											
header-on-first-page	Show header on first page.											
footer-on-first-page	Show footer on first page.											
page-break-before	Report page auto page break before heading.	option	-									
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>heading1</td><td>Page break before heading 1.</td></tr><tr><td>heading2</td><td>Page break before heading 2.</td></tr><tr><td>heading3</td><td>Page break before heading 3.</td></tr></table>	Option	Description	heading1	Page break before heading 1.	heading2	Page break before heading 2.	heading3	Page break before heading 3.			
Option	Description											
heading1	Page break before heading 1.											
heading2	Page break before heading 2.											
heading3	Page break before heading 3.											
paper	Report page paper.	option	-	a4								

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>a4</i>	A4 paper.		
	<i>letter</i>	Letter paper.		

config footer

Parameter	Description	Type	Size	Default
style	Report footer style.	string	Maximum length: 71	

config footer-item

Parameter	Description	Type	Size	Default
content	Report item text content.	string	Maximum length: 511	
description	Description.	string	Maximum length: 63	
id	Report item ID.	integer	Minimum value: 0 Maximum value: 4294967295	
img-src	Report item image file name.	string	Maximum length: 127	
style	Report item style.	string	Maximum length: 71	
type	Report item type.	option	-	text
	Option	Description		
	<i>text</i>	Text.		
	<i>image</i>	Image.		

config header

Parameter	Description	Type	Size	Default
style	Report header style.	string	Maximum length: 71	

config header-item

Parameter	Description	Type	Size	Default
content	Report item text content.	string	Maximum length: 511	
description	Description.	string	Maximum length: 63	
id	Report item ID.	integer	Minimum value: 0 Maximum value: 4294967295	
img-src	Report item image file name.	string	Maximum length: 127	
style	Report item style.	string	Maximum length: 71	
type	Report item type.	option	-	text
	Option Description			
	<i>text</i>	Text.		
	<i>image</i>	Image.		

config report setting



This command is available for model(s): FortiGate 1000D, FortiGate 1001F, FortiGate 101F, FortiGate 1101E, FortiGate 1500DT, FortiGate 1500D, FortiGate 1801F, FortiGate 2000E, FortiGate 201E, FortiGate 201F, FortiGate 2201E, FortiGate 2500E, FortiGate 2600F, FortiGate 2601F, FortiGate 3000D, FortiGate 3001F, FortiGate 301E, FortiGate 3100D, FortiGate 3200D, FortiGate 3201F, FortiGate 3301E, FortiGate 3401E, FortiGate 3501F, FortiGate 3601E, FortiGate 3700D, FortiGate 3701F, FortiGate 401E, FortiGate 401F, FortiGate 4201F, FortiGate 4401F, FortiGate 5001E1, FortiGate 501E, FortiGate 601E, FortiGate 61E, FortiGate 71F, FortiGate 800D, FortiGate 81E-POE, FortiGate 81E, FortiGate 81F-POE, FortiGate 81F, FortiGate 900D, FortiGate 91E, FortiGate-VM64 Aliyun, FortiGate-VM64 AWS, FortiGate-VM64 Azure, FortiGate-VM64 GCP, FortiGate-VM64 OPC, FortiGate-VM64, FortiGateRugged 70F 3G4G, FortiGateRugged 70F, FortiWiFi 61E, FortiWiFi 61F, FortiWiFi 81F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G-POE, FortiWiFi 81F 2R-POE, FortiWiFi 81F 2R.

It is not available for: FortiGate 1000F, FortiGate 100EF, FortiGate 100E, FortiGate 100F, FortiGate 1100E, FortiGate 140E-POE, FortiGate 140E, FortiGate 1800F, FortiGate 200E, FortiGate 200F, FortiGate 3000F, FortiGate 300E, FortiGate 3200F, FortiGate 3300E, FortiGate 3400E, FortiGate 3600E, FortiGate 3700F, FortiGate 3960E, FortiGate 3980E, FortiGate 400E Bypass, FortiGate 400E, FortiGate 400F, FortiGate 40F 3G4G, FortiGate 4200F, FortiGate 4400F, FortiGate 5001E, FortiGate 500E, FortiGate 600E, FortiGate 60E-POE, FortiGate 60E, FortiGate 60F, FortiGate 70F, FortiGate 80E-POE, FortiGate 80E, FortiGate 80F Bypass, FortiGate 80F DSL, FortiGate 80F-POE, FortiGate 80F, FortiGate 90E, FortiGateRugged 60F 3G4G, FortiGateRugged 60F, FortiWiFi 40F 3G4G, FortiWiFi 40F, FortiWiFi 60E, FortiWiFi 60F, FortiWiFi 80F 2R 3G4G DSL.

Report setting configuration.

```
config report setting
  Description: Report setting configuration.
  set fortiview [enable|disable]
  set pdf-report [enable|disable]
  set report-source {option1}, {option2}, ...
  set top-n {integer}
  set web-browsing-threshold {integer}
end
```

config report setting

Parameter	Description	Type	Size	Default						
fortiview	Enable/disable historical FortiView.	option	-	enable **						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable historical FortiView.</td></tr><tr><td><i>disable</i></td><td>Disable historical FortiView.</td></tr></table>				Option	Description	<i>enable</i>	Enable historical FortiView.	<i>disable</i>	Disable historical FortiView.
Option	Description									
<i>enable</i>	Enable historical FortiView.									
<i>disable</i>	Disable historical FortiView.									

Parameter	Description	Type	Size	Default
pdf-report	Enable/disable PDF report.	option	-	enable **
	Option Description			
	<i>enable</i>	Enable PDF report.		
	<i>disable</i>	Disable PDF report.		
report-source	Report log source.	option	-	forward-traffic
	Option Description			
	<i>forward-traffic</i>	Report includes forward traffic logs.		
	<i>sniffer-traffic</i>	Report includes sniffer traffic logs.		
	<i>local-deny-traffic</i>	Report includes local deny traffic logs.		
top-n	Number of items to populate (1000 - 20000).	integer	Minimum value: 1000 Maximum value: 20000	1000
web-browsing-threshold	Web browsing time calculation threshold (3 - 15 min).	integer	Minimum value: 3 Maximum value: 15	3

** Values may differ between models.

router

This section includes syntax for the following commands:

- [config router access-list on page 868](#)
- [config router access-list6 on page 870](#)
- [config router aspath-list on page 871](#)
- [config router auth-path on page 872](#)
- [config router bfd on page 872](#)
- [config router bfd6 on page 874](#)
- [config router bgp on page 875](#)
- [config router community-list on page 924](#)
- [config router extcommunity-list on page 926](#)
- [config router isis on page 927](#)
- [config router key-chain on page 941](#)
- [config router multicast-flow on page 953](#)
- [config router multicast on page 942](#)
- [config router multicast6 on page 951](#)
- [config router ospf on page 954](#)
- [config router ospf6 on page 970](#)
- [config router policy on page 984](#)
- [config router policy6 on page 987](#)
- [config router prefix-list on page 989](#)
- [config router prefix-list6 on page 991](#)
- [config router rip on page 992](#)
- [config router ripng on page 999](#)
- [config router route-map on page 1004](#)
- [config router setting on page 1010](#)
- [config router static on page 1011](#)
- [config router static6 on page 1013](#)

config router access-list

Configure access lists.

```
config router access-list
  Description: Configure access lists.
  edit <name>
    set comments {string}
    config rule
```

```

Description: Rule.
edit <id>
    set action [permit|deny]
    set exact-match [enable|disable]
    set prefix {user}
    set wildcard {user}
next
end
next
end

```

config router access-list

Parameter	Description	Type	Size	Default
comments	Comment.	string	Maximum length: 127	
name	Name.	string	Maximum length: 35	

config rule

Parameter	Description	Type	Size	Default
action	Permit or deny this IP address and netmask prefix.	option	-	permit
	Option	Description		
	<i>permit</i>	Permit or allow this IP address and netmask prefix.		
	<i>deny</i>	Deny this IP address and netmask prefix.		
exact-match	Enable/disable exact match.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable exact match.		
	<i>disable</i>	Disable exact match.		
id	Rule ID.	integer	Minimum value: 0 Maximum value: 4294967295	
prefix	IPv4 prefix to define regular filter criteria, such as "any" or subnets.	user	Not Specified	
wildcard	Wildcard to define Cisco-style wildcard filter criteria.	user	Not Specified	

config router access-list6

Configure IPv6 access lists.

```
config router access-list6
  Description: Configure IPv6 access lists.
  edit <name>
    set comments {string}
    config rule
      Description: Rule.
      edit <id>
        set action [permit|deny]
        set exact-match [enable|disable]
        set flags {integer}
        set prefix6 {user}
      next
    end
  next
end
```

config router access-list6

Parameter	Description	Type	Size	Default
comments	Comment.	string	Maximum length: 127	
name	Name.	string	Maximum length: 35	

config rule

Parameter	Description	Type	Size	Default
action	Permit or deny this IP address and netmask prefix.	option	-	permit
	Option	Description		
	<i>permit</i>	Permit or allow this IP address and netmask prefix.		
	<i>deny</i>	Deny this IP address and netmask prefix.		
exact-match	Enable/disable exact prefix match.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable exact match.		
	<i>disable</i>	Disable exact match.		

Parameter	Description	Type	Size	Default
flags	Flags. Read-only.	integer	Minimum value: 0 Maximum value: 4294967295	0
id	Rule ID.	integer	Minimum value: 0 Maximum value: 4294967295	0
prefix6	IPv6 prefix to define regular filter criteria, such as "any" or subnets.	user	Not Specified	

config router aspath-list

Configure Autonomous System (AS) path lists.

```

config router aspath-list
  Description: Configure Autonomous System (AS) path lists.
  edit <name>
    config rule
      Description: AS path list rule.
      edit <id>
        set action [deny|permit]
        set regexp {string}
      next
    end
  next
end

```

config router aspath-list

Parameter	Description	Type	Size	Default
name	AS path list name.	string	Maximum length: 35	

config rule

Parameter	Description	Type	Size	Default
action	Permit or deny route-based operations, based on the route's AS_PATH attribute.	option	-	

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>deny</i>	Deny route-based operations.		
	<i>permit</i>	Permit route-based operations.		
id	ID.	integer	Minimum value: 0 Maximum value: 4294967295	
regex	Regular-expression to match the Border Gateway Protocol (BGP) AS paths.	string	Maximum length: 63	

config router auth-path

Configure authentication based routing.

```
config router auth-path
  Description: Configure authentication based routing.
  edit <name>
    set device {string}
    set gateway {ipv4-address}
  next
end
```

config router auth-path

Parameter	Description	Type	Size	Default
device	Outgoing interface.	string	Maximum length: 35	
gateway	Gateway IP address.	ipv4-address	Not Specified	0.0.0.0
name	Name of the entry.	string	Maximum length: 15	

config router bfd

Configure BFD.

```
config router bfd
  Description: Configure BFD.
```

```

config multihop-template
  Description: BFD multi-hop template table.
  edit <id>
    set auth-mode [none|md5]
    set bfd-desired-min-tx {integer}
    set bfd-detect-mult {integer}
    set bfd-required-min-rx {integer}
    set dst {ipv4-classnet}
    set md5-key {password}
    set src {ipv4-classnet}
  next
end
config neighbor
  Description: Neighbor.
  edit <ip>
    set interface {string}
  next
end
end

```

config multihop-template

Parameter	Description	Type	Size	Default
auth-mode	Authentication mode.	option	-	none
	Option	Description		
	<i>none</i>	None.		
	<i>md5</i>	Meticulous MD5 mode.		
bfd-desired-min-tx	BFD desired minimal transmit interval (milliseconds).	integer	Minimum value: 100 Maximum value: 30000	250
bfd-detect-mult	BFD detection multiplier.	integer	Minimum value: 3 Maximum value: 50	3
bfd-required-min-rx	BFD required minimal receive interval (milliseconds).	integer	Minimum value: 100 Maximum value: 30000	250
dst	Destination prefix.	ipv4-classnet	Not Specified	0.0.0.0 0.0.0.0
id	ID.	integer	Minimum value: 0 Maximum value: 4294967295	0
md5-key	MD5 key of key ID 1.	password	Not Specified	

Parameter	Description	Type	Size	Default
src	Source prefix.	ipv4-classnet	Not Specified	0.0.0.0 0.0.0.0

config neighbor

Parameter	Description	Type	Size	Default
interface	Interface name.	string	Maximum length: 15	
ip	IPv4 address of the BFD neighbor.	ipv4-address	Not Specified	0.0.0.0

config router bfd6

Configure IPv6 BFD.

```

config router bfd6
  Description: Configure IPv6 BFD.
  config multihop-template
    Description: BFD IPv6 multi-hop template table.
    edit <id>
      set auth-mode [none|md5]
      set bfd-desired-min-tx {integer}
      set bfd-detect-mult {integer}
      set bfd-required-min-rx {integer}
      set dst {ipv6-network}
      set md5-key {password}
      set src {ipv6-network}
    next
  end
  config neighbor
    Description: Configure neighbor of IPv6 BFD.
    edit <ip6-address>
      set interface {string}
    next
  end
end

```

config multihop-template

Parameter	Description	Type	Size	Default
auth-mode	Authentication mode.	option	-	none

Parameter	Description	Type	Size	Default						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>none</i></td><td>None.</td></tr><tr><td><i>md5</i></td><td>Meticulous MD5 mode.</td></tr></table>	Option	Description	<i>none</i>	None.	<i>md5</i>	Meticulous MD5 mode.			
	Option	Description								
	<i>none</i>	None.								
<i>md5</i>	Meticulous MD5 mode.									
bfd-desired-min-tx	BFD desired minimal transmit interval (milliseconds).	integer	Minimum value: 100 Maximum value: 30000	250						
bfd-detect-mult	BFD detection multiplier.	integer	Minimum value: 3 Maximum value: 50	3						
bfd-required-min-rx	BFD required minimal receive interval (milliseconds).	integer	Minimum value: 100 Maximum value: 30000	250						
dst	Destination prefix.	ipv6-network	Not Specified	::/0						
id	ID.	integer	Minimum value: 0 Maximum value: 4294967295	0						
md5-key	MD5 key of key ID 1.	password	Not Specified							
src	Source prefix.	ipv6-network	Not Specified	::/0						

config neighbor

Parameter	Description	Type	Size	Default
interface	Interface to the BFD neighbor.	string	Maximum length: 15	
ip6-address	IPv6 address of the BFD neighbor.	ipv6-address	Not Specified	::

config router bgp

Configure BGP.

```
config router bgp
  Description: Configure BGP.
  set additional-path [enable|disable]
  set additional-path-select {integer}
  set additional-path-select-vpnv4 {integer}
```

```

set additional-path-select6 {integer}
set additional-path-vpnv4 [enable|disable]
set additional-path6 [enable|disable]
config admin-distance
    Description: Administrative distance modifications.
    edit <id>
        set distance {integer}
        set neighbour-prefix {ipv4-classnet}
        set route-list {string}
    next
end
config aggregate-address
    Description: BGP aggregate address table.
    edit <id>
        set as-set [enable|disable]
        set prefix {ipv4-classnet-any}
        set summary-only [enable|disable]
    next
end
config aggregate-address6
    Description: BGP IPv6 aggregate address table.
    edit <id>
        set as-set [enable|disable]
        set prefix6 {ipv6-prefix}
        set summary-only [enable|disable]
    next
end
set always-compare-med [enable|disable]
set as {user}
set bestpath-as-path-ignore [enable|disable]
set bestpath-cmp-confed-aspath [enable|disable]
set bestpath-cmp-routerid [enable|disable]
set bestpath-med-confed [enable|disable]
set bestpath-med-missing-as-worst [enable|disable]
set client-to-client-reflection [enable|disable]
set cluster-id {ipv4-address-any}
set confederation-identifier {integer}
set confederation-peers <peer1>, <peer2>, ...
set dampening [enable|disable]
set dampening-max-suppress-time {integer}
set dampening-reachability-half-life {integer}
set dampening-reuse {integer}
set dampening-route-map {string}
set dampening-suppress {integer}
set dampening-unreachability-half-life {integer}
set default-local-preference {integer}
set deterministic-med [enable|disable]
set distance-external {integer}
set distance-internal {integer}
set distance-local {integer}
set ebgp-multipath [enable|disable]
set enforce-first-as [enable|disable]

```

```

set fast-external-failover [enable|disable]
set graceful-end-on-timer [enable|disable]
set graceful-restart [enable|disable]
set graceful-restart-time {integer}
set graceful-stalepath-time {integer}
set graceful-update-delay {integer}
set holdtime-timer {integer}
set ibgp-multipath [enable|disable]
set ignore-optional-capability [enable|disable]
set keepalive-timer {integer}
set log-neighbour-changes [enable|disable]
set multipath-recursive-distance [enable|disable]
config neighbor
    Description: BGP neighbor table.
    edit <ip>
        set activate [enable|disable]
        set activate-vpnv4 [enable|disable]
        set activate6 [enable|disable]
        set additional-path [send|receive|...]
        set additional-path-vpnv4 [send|receive|...]
        set additional-path6 [send|receive|...]
        set adv-additional-path {integer}
        set adv-additional-path-vpnv4 {integer}
        set adv-additional-path6 {integer}
        set advertisement-interval {integer}
        set allowas-in {integer}
        set allowas-in-enable [enable|disable]
        set allowas-in-enable6 [enable|disable]
        set allowas-in-vpnv4 {integer}
        set allowas-in6 {integer}
        set as-override [enable|disable]
        set as-override6 [enable|disable]
        set attribute-unchanged {option1}, {option2}, ...
        set attribute-unchanged-vpnv4 {option1}, {option2}, ...
        set attribute-unchanged6 {option1}, {option2}, ...
        set bfd [enable|disable]
        set capability-default-originate [enable|disable]
        set capability-default-originate6 [enable|disable]
        set capability-dynamic [enable|disable]
        set capability-graceful-restart [enable|disable]
        set capability-graceful-restart-vpnv4 [enable|disable]
        set capability-graceful-restart6 [enable|disable]
        set capability-orf [none|receive|...]
        set capability-orf6 [none|receive|...]
        set capability-route-refresh [enable|disable]
        config conditional-advertise
            Description: Conditional advertisement.
            edit <advertise-routemap>
                set condition-routemap <name1>, <name2>, ...
                set condition-type [exist|non-exist]
            next
        end
    end

```

```

config conditional-advertise6
    Description: IPv6 conditional advertisement.
    edit <advertise-routemap>
        set condition-routemap <name1>, <name2>, ...
        set condition-type [exist|non-exist]
    next
end
set connect-timer {integer}
set default-originate-routemap {string}
set default-originate-routemap6 {string}
set description {string}
set distribute-list-in {string}
set distribute-list-in-vpnv4 {string}
set distribute-list-in6 {string}
set distribute-list-out {string}
set distribute-list-out-vpnv4 {string}
set distribute-list-out6 {string}
set dont-capability-negotiate [enable|disable]
set ebgp-enforce-multihop [enable|disable]
set ebgp-multihop-ttl {integer}
set filter-list-in {string}
set filter-list-in6 {string}
set filter-list-out {string}
set filter-list-out6 {string}
set holdtime-timer {integer}
set interface {string}
set keep-alive-timer {integer}
set link-down-failover [enable|disable]
set local-as {user}
set local-as-no-prepend [enable|disable]
set local-as-replace-as [enable|disable]
set maximum-prefix {integer}
set maximum-prefix-threshold {integer}
set maximum-prefix-threshold-vpnv4 {integer}
set maximum-prefix-threshold6 {integer}
set maximum-prefix-vpnv4 {integer}
set maximum-prefix-warning-only [enable|disable]
set maximum-prefix-warning-only-vpnv4 [enable|disable]
set maximum-prefix-warning-only6 [enable|disable]
set maximum-prefix6 {integer}
set next-hop-self [enable|disable]
set next-hop-self-rr [enable|disable]
set next-hop-self-rr6 [enable|disable]
set next-hop-self-vpnv4 [enable|disable]
set next-hop-self6 [enable|disable]
set override-capability [enable|disable]
set passive [enable|disable]
set password {password}
set prefix-list-in {string}
set prefix-list-in-vpnv4 {string}
set prefix-list-in6 {string}
set prefix-list-out {string}

```

```

    set prefix-list-out-vpnv4 {string}
    set prefix-list-out6 {string}
    set remote-as {user}
    set remove-private-as [enable|disable]
    set remove-private-as-vpnv4 [enable|disable]
    set remove-private-as6 [enable|disable]
    set restart-time {integer}
    set retain-stale-time {integer}
    set route-map-in {string}
    set route-map-in-vpnv4 {string}
    set route-map-in6 {string}
    set route-map-out {string}
    set route-map-out-preferable {string}
    set route-map-out-vpnv4 {string}
    set route-map-out-vpnv4-preferable {string}
    set route-map-out6 {string}
    set route-map-out6-preferable {string}
    set route-reflector-client [enable|disable]
    set route-reflector-client-vpnv4 [enable|disable]
    set route-reflector-client6 [enable|disable]
    set route-server-client [enable|disable]
    set route-server-client-vpnv4 [enable|disable]
    set route-server-client6 [enable|disable]
    set send-community [standard|extended|...]
    set send-community-vpnv4 [standard|extended|...]
    set send-community6 [standard|extended|...]
    set shutdown [enable|disable]
    set soft-reconfiguration [enable|disable]
    set soft-reconfiguration-vpnv4 [enable|disable]
    set soft-reconfiguration6 [enable|disable]
    set stale-route [enable|disable]
    set strict-capability-match [enable|disable]
    set unsuppress-map {string}
    set unsuppress-map6 {string}
    set update-source {string}
    set weight {integer}
next
end
config neighbor-group
    Description: BGP neighbor group table.
    edit <name>
        set activate [enable|disable]
        set activate-vpnv4 [enable|disable]
        set activate6 [enable|disable]
        set additional-path [send|receive|...]
        set additional-path-vpnv4 [send|receive|...]
        set additional-path6 [send|receive|...]
        set adv-additional-path {integer}
        set adv-additional-path-vpnv4 {integer}
        set adv-additional-path6 {integer}
        set advertisement-interval {integer}
        set allowas-in {integer}

```

```
set allowas-in-enable [enable|disable]
set allowas-in-enable6 [enable|disable]
set allowas-in-vpnv4 {integer}
set allowas-in6 {integer}
set as-override [enable|disable]
set as-override6 [enable|disable]
set attribute-unchanged {option1}, {option2}, ...
set attribute-unchanged-vpnv4 {option1}, {option2}, ...
set attribute-unchanged6 {option1}, {option2}, ...
set bfd [enable|disable]
set capability-default-originate [enable|disable]
set capability-default-originate6 [enable|disable]
set capability-dynamic [enable|disable]
set capability-graceful-restart [enable|disable]
set capability-graceful-restart-vpnv4 [enable|disable]
set capability-graceful-restart6 [enable|disable]
set capability-orf [none|receive|...]
set capability-orf6 [none|receive|...]
set capability-route-refresh [enable|disable]
set connect-timer {integer}
set default-originate-routemap {string}
set default-originate-routemap6 {string}
set description {string}
set distribute-list-in {string}
set distribute-list-in-vpnv4 {string}
set distribute-list-in6 {string}
set distribute-list-out {string}
set distribute-list-out-vpnv4 {string}
set distribute-list-out6 {string}
set dont-capability-negotiate [enable|disable]
set ebgp-enforce-multihop [enable|disable]
set ebgp-multihop-ttl {integer}
set filter-list-in {string}
set filter-list-in6 {string}
set filter-list-out {string}
set filter-list-out6 {string}
set holdtime-timer {integer}
set interface {string}
set keep-alive-timer {integer}
set link-down-failover [enable|disable]
set local-as {user}
set local-as-no-prepend [enable|disable]
set local-as-replace-as [enable|disable]
set maximum-prefix {integer}
set maximum-prefix-threshold {integer}
set maximum-prefix-threshold-vpnv4 {integer}
set maximum-prefix-threshold6 {integer}
set maximum-prefix-vpnv4 {integer}
set maximum-prefix-warning-only [enable|disable]
set maximum-prefix-warning-only-vpnv4 [enable|disable]
set maximum-prefix-warning-only6 [enable|disable]
set maximum-prefix6 {integer}
```

```

set next-hop-self [enable|disable]
set next-hop-self-rr [enable|disable]
set next-hop-self-rr6 [enable|disable]
set next-hop-self-vpnv4 [enable|disable]
set next-hop-self6 [enable|disable]
set override-capability [enable|disable]
set passive [enable|disable]
set password {password}
set prefix-list-in {string}
set prefix-list-in-vpnv4 {string}
set prefix-list-in6 {string}
set prefix-list-out {string}
set prefix-list-out-vpnv4 {string}
set prefix-list-out6 {string}
set remote-as {user}
set remove-private-as [enable|disable]
set remove-private-as-vpnv4 [enable|disable]
set remove-private-as6 [enable|disable]
set restart-time {integer}
set retain-stale-time {integer}
set route-map-in {string}
set route-map-in-vpnv4 {string}
set route-map-in6 {string}
set route-map-out {string}
set route-map-out-preferable {string}
set route-map-out-vpnv4 {string}
set route-map-out-vpnv4-preferable {string}
set route-map-out6 {string}
set route-map-out6-preferable {string}
set route-reflector-client [enable|disable]
set route-reflector-client-vpnv4 [enable|disable]
set route-reflector-client6 [enable|disable]
set route-server-client [enable|disable]
set route-server-client-vpnv4 [enable|disable]
set route-server-client6 [enable|disable]
set send-community [standard|extended|...]
set send-community-vpnv4 [standard|extended|...]
set send-community6 [standard|extended|...]
set shutdown [enable|disable]
set soft-reconfiguration [enable|disable]
set soft-reconfiguration-vpnv4 [enable|disable]
set soft-reconfiguration6 [enable|disable]
set stale-route [enable|disable]
set strict-capability-match [enable|disable]
set unsuppress-map {string}
set unsuppress-map6 {string}
set update-source {string}
set weight {integer}
next
end
config neighbor-range
    Description: BGP neighbor range table.

```



```

    edit <id>
        set max-neighbor-num {integer}
        set neighbor-group {string}
        set prefix {ipv4-classnet}
    next
end
config neighbor-range6
    Description: BGP IPv6 neighbor range table.
    edit <id>
        set max-neighbor-num {integer}
        set neighbor-group {string}
        set prefix6 {ipv6-network}
    next
end
config network
    Description: BGP network table.
    edit <id>
        set backdoor [enable|disable]
        set network-import-check [global|enable|...]
        set prefix {ipv4-classnet}
        set route-map {string}
    next
end
set network-import-check [enable|disable]
config network6
    Description: BGP IPv6 network table.
    edit <id>
        set backdoor [enable|disable]
        set network-import-check [global|enable|...]
        set prefix6 {ipv6-network}
        set route-map {string}
    next
end
set recursive-inherit-priority [enable|disable]
set recursive-next-hop [enable|disable]
config redistribute
    Description: BGP IPv4 redistribute table. Read-only.
    edit <name>
        set route-map {string}
        set status [enable|disable]
    next
end
config redistribute6
    Description: BGP IPv6 redistribute table. Read-only.
    edit <name>
        set route-map {string}
        set status [enable|disable]
    next
end
set router-id {ipv4-address-any}
set scan-time {integer}
set synchronization [enable|disable]

```

```

set tag-resolve-mode [disable|preferred|...]
config vrf
  Description: BGP VRF leaking table.
  edit <vrf>
    set export-rt <route-target1>, <route-target2>, ...
    set import-route-map {string}
    set import-rt <route-target1>, <route-target2>, ...
    config leak-target
      Description: Target VRF table.
      edit <vrf>
        set interface {string}
        set route-map {string}
      next
    end
    set rd {string}
    set role [standalone|ce|...]
  next
end
config vrf6
  Description: BGP IPv6 VRF leaking table.
  edit <vrf>
    config leak-target
      Description: Target VRF table.
      edit <vrf>
        set interface {string}
        set route-map {string}
      next
    end
  next
end
end
end

```

config router bgp

Parameter	Description	Type	Size	Default
additional-path	Enable/disable selection of BGP IPv4 additional paths.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		
additional-path-select	Number of additional paths to be selected for each IPv4 NLRI.	integer	Minimum value: 2 Maximum value: 255	2

Parameter	Description	Type	Size	Default
additional-path-select-vpnv4	Number of additional paths to be selected for each VPNv4 NLRI.	integer	Minimum value: 2 2 Maximum value: 255	2
additional-path-select6	Number of additional paths to be selected for each IPv6 NLRI.	integer	Minimum value: 2 2 Maximum value: 255	2
additional-path-vpnv4	Enable/disable selection of BGP VPNv4 additional paths.	option	-	disable
	Option	Description		
	enable	Enable setting.		
	disable	Disable setting.		
additional-path6	Enable/disable selection of BGP IPv6 additional paths.	option	-	disable
	Option	Description		
	enable	Enable setting.		
	disable	Disable setting.		
always-compare-med	Enable/disable always compare MED.	option	-	disable
	Option	Description		
	enable	Enable setting.		
	disable	Disable setting.		
as	Router AS number, asplain/asdot/asdot+ format, 0 to disable BGP.	user	Not Specified	
bestpath-as-path-ignore	Enable/disable ignore AS path.	option	-	disable
	Option	Description		
	enable	Enable setting.		
	disable	Disable setting.		
bestpath-cmp-confed-aspath	Enable/disable compare federation AS path length.	option	-	disable

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		
bestpath-cmp-routerid	Enable/disable compare router ID for identical EBGp paths.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		
bestpath-med-confed	Enable/disable compare MED among confederation paths.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		
bestpath-med-missing-as-worst	Enable/disable treat missing MED as least preferred.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		
client-to-client-reflection	Enable/disable client-to-client route reflection.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		
cluster-id	Route reflector cluster ID.	ipv4-address-any	Not Specified	0.0.0.0
confederation-identifier	Confederation identifier.	integer	Minimum value: 0 1 Maximum value: 4294967295	
confederation-peers <peer>	Confederation peers. Peer ID.	string	Maximum length: 79	

Parameter	Description	Type	Size	Default						
dampening	Enable/disable route-flap dampening.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable setting.</td></tr><tr><td><i>disable</i></td><td>Disable setting.</td></tr></table>				Option	Description	<i>enable</i>	Enable setting.	<i>disable</i>	Disable setting.
	Option	Description								
	<i>enable</i>	Enable setting.								
<i>disable</i>	Disable setting.									
dampening-max-suppress-time	Maximum minutes a route can be suppressed.	integer	Minimum value: 60 1 Maximum value: 255							
dampening-reachability-half-life	Reachability half-life time for penalty (min).	integer	Minimum value: 15 1 Maximum value: 45							
dampening-reuse	Threshold to reuse routes.	integer	Minimum value: 750 1 Maximum value: 20000							
dampening-route-map	Criteria for dampening.	string	Maximum length: 35							
dampening-suppress	Threshold to suppress routes.	integer	Minimum value: 2000 1 Maximum value: 20000							
dampening-unreachability-half-life	Unreachability half-life time for penalty (min).	integer	Minimum value: 15 1 Maximum value: 45							
default-local-preference	Default local preference.	integer	Minimum value: 100 0 Maximum value: 4294967295							
deterministic-med	Enable/disable enforce deterministic comparison of MED.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable setting.</td></tr><tr><td><i>disable</i></td><td>Disable setting.</td></tr></table>				Option	Description	<i>enable</i>	Enable setting.	<i>disable</i>	Disable setting.
	Option	Description								
	<i>enable</i>	Enable setting.								
<i>disable</i>	Disable setting.									
distance-external	Distance for routes external to the AS.	integer	Minimum value: 20 1 Maximum value: 255							
distance-internal	Distance for routes internal to the AS.	integer	Minimum value: 200 1 Maximum value: 255							

Parameter	Description	Type	Size	Default						
distance-local	Distance for routes local to the AS.	integer	Minimum value: 1 Maximum value: 255	200						
ebgp-multipath	Enable/disable EBGp multi-path.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable setting.</td></tr><tr><td>disable</td><td>Disable setting.</td></tr></table>	Option	Description	enable	Enable setting.	disable	Disable setting.			
Option	Description									
enable	Enable setting.									
disable	Disable setting.									
enforce-first-as	Enable/disable enforce first AS for EBGp routes.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable setting.</td></tr><tr><td>disable</td><td>Disable setting.</td></tr></table>	Option	Description	enable	Enable setting.	disable	Disable setting.			
Option	Description									
enable	Enable setting.									
disable	Disable setting.									
fast-external-failover	Enable/disable reset peer BGP session if link goes down.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable setting.</td></tr><tr><td>disable</td><td>Disable setting.</td></tr></table>	Option	Description	enable	Enable setting.	disable	Disable setting.			
Option	Description									
enable	Enable setting.									
disable	Disable setting.									
graceful-end-on-timer	Enable/disable to exit graceful restart on timer only.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable setting.</td></tr><tr><td>disable</td><td>Disable setting.</td></tr></table>	Option	Description	enable	Enable setting.	disable	Disable setting.			
Option	Description									
enable	Enable setting.									
disable	Disable setting.									
graceful-restart	Enable/disable BGP graceful restart capabilities.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable setting.</td></tr><tr><td>disable</td><td>Disable setting.</td></tr></table>	Option	Description	enable	Enable setting.	disable	Disable setting.			
Option	Description									
enable	Enable setting.									
disable	Disable setting.									
graceful-restart-time	Time needed for neighbors to restart (sec).	integer	Minimum value: 1 Maximum value: 3600	120						

Parameter	Description	Type	Size	Default						
graceful-stalepath-time	Time to hold stale paths of restarting neighbor (sec).	integer	Minimum value: 360 1 Maximum value: 3600	360						
graceful-update-delay	Route advertisement/selection delay after restart (sec).	integer	Minimum value: 120 1 Maximum value: 3600	120						
holdtime-timer	Number of seconds to mark peer as dead.	integer	Minimum value: 180 3 Maximum value: 65535	180						
ibgp-multipath	Enable/disable IBGP multi-path.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable setting.</td></tr><tr><td><i>disable</i></td><td>Disable setting.</td></tr></table>	Option	Description	<i>enable</i>	Enable setting.	<i>disable</i>	Disable setting.			
Option	Description									
<i>enable</i>	Enable setting.									
<i>disable</i>	Disable setting.									
ignore-optional-capability	Do not send unknown optional capability notification message.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable setting.</td></tr><tr><td><i>disable</i></td><td>Disable setting.</td></tr></table>	Option	Description	<i>enable</i>	Enable setting.	<i>disable</i>	Disable setting.			
Option	Description									
<i>enable</i>	Enable setting.									
<i>disable</i>	Disable setting.									
keepalive-timer	Frequency to send keep alive requests.	integer	Minimum value: 60 0 Maximum value: 65535	60						
log-neighbour-changes	Log BGP neighbor changes.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable setting.</td></tr><tr><td><i>disable</i></td><td>Disable setting.</td></tr></table>	Option	Description	<i>enable</i>	Enable setting.	<i>disable</i>	Disable setting.			
Option	Description									
<i>enable</i>	Enable setting.									
<i>disable</i>	Disable setting.									
multipath-recursive-distance	Enable/disable use of recursive distance to select multipath.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable setting.</td></tr><tr><td><i>disable</i></td><td>Disable setting.</td></tr></table>	Option	Description	<i>enable</i>	Enable setting.	<i>disable</i>	Disable setting.			
Option	Description									
<i>enable</i>	Enable setting.									
<i>disable</i>	Disable setting.									

Parameter	Description	Type	Size	Default						
network-import-check	Enable/disable ensure BGP network route exists in IGP.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable setting.</td></tr><tr><td><i>disable</i></td><td>Disable setting.</td></tr></table>	Option	Description	<i>enable</i>	Enable setting.	<i>disable</i>	Disable setting.			
Option	Description									
<i>enable</i>	Enable setting.									
<i>disable</i>	Disable setting.									
recursive-inherit-priority	Enable/disable priority inheritance for recursive resolution.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable setting.</td></tr><tr><td><i>disable</i></td><td>Disable setting.</td></tr></table>	Option	Description	<i>enable</i>	Enable setting.	<i>disable</i>	Disable setting.			
Option	Description									
<i>enable</i>	Enable setting.									
<i>disable</i>	Disable setting.									
recursive-next-hop	Enable/disable recursive resolution of next-hop using BGP route.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable setting.</td></tr><tr><td><i>disable</i></td><td>Disable setting.</td></tr></table>	Option	Description	<i>enable</i>	Enable setting.	<i>disable</i>	Disable setting.			
Option	Description									
<i>enable</i>	Enable setting.									
<i>disable</i>	Disable setting.									
router-id	Router ID.	ipv4-address-any	Not Specified							
scan-time	Background scanner interval (sec), 0 to disable it.	integer	Minimum value: 5 Maximum value: 60	60						
synchronization	Enable/disable only advertise routes from iBGP if routes present in an IGP.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable setting.</td></tr><tr><td><i>disable</i></td><td>Disable setting.</td></tr></table>	Option	Description	<i>enable</i>	Enable setting.	<i>disable</i>	Disable setting.			
Option	Description									
<i>enable</i>	Enable setting.									
<i>disable</i>	Disable setting.									
tag-resolve-mode	Configure tag-match mode. Resolves BGP routes with other routes containing the same tag.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>disable</i></td><td>Disable tag-match mode.</td></tr></table>	Option	Description	<i>disable</i>	Disable tag-match mode.					
Option	Description									
<i>disable</i>	Disable tag-match mode.									

Parameter	Description	Type	Size	Default						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>preferred</i></td><td>Use tag-match if a BGP route resolution with another route containing the same tag is successful.</td></tr><tr><td><i>merge</i></td><td>Merge tag-match with best-match if they are using different routes. The result will exclude the next hops of tag-match whose interfaces have appeared in best-match.</td></tr></table>				Option	Description	<i>preferred</i>	Use tag-match if a BGP route resolution with another route containing the same tag is successful.	<i>merge</i>	Merge tag-match with best-match if they are using different routes. The result will exclude the next hops of tag-match whose interfaces have appeared in best-match.
Option	Description									
<i>preferred</i>	Use tag-match if a BGP route resolution with another route containing the same tag is successful.									
<i>merge</i>	Merge tag-match with best-match if they are using different routes. The result will exclude the next hops of tag-match whose interfaces have appeared in best-match.									

config admin-distance

Parameter	Description	Type	Size	Default
distance	Administrative distance to apply (1 - 255).	integer	Minimum value: 1 Maximum value: 255	0
id	ID.	integer	Minimum value: 0 Maximum value: 4294967295	0
neighbour-prefix	Neighbor address prefix.	ipv4-classnet	Not Specified	0.0.0.0 0.0.0.0
route-list	Access list of routes to apply new distance to.	string	Maximum length: 35	

config aggregate-address

Parameter	Description	Type	Size	Default
as-set	Enable/disable generate AS set path information.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		
id	ID.	integer	Minimum value: 0 Maximum value: 4294967295	0
prefix	Aggregate prefix.	ipv4-classnet-any	Not Specified	0.0.0.0 0.0.0.0

Parameter	Description	Type	Size	Default
summary-only	Enable/disable filter more specific routes from updates.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		

config aggregate-address6

Parameter	Description	Type	Size	Default
as-set	Enable/disable generate AS set path information.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		
id	ID.	integer	Minimum value: 0 0 Maximum value: 4294967295	0
prefix6	Aggregate IPv6 prefix.	ipv6-prefix	Not Specified	::/0
summary-only	Enable/disable filter more specific routes from updates.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		

config neighbor

Parameter	Description	Type	Size	Default
activate	Enable/disable address family IPv4 for this neighbor.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		

Parameter	Description	Type	Size	Default
activate-vpnv4	Enable/disable address family VPNv4 for this neighbor.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		
activate6	Enable/disable address family IPv6 for this neighbor.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		
additional-path	Enable/disable IPv4 additional-path capability.	option	-	disable
	Option	Description		
	<i>send</i>	Enable sending additional paths.		
	<i>receive</i>	Enable receiving additional paths.		
	<i>both</i>	Enable sending and receiving additional paths.		
	<i>disable</i>	Disable additional paths.		
additional-path-vpnv4	Enable/disable VPNv4 additional-path capability.	option	-	disable
	Option	Description		
	<i>send</i>	Enable sending additional paths.		
	<i>receive</i>	Enable receiving additional paths.		
	<i>both</i>	Enable sending and receiving additional paths.		
	<i>disable</i>	Disable additional paths.		
additional-path6	Enable/disable IPv6 additional-path capability.	option	-	disable
	Option	Description		
	<i>send</i>	Enable sending additional paths.		
	<i>receive</i>	Enable receiving additional paths.		

Parameter	Description	Type	Size	Default						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>both</i></td><td>Enable sending and receiving additional paths.</td></tr><tr><td><i>disable</i></td><td>Disable additional paths.</td></tr></table>	Option	Description	<i>both</i>	Enable sending and receiving additional paths.	<i>disable</i>	Disable additional paths.			
	Option	Description								
	<i>both</i>	Enable sending and receiving additional paths.								
<i>disable</i>	Disable additional paths.									
adv-additional-path	Number of IPv4 additional paths that can be advertised to this neighbor.	integer	Minimum value: 2 2 Maximum value: 255							
adv-additional-path-vpnv4	Number of VPNv4 additional paths that can be advertised to this neighbor.	integer	Minimum value: 2 2 Maximum value: 255							
adv-additional-path6	Number of IPv6 additional paths that can be advertised to this neighbor.	integer	Minimum value: 2 2 Maximum value: 255							
advertisement-interval	Minimum interval (sec) between sending updates.	integer	Minimum value: 30 0 Maximum value: 600							
allowas-in	IPv4 The maximum number of occurrence of my AS number allowed.	integer	Minimum value: 3 1 Maximum value: 10							
allowas-in-enable	Enable/disable IPv4 Enable to allow my AS in AS path.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable setting.</td></tr><tr><td><i>disable</i></td><td>Disable setting.</td></tr></table>	Option	Description	<i>enable</i>	Enable setting.	<i>disable</i>	Disable setting.			
	Option	Description								
	<i>enable</i>	Enable setting.								
<i>disable</i>	Disable setting.									
allowas-in-enable6	Enable/disable IPv6 Enable to allow my AS in AS path.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable setting.</td></tr><tr><td><i>disable</i></td><td>Disable setting.</td></tr></table>	Option	Description	<i>enable</i>	Enable setting.	<i>disable</i>	Disable setting.			
	Option	Description								
	<i>enable</i>	Enable setting.								
<i>disable</i>	Disable setting.									
allowas-in-vpnv4	The maximum number of occurrence of my AS number allowed for VPNv4 route.	integer	Minimum value: 3 1 Maximum value: 10							
allowas-in6	IPv6 The maximum number of occurrence of my AS number allowed.	integer	Minimum value: 3 1 Maximum value: 10							

Parameter	Description	Type	Size	Default								
as-override	Enable/disable replace peer AS with own AS for IPv4.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable setting.</td></tr><tr><td><i>disable</i></td><td>Disable setting.</td></tr></table>	Option	Description	<i>enable</i>	Enable setting.	<i>disable</i>	Disable setting.					
Option	Description											
<i>enable</i>	Enable setting.											
<i>disable</i>	Disable setting.											
as-override6	Enable/disable replace peer AS with own AS for IPv6.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable setting.</td></tr><tr><td><i>disable</i></td><td>Disable setting.</td></tr></table>	Option	Description	<i>enable</i>	Enable setting.	<i>disable</i>	Disable setting.					
Option	Description											
<i>enable</i>	Enable setting.											
<i>disable</i>	Disable setting.											
attribute-unchanged	IPv4 List of attributes that should be unchanged.	option	-									
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>as-path</i></td><td>AS path.</td></tr><tr><td><i>med</i></td><td>MED.</td></tr><tr><td><i>next-hop</i></td><td>Next hop.</td></tr></table>	Option	Description	<i>as-path</i>	AS path.	<i>med</i>	MED.	<i>next-hop</i>	Next hop.			
Option	Description											
<i>as-path</i>	AS path.											
<i>med</i>	MED.											
<i>next-hop</i>	Next hop.											
attribute-unchanged-vpnv4	List of attributes that should be unchanged for VPNv4 route.	option	-									
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>as-path</i></td><td>AS path.</td></tr><tr><td><i>med</i></td><td>MED.</td></tr><tr><td><i>next-hop</i></td><td>Next hop.</td></tr></table>	Option	Description	<i>as-path</i>	AS path.	<i>med</i>	MED.	<i>next-hop</i>	Next hop.			
Option	Description											
<i>as-path</i>	AS path.											
<i>med</i>	MED.											
<i>next-hop</i>	Next hop.											
attribute-unchanged6	IPv6 List of attributes that should be unchanged.	option	-									
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>as-path</i></td><td>AS path.</td></tr><tr><td><i>med</i></td><td>MED.</td></tr><tr><td><i>next-hop</i></td><td>Next hop.</td></tr></table>	Option	Description	<i>as-path</i>	AS path.	<i>med</i>	MED.	<i>next-hop</i>	Next hop.			
Option	Description											
<i>as-path</i>	AS path.											
<i>med</i>	MED.											
<i>next-hop</i>	Next hop.											
bfd	Enable/disable BFD for this neighbor.	option	-	disable								

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		
capability-default-originate	Enable/disable advertise default IPv4 route to this neighbor.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		
capability-default-originate6	Enable/disable advertise default IPv6 route to this neighbor.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		
capability-dynamic	Enable/disable advertise dynamic capability to this neighbor.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		
capability-graceful-restart	Enable/disable advertise IPv4 graceful restart capability to this neighbor.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		
capability-graceful-restart-vpnv4	Enable/disable advertise VPNv4 graceful restart capability to this neighbor.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		

Parameter	Description	Type	Size	Default										
capability-graceful-restart6	Enable/disable advertise IPv6 graceful restart capability to this neighbor.	option	-	disable										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable setting.</td></tr><tr><td><i>disable</i></td><td>Disable setting.</td></tr></table>	Option	Description	<i>enable</i>	Enable setting.	<i>disable</i>	Disable setting.							
Option	Description													
<i>enable</i>	Enable setting.													
<i>disable</i>	Disable setting.													
capability-orf	Accept/Send IPv4 ORF lists to/from this neighbor.	option	-	none										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>none</i></td><td>None.</td></tr><tr><td><i>receive</i></td><td>Receive ORF lists.</td></tr><tr><td><i>send</i></td><td>Send ORF list.</td></tr><tr><td><i>both</i></td><td>Send and receive ORF lists.</td></tr></table>	Option	Description	<i>none</i>	None.	<i>receive</i>	Receive ORF lists.	<i>send</i>	Send ORF list.	<i>both</i>	Send and receive ORF lists.			
Option	Description													
<i>none</i>	None.													
<i>receive</i>	Receive ORF lists.													
<i>send</i>	Send ORF list.													
<i>both</i>	Send and receive ORF lists.													
capability-orf6	Accept/Send IPv6 ORF lists to/from this neighbor.	option	-	none										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>none</i></td><td>None.</td></tr><tr><td><i>receive</i></td><td>Receive ORF lists.</td></tr><tr><td><i>send</i></td><td>Send ORF list.</td></tr><tr><td><i>both</i></td><td>Send and receive ORF lists.</td></tr></table>	Option	Description	<i>none</i>	None.	<i>receive</i>	Receive ORF lists.	<i>send</i>	Send ORF list.	<i>both</i>	Send and receive ORF lists.			
Option	Description													
<i>none</i>	None.													
<i>receive</i>	Receive ORF lists.													
<i>send</i>	Send ORF list.													
<i>both</i>	Send and receive ORF lists.													
capability-route-refresh	Enable/disable advertise route refresh capability to this neighbor.	option	-	enable										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable setting.</td></tr><tr><td><i>disable</i></td><td>Disable setting.</td></tr></table>	Option	Description	<i>enable</i>	Enable setting.	<i>disable</i>	Disable setting.							
Option	Description													
<i>enable</i>	Enable setting.													
<i>disable</i>	Disable setting.													
connect-timer	Interval (sec) for connect timer.	integer	Minimum value: 1 Maximum value: 65535	4294967295										
default-originate-routemap	Route map to specify criteria to originate IPv4 default.	string	Maximum length: 35											
default-originate-routemap6	Route map to specify criteria to originate IPv6 default.	string	Maximum length: 35											

Parameter	Description	Type	Size	Default						
description	Description.	string	Maximum length: 63							
distribute-list-in	Filter for IPv4 updates from this neighbor.	string	Maximum length: 35							
distribute-list-in-vpnv4	Filter for VPNv4 updates from this neighbor.	string	Maximum length: 35							
distribute-list-in6	Filter for IPv6 updates from this neighbor.	string	Maximum length: 35							
distribute-list-out	Filter for IPv4 updates to this neighbor.	string	Maximum length: 35							
distribute-list-out-vpnv4	Filter for VPNv4 updates to this neighbor.	string	Maximum length: 35							
distribute-list-out6	Filter for IPv6 updates to this neighbor.	string	Maximum length: 35							
dont-capability-negotiate	Do not negotiate capabilities with this neighbor.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable setting.</td></tr><tr><td><i>disable</i></td><td>Disable setting.</td></tr></table>				Option	Description	<i>enable</i>	Enable setting.	<i>disable</i>	Disable setting.
	Option	Description								
	<i>enable</i>	Enable setting.								
<i>disable</i>	Disable setting.									
ebgp-enforce-multihop	Enable/disable allow multi-hop EBGp neighbors.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable setting.</td></tr><tr><td><i>disable</i></td><td>Disable setting.</td></tr></table>				Option	Description	<i>enable</i>	Enable setting.	<i>disable</i>	Disable setting.
	Option	Description								
	<i>enable</i>	Enable setting.								
<i>disable</i>	Disable setting.									
ebgp-multihop-ttl	EBGP multihop TTL for this peer.	integer	Minimum value: 1 Maximum value: 255	255						
filter-list-in	BGP filter for IPv4 inbound routes.	string	Maximum length: 35							
filter-list-in6	BGP filter for IPv6 inbound routes.	string	Maximum length: 35							
filter-list-out	BGP filter for IPv4 outbound routes.	string	Maximum length: 35							
filter-list-out6	BGP filter for IPv6 outbound routes.	string	Maximum length: 35							

Parameter	Description	Type	Size	Default						
holdtime-timer	Interval (sec) before peer considered dead.	integer	Minimum value: 3 Maximum value: 65535	4294967295						
interface	Specify outgoing interface for peer connection. For IPv6 peer, the interface should have link-local address.	string	Maximum length: 15							
ip	IP/IPv6 address of neighbor.	string	Maximum length: 45							
keep-alive-timer	Keep alive timer interval (sec).	integer	Minimum value: 0 Maximum value: 65535	4294967295						
link-down-failover	Enable/disable failover upon link down.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable setting.</td></tr><tr><td>disable</td><td>Disable setting.</td></tr></table>				Option	Description	enable	Enable setting.	disable	Disable setting.
Option	Description									
enable	Enable setting.									
disable	Disable setting.									
local-as	Local AS number of neighbor.	user	Not Specified							
local-as-no-prepend	Do not prepend local-as to incoming updates.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable setting.</td></tr><tr><td>disable</td><td>Disable setting.</td></tr></table>				Option	Description	enable	Enable setting.	disable	Disable setting.
Option	Description									
enable	Enable setting.									
disable	Disable setting.									
local-as-replace-as	Replace real AS with local-as in outgoing updates.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable setting.</td></tr><tr><td>disable</td><td>Disable setting.</td></tr></table>				Option	Description	enable	Enable setting.	disable	Disable setting.
Option	Description									
enable	Enable setting.									
disable	Disable setting.									
maximum-prefix	Maximum number of IPv4 prefixes to accept from this peer.	integer	Minimum value: 1 Maximum value: 4294967295	0						
maximum-prefix-threshold	Maximum IPv4 prefix threshold value (1 - 100 percent).	integer	Minimum value: 1 Maximum value: 100	75						

Parameter	Description	Type	Size	Default						
maximum-prefix-threshold-vpnv4	Maximum VPNv4 prefix threshold value (1 - 100 percent).	integer	Minimum value: 1 Maximum value: 100	75						
maximum-prefix-threshold6	Maximum IPv6 prefix threshold value (1 - 100 percent).	integer	Minimum value: 1 Maximum value: 100	75						
maximum-prefix-vpnv4	Maximum number of VPNv4 prefixes to accept from this peer.	integer	Minimum value: 1 Maximum value: 4294967295	0						
maximum-prefix-warning-only	Enable/disable IPv4 Only give warning message when limit is exceeded.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable setting.</td></tr><tr><td>disable</td><td>Disable setting.</td></tr></table>	Option	Description	enable	Enable setting.	disable	Disable setting.			
Option	Description									
enable	Enable setting.									
disable	Disable setting.									
maximum-prefix-warning-only-vpnv4	Enable/disable only giving warning message when limit is exceeded for VPNv4 routes.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable setting.</td></tr><tr><td>disable</td><td>Disable setting.</td></tr></table>	Option	Description	enable	Enable setting.	disable	Disable setting.			
Option	Description									
enable	Enable setting.									
disable	Disable setting.									
maximum-prefix-warning-only6	Enable/disable IPv6 Only give warning message when limit is exceeded.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable setting.</td></tr><tr><td>disable</td><td>Disable setting.</td></tr></table>	Option	Description	enable	Enable setting.	disable	Disable setting.			
Option	Description									
enable	Enable setting.									
disable	Disable setting.									
maximum-prefix6	Maximum number of IPv6 prefixes to accept from this peer.	integer	Minimum value: 1 Maximum value: 4294967295	0						
next-hop-self	Enable/disable IPv4 next-hop calculation for this neighbor.	option	-	disable						

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		
next-hop-self-rr	Enable/disable setting nexthop's address to interface's IPv4 address for route-reflector routes.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		
next-hop-self-rr6	Enable/disable setting nexthop's address to interface's IPv6 address for route-reflector routes.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		
next-hop-self-vpnv4	Enable/disable setting VPNv4 next-hop to interface's IP address for this neighbor.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		
next-hop-self6	Enable/disable IPv6 next-hop calculation for this neighbor.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		
override-capability	Enable/disable override result of capability negotiation.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		

Parameter	Description	Type	Size	Default
passive	Enable/disable sending of open messages to this neighbor.	option	-	disable
	Option Description			
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		
password	Password used in MD5 authentication.	password	Not Specified	
prefix-list-in	IPv4 Inbound filter for updates from this neighbor.	string	Maximum length: 35	
prefix-list-in-vpnv4	Inbound filter for VPNv4 updates from this neighbor.	string	Maximum length: 35	
prefix-list-in6	IPv6 Inbound filter for updates from this neighbor.	string	Maximum length: 35	
prefix-list-out	IPv4 Outbound filter for updates to this neighbor.	string	Maximum length: 35	
prefix-list-out-vpnv4	Outbound filter for VPNv4 updates to this neighbor.	string	Maximum length: 35	
prefix-list-out6	IPv6 Outbound filter for updates to this neighbor.	string	Maximum length: 35	
remote-as	AS number of neighbor.	user	Not Specified	
remove-private-as	Enable/disable remove private AS number from IPv4 outbound updates.	option	-	disable
	Option Description			
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		
remove-private-as-vpnv4	Enable/disable remove private AS number from VPNv4 outbound updates.	option	-	disable
	Option Description			
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		
remove-private-as6	Enable/disable remove private AS number from IPv6 outbound updates.	option	-	disable

Parameter	Description	Type	Size	Default						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable setting.</td></tr><tr><td><i>disable</i></td><td>Disable setting.</td></tr></table>	Option	Description	<i>enable</i>	Enable setting.	<i>disable</i>	Disable setting.			
	Option	Description								
	<i>enable</i>	Enable setting.								
<i>disable</i>	Disable setting.									
restart-time	Graceful restart delay time (sec, 0 = global default).	integer	Minimum value: 0 0 Maximum value: 3600							
retain-stale-time	Time to retain stale routes.	integer	Minimum value: 0 0 Maximum value: 65535							
route-map-in	IPv4 Inbound route map filter.	string	Maximum length: 35							
route-map-in-vpnv4	VPNv4 inbound route map filter.	string	Maximum length: 35							
route-map-in6	IPv6 Inbound route map filter.	string	Maximum length: 35							
route-map-out	IPv4 outbound route map filter.	string	Maximum length: 35							
route-map-out-preferable	IPv4 outbound route map filter if the peer is preferred.	string	Maximum length: 35							
route-map-out-vpnv4	VPNv4 outbound route map filter.	string	Maximum length: 35							
route-map-out-vpnv4-preferable	VPNv4 outbound route map filter if the peer is preferred.	string	Maximum length: 35							
route-map-out6	IPv6 Outbound route map filter.	string	Maximum length: 35							
route-map-out6-preferable	IPv6 outbound route map filter if the peer is preferred.	string	Maximum length: 35							
route-reflector-client	Enable/disable IPv4 AS route reflector client.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable setting.</td></tr><tr><td><i>disable</i></td><td>Disable setting.</td></tr></table>	Option	Description	<i>enable</i>	Enable setting.	<i>disable</i>	Disable setting.			
	Option	Description								
	<i>enable</i>	Enable setting.								
<i>disable</i>	Disable setting.									
route-reflector-client-vpnv4	Enable/disable VPNv4 AS route reflector client for this neighbor.	option	-	disable						

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		
route-reflector-client6	Enable/disable IPv6 AS route reflector client.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		
route-server-client	Enable/disable IPv4 AS route server client.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		
route-server-client-vpnv4	Enable/disable VPNv4 AS route server client for this neighbor.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		
route-server-client6	Enable/disable IPv6 AS route server client.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		
send-community	IPv4 Send community attribute to neighbor.	option	-	both
	Option	Description		
	<i>standard</i>	Standard.		
	<i>extended</i>	Extended.		
	<i>both</i>	Both.		
	<i>disable</i>	Disable		

Parameter	Description	Type	Size	Default										
send-community-vpnv4	Send community attribute to neighbor for VPNv4 address family.	option	-	both										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>standard</i></td><td>Standard.</td></tr><tr><td><i>extended</i></td><td>Extended.</td></tr><tr><td><i>both</i></td><td>Both.</td></tr><tr><td><i>disable</i></td><td>Disable</td></tr></table>	Option	Description	<i>standard</i>	Standard.	<i>extended</i>	Extended.	<i>both</i>	Both.	<i>disable</i>	Disable			
Option	Description													
<i>standard</i>	Standard.													
<i>extended</i>	Extended.													
<i>both</i>	Both.													
<i>disable</i>	Disable													
send-community6	IPv6 Send community attribute to neighbor.	option	-	both										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>standard</i></td><td>Standard.</td></tr><tr><td><i>extended</i></td><td>Extended.</td></tr><tr><td><i>both</i></td><td>Both.</td></tr><tr><td><i>disable</i></td><td>Disable</td></tr></table>	Option	Description	<i>standard</i>	Standard.	<i>extended</i>	Extended.	<i>both</i>	Both.	<i>disable</i>	Disable			
Option	Description													
<i>standard</i>	Standard.													
<i>extended</i>	Extended.													
<i>both</i>	Both.													
<i>disable</i>	Disable													
shutdown	Enable/disable shutdown this neighbor.	option	-	disable										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable setting.</td></tr><tr><td><i>disable</i></td><td>Disable setting.</td></tr></table>	Option	Description	<i>enable</i>	Enable setting.	<i>disable</i>	Disable setting.							
Option	Description													
<i>enable</i>	Enable setting.													
<i>disable</i>	Disable setting.													
soft-reconfiguration	Enable/disable allow IPv4 inbound soft reconfiguration.	option	-	disable										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable setting.</td></tr><tr><td><i>disable</i></td><td>Disable setting.</td></tr></table>	Option	Description	<i>enable</i>	Enable setting.	<i>disable</i>	Disable setting.							
Option	Description													
<i>enable</i>	Enable setting.													
<i>disable</i>	Disable setting.													
soft-reconfiguration-vpnv4	Enable/disable allow VPNv4 inbound soft reconfiguration.	option	-	disable										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable setting.</td></tr><tr><td><i>disable</i></td><td>Disable setting.</td></tr></table>	Option	Description	<i>enable</i>	Enable setting.	<i>disable</i>	Disable setting.							
Option	Description													
<i>enable</i>	Enable setting.													
<i>disable</i>	Disable setting.													

Parameter	Description	Type	Size	Default						
soft-reconfiguration6	Enable/disable allow IPv6 inbound soft reconfiguration.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable setting.</td></tr><tr><td><i>disable</i></td><td>Disable setting.</td></tr></table>	Option	Description	<i>enable</i>	Enable setting.	<i>disable</i>	Disable setting.			
Option	Description									
<i>enable</i>	Enable setting.									
<i>disable</i>	Disable setting.									
stale-route	Enable/disable stale route after neighbor down.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable setting.</td></tr><tr><td><i>disable</i></td><td>Disable setting.</td></tr></table>	Option	Description	<i>enable</i>	Enable setting.	<i>disable</i>	Disable setting.			
Option	Description									
<i>enable</i>	Enable setting.									
<i>disable</i>	Disable setting.									
strict-capability-match	Enable/disable strict capability matching.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable setting.</td></tr><tr><td><i>disable</i></td><td>Disable setting.</td></tr></table>	Option	Description	<i>enable</i>	Enable setting.	<i>disable</i>	Disable setting.			
Option	Description									
<i>enable</i>	Enable setting.									
<i>disable</i>	Disable setting.									
unsuppress-map	IPv4 Route map to selectively unsuppress suppressed routes.	string	Maximum length: 35							
unsuppress-map6	IPv6 Route map to selectively unsuppress suppressed routes.	string	Maximum length: 35							
update-source	Interface to use as source IP/IPv6 address of TCP connections.	string	Maximum length: 15							
weight	Neighbor weight.	integer	Minimum value: 0 Maximum value: 65535	4294967295						

config conditional-advertise

Parameter	Description	Type	Size	Default
advertise-routemap	Name of advertising route map.	string	Maximum length: 35	
condition-routemap <name>	List of conditional route maps. Route map.	string	Maximum length: 79	
condition-type	Type of condition.	option	-	exist

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>exist</i>	True if condition route map is matched.		
	<i>non-exist</i>	True if condition route map is not matched.		

config conditional-advertise6

Parameter	Description	Type	Size	Default
advertise-routemap	Name of advertising route map.	string	Maximum length: 35	
condition-routemap <name>	List of conditional route maps. Route map.	string	Maximum length: 79	
condition-type	Type of condition.	option	-	exist
	Option	Description		
	<i>exist</i>	True if condition route map is matched.		
	<i>non-exist</i>	True if condition route map is not matched.		

config neighbor-group

Parameter	Description	Type	Size	Default
activate	Enable/disable address family IPv4 for this neighbor.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		
activate-vpnv4	Enable/disable address family VPNv4 for this neighbor.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		
activate6	Enable/disable address family IPv6 for this neighbor.	option	-	enable

Parameter	Description	Type	Size	Default										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable setting.</td></tr><tr><td><i>disable</i></td><td>Disable setting.</td></tr></table>	Option	Description	<i>enable</i>	Enable setting.	<i>disable</i>	Disable setting.							
	Option	Description												
	<i>enable</i>	Enable setting.												
<i>disable</i>	Disable setting.													
additional-path	Enable/disable IPv4 additional-path capability.	option	-	disable										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>send</i></td><td>Enable sending additional paths.</td></tr><tr><td><i>receive</i></td><td>Enable receiving additional paths.</td></tr><tr><td><i>both</i></td><td>Enable sending and receiving additional paths.</td></tr><tr><td><i>disable</i></td><td>Disable additional paths.</td></tr></table>	Option	Description	<i>send</i>	Enable sending additional paths.	<i>receive</i>	Enable receiving additional paths.	<i>both</i>	Enable sending and receiving additional paths.	<i>disable</i>	Disable additional paths.			
	Option	Description												
	<i>send</i>	Enable sending additional paths.												
	<i>receive</i>	Enable receiving additional paths.												
	<i>both</i>	Enable sending and receiving additional paths.												
<i>disable</i>	Disable additional paths.													
additional-path-vpnv4	Enable/disable VPNv4 additional-path capability.	option	-	disable										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>send</i></td><td>Enable sending additional paths.</td></tr><tr><td><i>receive</i></td><td>Enable receiving additional paths.</td></tr><tr><td><i>both</i></td><td>Enable sending and receiving additional paths.</td></tr><tr><td><i>disable</i></td><td>Disable additional paths.</td></tr></table>	Option	Description	<i>send</i>	Enable sending additional paths.	<i>receive</i>	Enable receiving additional paths.	<i>both</i>	Enable sending and receiving additional paths.	<i>disable</i>	Disable additional paths.			
	Option	Description												
	<i>send</i>	Enable sending additional paths.												
	<i>receive</i>	Enable receiving additional paths.												
	<i>both</i>	Enable sending and receiving additional paths.												
<i>disable</i>	Disable additional paths.													
additional-path6	Enable/disable IPv6 additional-path capability.	option	-	disable										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>send</i></td><td>Enable sending additional paths.</td></tr><tr><td><i>receive</i></td><td>Enable receiving additional paths.</td></tr><tr><td><i>both</i></td><td>Enable sending and receiving additional paths.</td></tr><tr><td><i>disable</i></td><td>Disable additional paths.</td></tr></table>	Option	Description	<i>send</i>	Enable sending additional paths.	<i>receive</i>	Enable receiving additional paths.	<i>both</i>	Enable sending and receiving additional paths.	<i>disable</i>	Disable additional paths.			
	Option	Description												
	<i>send</i>	Enable sending additional paths.												
	<i>receive</i>	Enable receiving additional paths.												
	<i>both</i>	Enable sending and receiving additional paths.												
<i>disable</i>	Disable additional paths.													
adv-additional-path	Number of IPv4 additional paths that can be advertised to this neighbor.	integer	Minimum value: 2 2 Maximum value: 255	2										
adv-additional-path-vpnv4	Number of VPNv4 additional paths that can be advertised to this neighbor.	integer	Minimum value: 2 2 Maximum value: 255	2										

Parameter	Description	Type	Size	Default
adv-additional-path6	Number of IPv6 additional paths that can be advertised to this neighbor.	integer	Minimum value: 2 2 Maximum value: 255	
advertisement-interval	Minimum interval (sec) between sending updates.	integer	Minimum value: 0 0 Maximum value: 600	30
allowas-in	IPv4 The maximum number of occurrence of my AS number allowed.	integer	Minimum value: 1 1 Maximum value: 10	3
allowas-in-enable	Enable/disable IPv4 Enable to allow my AS in AS path.	option	-	disable
	Option	Description		
	enable	Enable setting.		
	disable	Disable setting.		
allowas-in-enable6	Enable/disable IPv6 Enable to allow my AS in AS path.	option	-	disable
	Option	Description		
	enable	Enable setting.		
	disable	Disable setting.		
allowas-in-vpnv4	The maximum number of occurrence of my AS number allowed for VPNv4 route.	integer	Minimum value: 1 1 Maximum value: 10	3
allowas-in6	IPv6 The maximum number of occurrence of my AS number allowed.	integer	Minimum value: 1 1 Maximum value: 10	3
as-override	Enable/disable replace peer AS with own AS for IPv4.	option	-	disable
	Option	Description		
	enable	Enable setting.		
	disable	Disable setting.		
as-override6	Enable/disable replace peer AS with own AS for IPv6.	option	-	disable

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		
attribute-unchanged	IPv4 List of attributes that should be unchanged.	option	-	
	Option	Description		
	<i>as-path</i>	AS path.		
	<i>med</i>	MED.		
	<i>next-hop</i>	Next hop.		
attribute-unchanged-vpnv4	List of attributes that should be unchanged for VPNv4 route.	option	-	
	Option	Description		
	<i>as-path</i>	AS path.		
	<i>med</i>	MED.		
	<i>next-hop</i>	Next hop.		
attribute-unchanged6	IPv6 List of attributes that should be unchanged.	option	-	
	Option	Description		
	<i>as-path</i>	AS path.		
	<i>med</i>	MED.		
	<i>next-hop</i>	Next hop.		
bfd	Enable/disable BFD for this neighbor.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		
capability-default-originate	Enable/disable advertise default IPv4 route to this neighbor.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable setting.		

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>disable</i>	Disable setting.		
capability-default-originate6	Enable/disable advertise default IPv6 route to this neighbor.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		
capability-dynamic	Enable/disable advertise dynamic capability to this neighbor.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		
capability-graceful-restart	Enable/disable advertise IPv4 graceful restart capability to this neighbor.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		
capability-graceful-restart-vpnv4	Enable/disable advertise VPNv4 graceful restart capability to this neighbor.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		
capability-graceful-restart6	Enable/disable advertise IPv6 graceful restart capability to this neighbor.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		

Parameter	Description	Type	Size	Default										
capability-orf	Accept/Send IPv4 ORF lists to/from this neighbor.	option	-	none										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>none</i></td><td>None.</td></tr><tr><td><i>receive</i></td><td>Receive ORF lists.</td></tr><tr><td><i>send</i></td><td>Send ORF list.</td></tr><tr><td><i>both</i></td><td>Send and receive ORF lists.</td></tr></table>	Option	Description	<i>none</i>	None.	<i>receive</i>	Receive ORF lists.	<i>send</i>	Send ORF list.	<i>both</i>	Send and receive ORF lists.			
Option	Description													
<i>none</i>	None.													
<i>receive</i>	Receive ORF lists.													
<i>send</i>	Send ORF list.													
<i>both</i>	Send and receive ORF lists.													
capability-orf6	Accept/Send IPv6 ORF lists to/from this neighbor.	option	-	none										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>none</i></td><td>None.</td></tr><tr><td><i>receive</i></td><td>Receive ORF lists.</td></tr><tr><td><i>send</i></td><td>Send ORF list.</td></tr><tr><td><i>both</i></td><td>Send and receive ORF lists.</td></tr></table>	Option	Description	<i>none</i>	None.	<i>receive</i>	Receive ORF lists.	<i>send</i>	Send ORF list.	<i>both</i>	Send and receive ORF lists.			
Option	Description													
<i>none</i>	None.													
<i>receive</i>	Receive ORF lists.													
<i>send</i>	Send ORF list.													
<i>both</i>	Send and receive ORF lists.													
capability-route-refresh	Enable/disable advertise route refresh capability to this neighbor.	option	-	enable										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable setting.</td></tr><tr><td><i>disable</i></td><td>Disable setting.</td></tr></table>	Option	Description	<i>enable</i>	Enable setting.	<i>disable</i>	Disable setting.							
Option	Description													
<i>enable</i>	Enable setting.													
<i>disable</i>	Disable setting.													
connect-timer	Interval (sec) for connect timer.	integer	Minimum value: 1 Maximum value: 65535	4294967295										
default-originate-routemap	Route map to specify criteria to originate IPv4 default.	string	Maximum length: 35											
default-originate-routemap6	Route map to specify criteria to originate IPv6 default.	string	Maximum length: 35											
description	Description.	string	Maximum length: 63											
distribute-list-in	Filter for IPv4 updates from this neighbor.	string	Maximum length: 35											
distribute-list-in-vpnv4	Filter for VPNv4 updates from this neighbor.	string	Maximum length: 35											

Parameter	Description	Type	Size	Default						
distribute-list-in6	Filter for IPv6 updates from this neighbor.	string	Maximum length: 35							
distribute-list-out	Filter for IPv4 updates to this neighbor.	string	Maximum length: 35							
distribute-list-out-vpnv4	Filter for VPNv4 updates to this neighbor.	string	Maximum length: 35							
distribute-list-out6	Filter for IPv6 updates to this neighbor.	string	Maximum length: 35							
dont-capability-negotiate	Do not negotiate capabilities with this neighbor.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable setting.</td></tr><tr><td><i>disable</i></td><td>Disable setting.</td></tr></table>				Option	Description	<i>enable</i>	Enable setting.	<i>disable</i>	Disable setting.
	Option	Description								
	<i>enable</i>	Enable setting.								
<i>disable</i>	Disable setting.									
ebgp-enforce-multihop	Enable/disable allow multi-hop EBGp neighbors.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable setting.</td></tr><tr><td><i>disable</i></td><td>Disable setting.</td></tr></table>				Option	Description	<i>enable</i>	Enable setting.	<i>disable</i>	Disable setting.
	Option	Description								
	<i>enable</i>	Enable setting.								
<i>disable</i>	Disable setting.									
ebgp-multihop-ttl	EBGP multihop TTL for this peer.	integer	Minimum value: 1 Maximum value: 255	255						
filter-list-in	BGP filter for IPv4 inbound routes.	string	Maximum length: 35							
filter-list-in6	BGP filter for IPv6 inbound routes.	string	Maximum length: 35							
filter-list-out	BGP filter for IPv4 outbound routes.	string	Maximum length: 35							
filter-list-out6	BGP filter for IPv6 outbound routes.	string	Maximum length: 35							
holdtime-timer	Interval (sec) before peer considered dead.	integer	Minimum value: 3 Maximum value: 65535	4294967295						

Parameter	Description	Type	Size	Default						
interface	Specify outgoing interface for peer connection. For IPv6 peer, the interface should have link-local address.	string	Maximum length: 15							
keep-alive-timer	Keep alive timer interval (sec).	integer	Minimum value: 0 Maximum value: 65535	4294967295						
link-down-failover	Enable/disable failover upon link down.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable setting.</td></tr><tr><td>disable</td><td>Disable setting.</td></tr></table>				Option	Description	enable	Enable setting.	disable	Disable setting.
	Option	Description								
	enable	Enable setting.								
disable	Disable setting.									
local-as	Local AS number of neighbor.	user	Not Specified							
local-as-no-prepend	Do not prepend local-as to incoming updates.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable setting.</td></tr><tr><td>disable</td><td>Disable setting.</td></tr></table>				Option	Description	enable	Enable setting.	disable	Disable setting.
	Option	Description								
	enable	Enable setting.								
disable	Disable setting.									
local-as-replace-as	Replace real AS with local-as in outgoing updates.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable setting.</td></tr><tr><td>disable</td><td>Disable setting.</td></tr></table>				Option	Description	enable	Enable setting.	disable	Disable setting.
	Option	Description								
	enable	Enable setting.								
disable	Disable setting.									
maximum-prefix	Maximum number of IPv4 prefixes to accept from this peer.	integer	Minimum value: 1 Maximum value: 4294967295	0						
maximum-prefix-threshold	Maximum IPv4 prefix threshold value (1 - 100 percent).	integer	Minimum value: 1 Maximum value: 100	75						
maximum-prefix-threshold-vpnv4	Maximum VPNv4 prefix threshold value (1 - 100 percent).	integer	Minimum value: 1 Maximum value: 100	75						

Parameter	Description	Type	Size	Default
maximum-prefix-threshold6	Maximum IPv6 prefix threshold value (1 - 100 percent).	integer	Minimum value: 1 Maximum value: 100	75
maximum-prefix-vpnv4	Maximum number of VPNv4 prefixes to accept from this peer.	integer	Minimum value: 1 Maximum value: 4294967295	0
maximum-prefix-warning-only	Enable/disable IPv4 Only give warning message when limit is exceeded.	option	-	disable
	Option		Description	
	<i>enable</i>		Enable setting.	
	<i>disable</i>		Disable setting.	
maximum-prefix-warning-only-vpnv4	Enable/disable only giving warning message when limit is exceeded for VPNv4 routes.	option	-	disable
	Option		Description	
	<i>enable</i>		Enable setting.	
	<i>disable</i>		Disable setting.	
maximum-prefix-warning-only6	Enable/disable IPv6 Only give warning message when limit is exceeded.	option	-	disable
	Option		Description	
	<i>enable</i>		Enable setting.	
	<i>disable</i>		Disable setting.	
maximum-prefix6	Maximum number of IPv6 prefixes to accept from this peer.	integer	Minimum value: 1 Maximum value: 4294967295	0
name	Neighbor group name.	string	Maximum length: 45	
next-hop-self	Enable/disable IPv4 next-hop calculation for this neighbor.	option	-	disable

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		
next-hop-self-rr	Enable/disable setting nexthop's address to interface's IPv4 address for route-reflector routes.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		
next-hop-self-rr6	Enable/disable setting nexthop's address to interface's IPv6 address for route-reflector routes.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		
next-hop-self-vpnv4	Enable/disable setting VPNv4 next-hop to interface's IP address for this neighbor.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		
next-hop-self6	Enable/disable IPv6 next-hop calculation for this neighbor.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		
override-capability	Enable/disable override result of capability negotiation.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		

Parameter	Description	Type	Size	Default
passive	Enable/disable sending of open messages to this neighbor.	option	-	disable
	Option Description			
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		
password	Password used in MD5 authentication.	password	Not Specified	
prefix-list-in	IPv4 Inbound filter for updates from this neighbor.	string	Maximum length: 35	
prefix-list-in-vpnv4	Inbound filter for VPNv4 updates from this neighbor.	string	Maximum length: 35	
prefix-list-in6	IPv6 Inbound filter for updates from this neighbor.	string	Maximum length: 35	
prefix-list-out	IPv4 Outbound filter for updates to this neighbor.	string	Maximum length: 35	
prefix-list-out-vpnv4	Outbound filter for VPNv4 updates to this neighbor.	string	Maximum length: 35	
prefix-list-out6	IPv6 Outbound filter for updates to this neighbor.	string	Maximum length: 35	
remote-as	AS number of neighbor.	user	Not Specified	
remove-private-as	Enable/disable remove private AS number from IPv4 outbound updates.	option	-	disable
	Option Description			
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		
remove-private-as-vpnv4	Enable/disable remove private AS number from VPNv4 outbound updates.	option	-	disable
	Option Description			
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		
remove-private-as6	Enable/disable remove private AS number from IPv6 outbound updates.	option	-	disable

Parameter	Description	Type	Size	Default						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable setting.</td></tr><tr><td><i>disable</i></td><td>Disable setting.</td></tr></table>	Option	Description	<i>enable</i>	Enable setting.	<i>disable</i>	Disable setting.			
	Option	Description								
	<i>enable</i>	Enable setting.								
<i>disable</i>	Disable setting.									
restart-time	Graceful restart delay time (sec, 0 = global default).	integer	Minimum value: 0 0 Maximum value: 3600							
retain-stale-time	Time to retain stale routes.	integer	Minimum value: 0 0 Maximum value: 65535							
route-map-in	IPv4 Inbound route map filter.	string	Maximum length: 35							
route-map-in-vpnv4	VPNv4 inbound route map filter.	string	Maximum length: 35							
route-map-in6	IPv6 Inbound route map filter.	string	Maximum length: 35							
route-map-out	IPv4 outbound route map filter.	string	Maximum length: 35							
route-map-out-preferable	IPv4 outbound route map filter if the peer is preferred.	string	Maximum length: 35							
route-map-out-vpnv4	VPNv4 outbound route map filter.	string	Maximum length: 35							
route-map-out-vpnv4-preferable	VPNv4 outbound route map filter if the peer is preferred.	string	Maximum length: 35							
route-map-out6	IPv6 Outbound route map filter.	string	Maximum length: 35							
route-map-out6-preferable	IPv6 outbound route map filter if the peer is preferred.	string	Maximum length: 35							
route-reflector-client	Enable/disable IPv4 AS route reflector client.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable setting.</td></tr><tr><td><i>disable</i></td><td>Disable setting.</td></tr></table>	Option	Description	<i>enable</i>	Enable setting.	<i>disable</i>	Disable setting.			
	Option	Description								
	<i>enable</i>	Enable setting.								
<i>disable</i>	Disable setting.									
route-reflector-client-vpnv4	Enable/disable VPNv4 AS route reflector client for this neighbor.	option	-	disable						

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		
route-reflector-client6	Enable/disable IPv6 AS route reflector client.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		
route-server-client	Enable/disable IPv4 AS route server client.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		
route-server-client-vpnv4	Enable/disable VPNv4 AS route server client for this neighbor.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		
route-server-client6	Enable/disable IPv6 AS route server client.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		
send-community	IPv4 Send community attribute to neighbor.	option	-	both
	Option	Description		
	<i>standard</i>	Standard.		
	<i>extended</i>	Extended.		
	<i>both</i>	Both.		
	<i>disable</i>	Disable		

Parameter	Description	Type	Size	Default										
send-community-vpnv4	Send community attribute to neighbor for VPNv4 address family.	option	-	both										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>standard</i></td><td>Standard.</td></tr><tr><td><i>extended</i></td><td>Extended.</td></tr><tr><td><i>both</i></td><td>Both.</td></tr><tr><td><i>disable</i></td><td>Disable</td></tr></table>	Option	Description	<i>standard</i>	Standard.	<i>extended</i>	Extended.	<i>both</i>	Both.	<i>disable</i>	Disable			
Option	Description													
<i>standard</i>	Standard.													
<i>extended</i>	Extended.													
<i>both</i>	Both.													
<i>disable</i>	Disable													
send-community6	IPv6 Send community attribute to neighbor.	option	-	both										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>standard</i></td><td>Standard.</td></tr><tr><td><i>extended</i></td><td>Extended.</td></tr><tr><td><i>both</i></td><td>Both.</td></tr><tr><td><i>disable</i></td><td>Disable</td></tr></table>	Option	Description	<i>standard</i>	Standard.	<i>extended</i>	Extended.	<i>both</i>	Both.	<i>disable</i>	Disable			
Option	Description													
<i>standard</i>	Standard.													
<i>extended</i>	Extended.													
<i>both</i>	Both.													
<i>disable</i>	Disable													
shutdown	Enable/disable shutdown this neighbor.	option	-	disable										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable setting.</td></tr><tr><td><i>disable</i></td><td>Disable setting.</td></tr></table>	Option	Description	<i>enable</i>	Enable setting.	<i>disable</i>	Disable setting.							
Option	Description													
<i>enable</i>	Enable setting.													
<i>disable</i>	Disable setting.													
soft-reconfiguration	Enable/disable allow IPv4 inbound soft reconfiguration.	option	-	disable										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable setting.</td></tr><tr><td><i>disable</i></td><td>Disable setting.</td></tr></table>	Option	Description	<i>enable</i>	Enable setting.	<i>disable</i>	Disable setting.							
Option	Description													
<i>enable</i>	Enable setting.													
<i>disable</i>	Disable setting.													
soft-reconfiguration-vpnv4	Enable/disable allow VPNv4 inbound soft reconfiguration.	option	-	disable										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable setting.</td></tr><tr><td><i>disable</i></td><td>Disable setting.</td></tr></table>	Option	Description	<i>enable</i>	Enable setting.	<i>disable</i>	Disable setting.							
Option	Description													
<i>enable</i>	Enable setting.													
<i>disable</i>	Disable setting.													

Parameter	Description	Type	Size	Default						
soft-reconfiguration6	Enable/disable allow IPv6 inbound soft reconfiguration.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable setting.</td></tr><tr><td><i>disable</i></td><td>Disable setting.</td></tr></table>	Option	Description	<i>enable</i>	Enable setting.	<i>disable</i>	Disable setting.			
Option	Description									
<i>enable</i>	Enable setting.									
<i>disable</i>	Disable setting.									
stale-route	Enable/disable stale route after neighbor down.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable setting.</td></tr><tr><td><i>disable</i></td><td>Disable setting.</td></tr></table>	Option	Description	<i>enable</i>	Enable setting.	<i>disable</i>	Disable setting.			
Option	Description									
<i>enable</i>	Enable setting.									
<i>disable</i>	Disable setting.									
strict-capability-match	Enable/disable strict capability matching.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable setting.</td></tr><tr><td><i>disable</i></td><td>Disable setting.</td></tr></table>	Option	Description	<i>enable</i>	Enable setting.	<i>disable</i>	Disable setting.			
Option	Description									
<i>enable</i>	Enable setting.									
<i>disable</i>	Disable setting.									
unsuppress-map	IPv4 Route map to selectively unsuppress suppressed routes.	string	Maximum length: 35							
unsuppress-map6	IPv6 Route map to selectively unsuppress suppressed routes.	string	Maximum length: 35							
update-source	Interface to use as source IP/IPv6 address of TCP connections.	string	Maximum length: 15							
weight	Neighbor weight.	integer	Minimum value: 0 Maximum value: 65535	4294967295						

config neighbor-range

Parameter	Description	Type	Size	Default
id	Neighbor range ID.	integer	Minimum value: 0 Maximum value: 4294967295	0
max-neighbor-num	Maximum number of neighbors.	integer	Minimum value: 1 Maximum value: 1000	0

Parameter	Description	Type	Size	Default
neighbor-group	Neighbor group name.	string	Maximum length: 63	
prefix	Neighbor range prefix.	ipv4-classnet	Not Specified	0.0.0.0 0.0.0.0

config neighbor-range6

Parameter	Description	Type	Size	Default
id	IPv6 neighbor range ID.	integer	Minimum value: 0 0 Maximum value: 4294967295	
max-neighbor-num	Maximum number of neighbors.	integer	Minimum value: 0 1 Maximum value: 1000	
neighbor-group	Neighbor group name.	string	Maximum length: 63	
prefix6	IPv6 prefix.	ipv6-network	Not Specified	::/0

config network

Parameter	Description	Type	Size	Default						
backdoor	Enable/disable route as backdoor.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable setting.</td></tr><tr><td><i>disable</i></td><td>Disable setting.</td></tr></table>	Option	Description	<i>enable</i>	Enable setting.	<i>disable</i>	Disable setting.			
Option	Description									
<i>enable</i>	Enable setting.									
<i>disable</i>	Disable setting.									
id	ID.	integer	Minimum value: 0 0 Maximum value: 4294967295							
network-import-check	Configure insurance of BGP network route existence in IGP.	option	-	global						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>global</i></td><td>Use global network sync value.</td></tr><tr><td><i>enable</i></td><td>Enable network sync per prefix.</td></tr></table>	Option	Description	<i>global</i>	Use global network sync value.	<i>enable</i>	Enable network sync per prefix.			
Option	Description									
<i>global</i>	Use global network sync value.									
<i>enable</i>	Enable network sync per prefix.									

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>disable</i>	Disable network sync per prefix.		
prefix	Network prefix.	ipv4-classnet	Not Specified	0.0.0.0 0.0.0.0
route-map	Route map to modify generated route.	string	Maximum length: 35	

config network6

Parameter	Description	Type	Size	Default
backdoor	Enable/disable route as backdoor.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		
id	ID.	integer	Minimum value: 0 0 Maximum value: 4294967295	0
network-import-check	Configure insurance of BGP network route existence in IGP.	option	-	global
	Option	Description		
	<i>global</i>	Use global network sync value.		
	<i>enable</i>	Enable network sync per prefix.		
	<i>disable</i>	Disable network sync per prefix.		
prefix6	Network IPv6 prefix.	ipv6-network	Not Specified	::/0
route-map	Route map to modify generated route.	string	Maximum length: 35	

config redistribute

Parameter	Description	Type	Size	Default
name	Distribute list entry name.	string	Maximum length: 35	

Parameter	Description	Type	Size	Default
route-map	Route map name.	string	Maximum length: 35	
status	Status.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		

config redistribute6

Parameter	Description	Type	Size	Default
name	Distribute list entry name.	string	Maximum length: 35	
route-map	Route map name.	string	Maximum length: 35	
status	Status.	option	-	disable
	Option	Description		
	enable	Enable setting.		
	disable	Disable setting.		

config vrf

Parameter	Description	Type	Size	Default
export-rt <route-target>	List of export route target. Attribute: AA AA:NN.	string	Maximum length: 79	
import-route-map	Import route map.	string	Maximum length: 35	
import-rt <route-target>	List of import route target. Attribute: AA AA:NN.	string	Maximum length: 79	
rd	Route Distinguisher: AA AA:NN.	string	Maximum length: 79	
role	VRF role.	option	-	standalone

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>standalone</i>	Stand-alone VRF.		
	<i>ce</i>	CE VRF.		
	<i>pe</i>	PE VRF.		
vrf	Origin VRF ID (0 - 251).	string	Maximum length: 7	

config leak-target

Parameter	Description	Type	Size	Default
interface	Interface which is used to leak routes to target VRF.	string	Maximum length: 15	
route-map	Route map of VRF leaking.	string	Maximum length: 35	
vrf	Target VRF ID (0 - 251).	string	Maximum length: 7	

config vrf6

Parameter	Description	Type	Size	Default
vrf	Origin VRF ID (0 - 251).	string	Maximum length: 7	

config leak-target

Parameter	Description	Type	Size	Default
interface	Interface which is used to leak routes to target VRF.	string	Maximum length: 15	
route-map	Route map of VRF leaking.	string	Maximum length: 35	
vrf	Target VRF ID (0 - 251).	string	Maximum length: 7	

config router community-list

Configure community lists.

```

config router community-list
  Description: Configure community lists.
  edit <name>
    config rule
      Description: Community list rule.
      edit <id>
        set action [deny|permit]
        set match {string}
        set regexp {string}
      next
    end
    set type [standard|expanded]
  next
end

```

config router community-list

Parameter	Description	Type	Size	Default						
name	Community list name.	string	Maximum length: 35							
type	Community list type (standard or expanded).	option	-	standard						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>standard</i></td><td>Standard community list type.</td></tr><tr><td><i>expanded</i></td><td>Expanded community list type.</td></tr></table>				Option	Description	<i>standard</i>	Standard community list type.	<i>expanded</i>	Expanded community list type.
Option	Description									
<i>standard</i>	Standard community list type.									
<i>expanded</i>	Expanded community list type.									

config rule

Parameter	Description	Type	Size	Default
action	Permit or deny route-based operations, based on the route's COMMUNITY attribute.	option	-	
	Option	Description		
	<i>deny</i>	Deny route-based operations.		
	<i>permit</i>	Permit or allow route-based operations.		
id	ID.	integer	Minimum value: 0 Maximum value: 4294967295	0
match	Community specifications for matching a reserved community.	string	Maximum length: 255	

Parameter	Description	Type	Size	Default
regex	Ordered list of COMMUNITY attributes as a regular expression.	string	Maximum length: 255	

config router extcommunity-list

Configure extended community lists.

```

config router extcommunity-list
  Description: Configure extended community lists.
  edit <name>
    config rule
      Description: Extended community list rule.
      edit <id>
        set action [deny|permit]
        set match {string}
        set regex {string}
        set type [rt|soo]
      next
    end
    set type [standard|expanded]
  next
end

```

config router extcommunity-list

Parameter	Description	Type	Size	Default						
name	Extended community list name.	string	Maximum length: 35							
type	Extended community list type (standard or expanded).	option	-	standard						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>standard</i></td><td>Standard extended community list type.</td></tr><tr><td><i>expanded</i></td><td>Expanded extended community list type.</td></tr></table>				Option	Description	<i>standard</i>	Standard extended community list type.	<i>expanded</i>	Expanded extended community list type.
Option	Description									
<i>standard</i>	Standard extended community list type.									
<i>expanded</i>	Expanded extended community list type.									

config rule

Parameter	Description	Type	Size	Default						
action	Permit or deny route-based operations, based on the route's EXTENDED COMMUNITY attribute.	option	-							
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>deny</td><td>Deny route-based operations.</td></tr><tr><td>permit</td><td>Permit or allow route-based operations.</td></tr></table>	Option	Description	deny	Deny route-based operations.	permit	Permit or allow route-based operations.			
Option	Description									
deny	Deny route-based operations.									
permit	Permit or allow route-based operations.									
id	ID.	integer	Minimum value: 0 Maximum value: 4294967295							
match	Extended community specifications for matching a reserved extended community.	string	Maximum length: 255							
regexp	Ordered list of EXTENDED COMMUNITY attributes as a regular expression.	string	Maximum length: 255							
type	Type of extended community.	option	-	rt						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>rt</td><td>Route Target.</td></tr><tr><td>soo</td><td>Site of Origin.</td></tr></table>	Option	Description	rt	Route Target.	soo	Site of Origin.			
Option	Description									
rt	Route Target.									
soo	Site of Origin.									

config router isis

Configure IS-IS.

```
config router isis
  Description: Configure IS-IS.
  set adjacency-check [enable|disable]
  set adjacency-check6 [enable|disable]
  set adv-passive-only [enable|disable]
  set adv-passive-only6 [enable|disable]
  set auth-keychain-11 {string}
  set auth-keychain-12 {string}
  set auth-mode-11 [password|md5]
  set auth-mode-12 [password|md5]
  set auth-password-11 {password}
  set auth-password-12 {password}
  set auth-sendonly-11 [enable|disable]
  set auth-sendonly-12 [enable|disable]
  set default-originate [enable|disable]
```

```

set default-originate6 [enable|disable]
set dynamic-hostname [enable|disable]
set ignore-lsp-errors [enable|disable]
set is-type [level-1-2|level-1|...]
config isis-interface
    Description: IS-IS interface configuration.
    edit <name>
        set auth-keychain-l1 {string}
        set auth-keychain-l2 {string}
        set auth-mode-l1 [md5|password]
        set auth-mode-l2 [md5|password]
        set auth-password-l1 {password}
        set auth-password-l2 {password}
        set auth-send-only-l1 [enable|disable]
        set auth-send-only-l2 [enable|disable]
        set circuit-type [level-1-2|level-1|...]
        set csnp-interval-l1 {integer}
        set csnp-interval-l2 {integer}
        set hello-interval-l1 {integer}
        set hello-interval-l2 {integer}
        set hello-multiplier-l1 {integer}
        set hello-multiplier-l2 {integer}
        set hello-padding [enable|disable]
        set lsp-interval {integer}
        set lsp-retransmit-interval {integer}
        set mesh-group [enable|disable]
        set mesh-group-id {integer}
        set metric-l1 {integer}
        set metric-l2 {integer}
        set network-type [broadcast|point-to-point|...]
        set priority-l1 {integer}
        set priority-l2 {integer}
        set status [enable|disable]
        set status6 [enable|disable]
        set wide-metric-l1 {integer}
        set wide-metric-l2 {integer}
    next
end
config isis-net
    Description: IS-IS net configuration.
    edit <id>
        set net {user}
    next
end
set lsp-gen-interval-l1 {integer}
set lsp-gen-interval-l2 {integer}
set lsp-refresh-interval {integer}
set max-lsp-lifetime {integer}
set metric-style [narrow|wide|...]
set overload-bit [enable|disable]
set overload-bit-on-startup {integer}
set overload-bit-suppress {option1}, {option2}, ...

```

```

config redistribute
    Description: IS-IS redistribute protocols. Read-only.
    edit <protocol>
        set level [level-1-2|level-1|...]
        set metric {integer}
        set metric-type [external|internal]
        set routemap {string}
        set status [enable|disable]
    next
end
set redistribute-l1 [enable|disable]
set redistribute-l1-list {string}
set redistribute-l2 [enable|disable]
set redistribute-l2-list {string}
config redistribute6
    Description: IS-IS IPv6 redistribution for routing protocols. Read-only.
    edit <protocol>
        set level [level-1-2|level-1|...]
        set metric {integer}
        set metric-type [external|internal]
        set routemap {string}
        set status [enable|disable]
    next
end
set redistribute6-l1 [enable|disable]
set redistribute6-l1-list {string}
set redistribute6-l2 [enable|disable]
set redistribute6-l2-list {string}
set spf-interval-exp-l1 {user}
set spf-interval-exp-l2 {user}
config summary-address
    Description: IS-IS summary addresses.
    edit <id>
        set level [level-1-2|level-1|...]
        set prefix {ipv4-classnet-any}
    next
end
config summary-address6
    Description: IS-IS IPv6 summary address.
    edit <id>
        set level [level-1-2|level-1|...]
        set prefix6 {ipv6-prefix}
    next
end
end

```


config router isis

Parameter	Description	Type	Size	Default						
adjacency-check	Enable/disable adjacency check.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable adjacency check.</td></tr><tr><td><i>disable</i></td><td>Disable adjacency check.</td></tr></table>	Option	Description	<i>enable</i>	Enable adjacency check.	<i>disable</i>	Disable adjacency check.			
Option	Description									
<i>enable</i>	Enable adjacency check.									
<i>disable</i>	Disable adjacency check.									
adjacency-check6	Enable/disable IPv6 adjacency check.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable IPv6 adjacency check.</td></tr><tr><td><i>disable</i></td><td>Disable IPv6 adjacency check.</td></tr></table>	Option	Description	<i>enable</i>	Enable IPv6 adjacency check.	<i>disable</i>	Disable IPv6 adjacency check.			
Option	Description									
<i>enable</i>	Enable IPv6 adjacency check.									
<i>disable</i>	Disable IPv6 adjacency check.									
adv-passive-only	Enable/disable IS-IS advertisement of passive interfaces only.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Advertise passive interfaces only.</td></tr><tr><td><i>disable</i></td><td>Advertise all IS-IS enabled interfaces.</td></tr></table>	Option	Description	<i>enable</i>	Advertise passive interfaces only.	<i>disable</i>	Advertise all IS-IS enabled interfaces.			
Option	Description									
<i>enable</i>	Advertise passive interfaces only.									
<i>disable</i>	Advertise all IS-IS enabled interfaces.									
adv-passive-only6	Enable/disable IPv6 IS-IS advertisement of passive interfaces only.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Advertise passive interfaces only.</td></tr><tr><td><i>disable</i></td><td>Advertise all IS-IS enabled interfaces.</td></tr></table>	Option	Description	<i>enable</i>	Advertise passive interfaces only.	<i>disable</i>	Advertise all IS-IS enabled interfaces.			
Option	Description									
<i>enable</i>	Advertise passive interfaces only.									
<i>disable</i>	Advertise all IS-IS enabled interfaces.									
auth-keychain-l1	Authentication key-chain for level 1 PDUs.	string	Maximum length: 35							
auth-keychain-l2	Authentication key-chain for level 2 PDUs.	string	Maximum length: 35							
auth-mode-l1	Level 1 authentication mode.	option	-	password						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>password</i></td><td>Password.</td></tr><tr><td><i>md5</i></td><td>MD5.</td></tr></table>	Option	Description	<i>password</i>	Password.	<i>md5</i>	MD5.			
Option	Description									
<i>password</i>	Password.									
<i>md5</i>	MD5.									
auth-mode-l2	Level 2 authentication mode.	option	-	password						

Parameter	Description	Type	Size	Default						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>password</i></td><td>Password.</td></tr><tr><td><i>md5</i></td><td>MD5.</td></tr></table>	Option	Description	<i>password</i>	Password.	<i>md5</i>	MD5.			
	Option	Description								
	<i>password</i>	Password.								
<i>md5</i>	MD5.									
auth-password-l1	Authentication password for level 1 PDUs.	password	Not Specified							
auth-password-l2	Authentication password for level 2 PDUs.	password	Not Specified							
auth-sendonly-l1	Enable/disable level 1 authentication send-only.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable level 1 authentication send-only.</td></tr><tr><td><i>disable</i></td><td>Disable level 1 authentication send-only.</td></tr></table>	Option	Description	<i>enable</i>	Enable level 1 authentication send-only.	<i>disable</i>	Disable level 1 authentication send-only.			
	Option	Description								
	<i>enable</i>	Enable level 1 authentication send-only.								
<i>disable</i>	Disable level 1 authentication send-only.									
auth-sendonly-l2	Enable/disable level 2 authentication send-only.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable level 2 authentication send-only.</td></tr><tr><td><i>disable</i></td><td>Disable level 2 authentication send-only.</td></tr></table>	Option	Description	<i>enable</i>	Enable level 2 authentication send-only.	<i>disable</i>	Disable level 2 authentication send-only.			
	Option	Description								
	<i>enable</i>	Enable level 2 authentication send-only.								
<i>disable</i>	Disable level 2 authentication send-only.									
default-originate	Enable/disable distribution of default route information.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable distribution of default route information.</td></tr><tr><td><i>disable</i></td><td>Disable distribution of default route information.</td></tr></table>	Option	Description	<i>enable</i>	Enable distribution of default route information.	<i>disable</i>	Disable distribution of default route information.			
	Option	Description								
	<i>enable</i>	Enable distribution of default route information.								
<i>disable</i>	Disable distribution of default route information.									
default-originate6	Enable/disable distribution of default IPv6 route information.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable distribution of default IPv6 route information.</td></tr><tr><td><i>disable</i></td><td>Disable distribution of default IPv6 route information.</td></tr></table>	Option	Description	<i>enable</i>	Enable distribution of default IPv6 route information.	<i>disable</i>	Disable distribution of default IPv6 route information.			
	Option	Description								
	<i>enable</i>	Enable distribution of default IPv6 route information.								
<i>disable</i>	Disable distribution of default IPv6 route information.									
dynamic-hostname	Enable/disable dynamic hostname.	option	-	disable						

Parameter	Description	Type	Size	Default								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable dynamic hostname.</td></tr><tr><td><i>disable</i></td><td>Disable dynamic hostname.</td></tr></table>	Option	Description	<i>enable</i>	Enable dynamic hostname.	<i>disable</i>	Disable dynamic hostname.					
	Option	Description										
	<i>enable</i>	Enable dynamic hostname.										
<i>disable</i>	Disable dynamic hostname.											
ignore-lsp-errors	Enable/disable ignoring of LSP errors with bad checksums.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable ignoring of LSP errors with bad checksums.</td></tr><tr><td><i>disable</i></td><td>Disable ignoring of LSP errors with bad checksums.</td></tr></table>	Option	Description	<i>enable</i>	Enable ignoring of LSP errors with bad checksums.	<i>disable</i>	Disable ignoring of LSP errors with bad checksums.					
	Option	Description										
	<i>enable</i>	Enable ignoring of LSP errors with bad checksums.										
<i>disable</i>	Disable ignoring of LSP errors with bad checksums.											
is-type	IS type.	option	-	level-1-2								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>level-1-2</i></td><td>Level 1 and 2.</td></tr><tr><td><i>level-1</i></td><td>Level 1 only.</td></tr><tr><td><i>level-2-only</i></td><td>Level 2 only.</td></tr></table>	Option	Description	<i>level-1-2</i>	Level 1 and 2.	<i>level-1</i>	Level 1 only.	<i>level-2-only</i>	Level 2 only.			
	Option	Description										
	<i>level-1-2</i>	Level 1 and 2.										
	<i>level-1</i>	Level 1 only.										
<i>level-2-only</i>	Level 2 only.											
lsp-gen-interval-l1	Minimum interval for level 1 LSP regenerating.	integer	Minimum value: 1 Maximum value: 120	30								
lsp-gen-interval-l2	Minimum interval for level 2 LSP regenerating.	integer	Minimum value: 1 Maximum value: 120	30								
lsp-refresh-interval	LSP refresh time in seconds.	integer	Minimum value: 1 Maximum value: 65535	900								
max-lsp-lifetime	Maximum LSP lifetime in seconds.	integer	Minimum value: 350 Maximum value: 65535	1200								
metric-style	Use old-style (ISO 10589) or new-style packet formats.	option	-	narrow								

Parameter	Description	Type	Size	Default																												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>narrow</i></td><td>Use old style of TLVs with narrow metric.</td></tr><tr><td><i>wide</i></td><td>Use new style of TLVs to carry wider metric.</td></tr><tr><td><i>transition</i></td><td>Send and accept both styles of TLVs during transition.</td></tr><tr><td><i>narrow-transition</i></td><td>Narrow and accept both styles of TLVs during transition.</td></tr><tr><td><i>narrow-transition-l1</i></td><td>Narrow-transition level-1 only.</td></tr><tr><td><i>narrow-transition-l2</i></td><td>Narrow-transition level-2 only.</td></tr><tr><td><i>wide-l1</i></td><td>Wide level-1 only.</td></tr><tr><td><i>wide-l2</i></td><td>Wide level-2 only.</td></tr><tr><td><i>wide-transition</i></td><td>Wide and accept both styles of TLVs during transition.</td></tr><tr><td><i>wide-transition-l1</i></td><td>Wide-transition level-1 only.</td></tr><tr><td><i>wide-transition-l2</i></td><td>Wide-transition level-2 only.</td></tr><tr><td><i>transition-l1</i></td><td>Transition level-1 only.</td></tr><tr><td><i>transition-l2</i></td><td>Transition level-2 only.</td></tr></table>	Option	Description	<i>narrow</i>	Use old style of TLVs with narrow metric.	<i>wide</i>	Use new style of TLVs to carry wider metric.	<i>transition</i>	Send and accept both styles of TLVs during transition.	<i>narrow-transition</i>	Narrow and accept both styles of TLVs during transition.	<i>narrow-transition-l1</i>	Narrow-transition level-1 only.	<i>narrow-transition-l2</i>	Narrow-transition level-2 only.	<i>wide-l1</i>	Wide level-1 only.	<i>wide-l2</i>	Wide level-2 only.	<i>wide-transition</i>	Wide and accept both styles of TLVs during transition.	<i>wide-transition-l1</i>	Wide-transition level-1 only.	<i>wide-transition-l2</i>	Wide-transition level-2 only.	<i>transition-l1</i>	Transition level-1 only.	<i>transition-l2</i>	Transition level-2 only.			
	Option	Description																														
	<i>narrow</i>	Use old style of TLVs with narrow metric.																														
	<i>wide</i>	Use new style of TLVs to carry wider metric.																														
	<i>transition</i>	Send and accept both styles of TLVs during transition.																														
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	<i>narrow-transition-l1</i>	Narrow-transition level-1 only.																														
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	<i>wide-l1</i>	Wide level-1 only.																														
	<i>wide-l2</i>	Wide level-2 only.																														
	<i>wide-transition</i>	Wide and accept both styles of TLVs during transition.																														
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	<i>wide-transition-l2</i>	Wide-transition level-2 only.																														
	<i>transition-l1</i>	Transition level-1 only.																														
<i>transition-l2</i>	Transition level-2 only.																															
overload-bit	Enable/disable signal other routers not to use us in SPF.	option	-	disable																												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable overload bit.</td></tr><tr><td><i>disable</i></td><td>Disable overload bit.</td></tr></table>	Option	Description	<i>enable</i>	Enable overload bit.	<i>disable</i>	Disable overload bit.																									
	Option	Description																														
	<i>enable</i>	Enable overload bit.																														
<i>disable</i>	Disable overload bit.																															
overload-bit-on-startup	Overload-bit only temporarily after reboot.	integer	Minimum value: 5 Maximum value: 86400	0																												
overload-bit-suppress	Suppress overload-bit for the specific prefixes.	option	-																													

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>external</i>	External.		
	<i>interlevel</i>	Inter-level.		
redistribute-l1	Enable/disable redistribution of level 1 routes into level 2.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable redistribution of level 1 routes into level 2.		
	<i>disable</i>	Disable redistribution of level 1 routes into level 2.		
redistribute-l1-list	Access-list for route redistribution from l1 to l2.	string	Maximum length: 35	
redistribute-l2	Enable/disable redistribution of level 2 routes into level 1.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable redistribution of level 2 routes into level 1.		
	<i>disable</i>	Disable redistribution of level 2 routes into level 1.		
redistribute-l2-list	Access-list for route redistribution from l2 to l1.	string	Maximum length: 35	
redistribute6-l1	Enable/disable redistribution of level 1 IPv6 routes into level 2.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable redistribution of level 1 IPv6 routes into level 2.		
	<i>disable</i>	Disable redistribution of level 1 IPv6 routes into level 2.		
redistribute6-l1-list	Access-list for IPv6 route redistribution from l1 to l2.	string	Maximum length: 35	
redistribute6-l2	Enable/disable redistribution of level 2 IPv6 routes into level 1.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable redistribution of level 2 IPv6 routes into level 1.		
	<i>disable</i>	Disable redistribution of level 2 IPv6 routes into level 1.		
redistribute6-l2-list	Access-list for IPv6 route redistribution from l2 to l1.	string	Maximum length: 35	

Parameter	Description	Type	Size	Default
spf-interval-exp-l1	Level 1 SPF calculation delay.	user	Not Specified	
spf-interval-exp-l2	Level 2 SPF calculation delay.	user	Not Specified	

config isis-interface

Parameter	Description	Type	Size	Default
auth-keychain-l1	Authentication key-chain for level 1 PDUs.	string	Maximum length: 35	
auth-keychain-l2	Authentication key-chain for level 2 PDUs.	string	Maximum length: 35	
auth-mode-l1	Level 1 authentication mode.	option	-	password
	Option	Description		
	<i>md5</i>	MD5.		
	<i>password</i>	Password.		
auth-mode-l2	Level 2 authentication mode.	option	-	password
	Option	Description		
	<i>md5</i>	MD5.		
	<i>password</i>	Password.		
auth-password-l1	Authentication password for level 1 PDUs.	password	Not Specified	
auth-password-l2	Authentication password for level 2 PDUs.	password	Not Specified	
auth-send-only-l1	Enable/disable authentication send-only for level 1 PDUs.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable authentication send-only for level 1 PDUs.		
	<i>disable</i>	Disable authentication send-only for level 1 PDUs.		
auth-send-only-l2	Enable/disable authentication send-only for level 2 PDUs.	option	-	disable

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>enable</i>	Enable authentication send-only for level 2 PDUs.		
	<i>disable</i>	Disable authentication send-only for level 2 PDUs.		
circuit-type	IS-IS interface's circuit type.	option	-	level-1-2
	Option	Description		
	<i>level-1-2</i>	Level 1 and 2.		
	<i>level-1</i>	Level 1.		
	<i>level-2</i>	Level 2.		
csnp-interval-l1	Level 1 CSNP interval.	integer	Minimum value: 10 1 Maximum value: 65535	
csnp-interval-l2	Level 2 CSNP interval.	integer	Minimum value: 10 1 Maximum value: 65535	
hello-interval-l1	Level 1 hello interval.	integer	Minimum value: 10 0 Maximum value: 65535	
hello-interval-l2	Level 2 hello interval.	integer	Minimum value: 10 0 Maximum value: 65535	
hello-multiplier-l1	Level 1 multiplier for Hello holding time.	integer	Minimum value: 3 2 Maximum value: 100	
hello-multiplier-l2	Level 2 multiplier for Hello holding time.	integer	Minimum value: 3 2 Maximum value: 100	
hello-padding	Enable/disable padding to IS-IS hello packets.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable padding to IS-IS hello packets.		
	<i>disable</i>	Disable padding to IS-IS hello packets.		
lsp-interval	LSP transmission interval (milliseconds).	integer	Minimum value: 33 1 Maximum value: 4294967295	

Parameter	Description	Type	Size	Default								
lsp-retransmit-interval	LSP retransmission interval (sec).	integer	Minimum value: 5 1 Maximum value: 65535									
mesh-group	Enable/disable IS-IS mesh group.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable IS-IS mesh group.</td></tr><tr><td>disable</td><td>Disable IS-IS mesh group.</td></tr></table>				Option	Description	enable	Enable IS-IS mesh group.	disable	Disable IS-IS mesh group.		
Option	Description											
enable	Enable IS-IS mesh group.											
disable	Disable IS-IS mesh group.											
mesh-group-id	Mesh group ID <0-4294967295>, 0: mesh-group blocked.	integer	Minimum value: 0 0 Maximum value: 4294967295									
metric-l1	Level 1 metric for interface.	integer	Minimum value: 10 1 Maximum value: 63									
metric-l2	Level 2 metric for interface.	integer	Minimum value: 10 1 Maximum value: 63									
name	IS-IS interface name.	string	Maximum length: 15									
network-type	IS-IS interface's network type.	option	-									
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>broadcast</td><td>Broadcast.</td></tr><tr><td>point-to-point</td><td>Point-to-point.</td></tr><tr><td>loopback</td><td>Loopback.</td></tr></table>				Option	Description	broadcast	Broadcast.	point-to-point	Point-to-point.	loopback	Loopback.
Option	Description											
broadcast	Broadcast.											
point-to-point	Point-to-point.											
loopback	Loopback.											
priority-l1	Level 1 priority.	integer	Minimum value: 64 0 Maximum value: 127									
priority-l2	Level 2 priority.	integer	Minimum value: 64 0 Maximum value: 127									
status	Enable/disable interface for IS-IS.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable interface for IS-IS.</td></tr><tr><td>disable</td><td>Disable interface for IS-IS.</td></tr></table>				Option	Description	enable	Enable interface for IS-IS.	disable	Disable interface for IS-IS.		
Option	Description											
enable	Enable interface for IS-IS.											
disable	Disable interface for IS-IS.											

Parameter	Description	Type	Size	Default
status6	Enable/disable IPv6 interface for IS-IS.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable IPv6 interface for IS-IS.		
	<i>disable</i>	Disable IPv6 interface for IS-IS.		
wide-metric-l1	Level 1 wide metric for interface.	integer	Minimum value: 10 1 Maximum value: 16777214	
wide-metric-l2	Level 2 wide metric for interface.	integer	Minimum value: 10 1 Maximum value: 16777214	

config isis-net

Parameter	Description	Type	Size	Default
id	ISIS network ID.	integer	Minimum value: 0 0 Maximum value: 4294967295	0
net	IS-IS networks (format = xx.xxxx. .xxxx.xx.).	user	Not Specified	

config redistribute

Parameter	Description	Type	Size	Default								
level	Level.	option	-	level-2								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>level-1-2</td><td>Level 1 and 2.</td></tr><tr><td>level-1</td><td>Level 1.</td></tr><tr><td>level-2</td><td>Level 2.</td></tr></table>				Option	Description	level-1-2	Level 1 and 2.	level-1	Level 1.	level-2	Level 2.
	Option	Description										
	level-1-2	Level 1 and 2.										
	level-1	Level 1.										
level-2	Level 2.											
metric	Metric.	integer	Minimum value: 0 Maximum value: 4261412864	0								
metric-type	Metric type.	option	-	internal								

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>external</i>	External.		
	<i>internal</i>	Internal.		
protocol	Protocol name.	string	Maximum length: 35	
routemap	Route map name.	string	Maximum length: 35	
status	Status.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable.		
	<i>disable</i>	Disable.		

config redistribute6

Parameter	Description	Type	Size	Default
level	Level.	option	-	level-2
	Option	Description		
	<i>level-1-2</i>	Level 1 and 2.		
	<i>level-1</i>	Level 1.		
	<i>level-2</i>	Level 2.		
metric	Metric.	integer	Minimum value: 0 Maximum value: 4261412864	0
metric-type	Metric type.	option	-	internal
	Option	Description		
	<i>external</i>	External metric type.		
	<i>internal</i>	Internal metric type.		
protocol	Protocol name.	string	Maximum length: 35	
routemap	Route map name.	string	Maximum length: 35	

Parameter	Description	Type	Size	Default
status	Enable/disable redistribution.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable redistribution.		
	<i>disable</i>	Disable redistribution.		

config summary-address

Parameter	Description	Type	Size	Default
id	Summary address entry ID.	integer	Minimum value: 0 0 Maximum value: 4294967295	0
level	Level.	option	-	level-2
	Option	Description		
	<i>level-1-2</i>	Level 1 and 2.		
	<i>level-1</i>	Level 1.		
	<i>level-2</i>	Level 2.		
prefix	Prefix.	ipv4-classnet-any	Not Specified	0.0.0.0 0.0.0.0

config summary-address6

Parameter	Description	Type	Size	Default
id	Prefix entry ID.	integer	Minimum value: 0 0 Maximum value: 4294967295	0
level	Level.	option	-	level-2
	Option	Description		
	<i>level-1-2</i>	Level 1 and 2.		
	<i>level-1</i>	Level 1.		
	<i>level-2</i>	Level 2.		
prefix6	IPv6 prefix.	ipv6-prefix	Not Specified	::/0

config router key-chain

Configure key-chain.

```
config router key-chain
  Description: Configure key-chain.
  edit <name>
    config key
      Description: Configuration method to edit key settings.
      edit <id>
        set accept-lifetime {user}
        set algorithm [md5|hmac-sha1|...]
        set key-string {password}
        set send-lifetime {user}
      next
    end
  next
end
```

config router key-chain

Parameter	Description	Type	Size	Default
name	Key-chain name.	string	Maximum length: 35	

config key

Parameter	Description	Type	Size	Default
accept-lifetime	Lifetime of received authentication key (format: hh:mm:ss day month year).	user	Not Specified	
algorithm	Cryptographic algorithm.	option	-	md5
		Option	Description	
		md5	MD5.	
		hmac-sha1	HMAC-SHA1.	
		hmac-sha256	HMAC-SHA256.	
		hmac-sha384	HMAC-SHA384.	
		hmac-sha512	HMAC-SHA512.	
id	Key ID (0 - 2147483647).	string	Maximum length: 10	

Parameter	Description	Type	Size	Default
key-string	Password for the key (maximum = 64 characters).	password	Not Specified	
send-lifetime	Lifetime of sent authentication key (format: hh:mm:ss day month year).	user	Not Specified	

config router multicast

Configure router multicast.

```

config router multicast
  Description: Configure router multicast.
  config interface
    Description: PIM interfaces.
    edit <name>
      set bfd [enable|disable]
      set cisco-exclude-genid [enable|disable]
      set dr-priority {integer}
      set hello-holdtime {integer}
      set hello-interval {integer}
      config igmp
        Description: IGMP configuration options.
        set access-group {string}
        set immediate-leave-group {string}
        set last-member-query-count {integer}
        set last-member-query-interval {integer}
        set query-interval {integer}
        set query-max-response-time {integer}
        set query-timeout {integer}
        set router-alert-check [enable|disable]
        set version [3|2|...]
      end
    config join-group
      Description: Join multicast groups.
      edit <address>
        next
      end
    set multicast-flow {string}
    set neighbour-filter {string}
    set passive [enable|disable]
    set pim-mode [sparse-mode|dense-mode]
    set propagation-delay {integer}
    set rp-candidate [enable|disable]
    set rp-candidate-group {string}
    set rp-candidate-interval {integer}
    set rp-candidate-priority {integer}
    set rpf-nbr-fail-back [enable|disable]
    set rpf-nbr-fail-back-filter {string}
  end

```

```

        set state-refresh-interval {integer}
        set static-group {string}
        set ttl-threshold {integer}
    next
end
set multicast-routing [enable|disable]
config pim-sm-global
    Description: PIM sparse-mode global settings.
    set accept-register-list {string}
    set accept-source-list {string}
    set bsr-allow-quick-refresh [enable|disable]
    set bsr-candidate [enable|disable]
    set bsr-hash {integer}
    set bsr-interface {string}
    set bsr-priority {integer}
    set cisco-crp-prefix [enable|disable]
    set cisco-ignore-rp-set-priority [enable|disable]
    set cisco-register-checksum [enable|disable]
    set cisco-register-checksum-group {string}
    set join-prune-holdtime {integer}
    set message-interval {integer}
    set null-register-retries {integer}
    set register-rate-limit {integer}
    set register-rp-reachability [enable|disable]
    set register-source [disable|interface|...]
    set register-source-interface {string}
    set register-source-ip {ipv4-address}
    set register-supression {integer}
config rp-address
    Description: Statically configure RP addresses.
    edit <id>
        set group {string}
        set ip-address {ipv4-address}
    next
end
set rp-register-keepalive {integer}
set spt-threshold [enable|disable]
set spt-threshold-group {string}
set ssm [enable|disable]
set ssm-range {string}
end
set route-limit {integer}
set route-threshold {integer}
end

```

config router multicast

Parameter	Description	Type	Size	Default
multicast-routing	Enable/disable IP multicast routing.	option	-	disable
	Option Description			
	<i>enable</i>	Enable IP multicast routing.		
	<i>disable</i>	Disable IP multicast routing.		
route-limit	Maximum number of multicast routes.	integer	Minimum value: 1 Maximum value: 2147483647	2147483647
route-threshold	Generate warnings when the number of multicast routes exceeds this number, must not be greater than route-limit.	integer	Minimum value: 1 Maximum value: 2147483647	

config interface

Parameter	Description	Type	Size	Default
bfd	Enable/disable Protocol Independent Multicast (PIM) Bidirectional Forwarding Detection (BFD).	option	-	disable
	Option Description			
	<i>enable</i>	Enable Protocol Independent Multicast (PIM) Bidirectional Forwarding Detection (BFD).		
	<i>disable</i>	Disable Protocol Independent Multicast (PIM) Bidirectional Forwarding Detection (BFD).		
cisco-exclude-genid	Exclude GenID from hello packets (compatibility with old Cisco IOS).	option	-	disable
	Option Description			
	<i>enable</i>	Do not send GenID.		
	<i>disable</i>	Send GenID according to standard.		

Parameter	Description	Type	Size	Default						
dr-priority	DR election priority.	integer	Minimum value: 1 1 Maximum value: 4294967295							
hello-holdtime	Time before old neighbor information expires (0 - 65535 sec, default = 105).	integer	Minimum value: 1 1 Maximum value: 65535							
hello-interval	Interval between sending PIM hello messages (0 - 65535 sec, default = 30).	integer	Minimum value: 1 1 Maximum value: 65535	30						
multicast-flow	Acceptable source for multicast group.	string	Maximum length: 35							
name	Interface name.	string	Maximum length: 15							
neighbour-filter	Routers acknowledged as neighbor routers.	string	Maximum length: 35							
passive	Enable/disable listening to IGMP but not participating in PIM.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Listen only.</td></tr><tr><td>disable</td><td>Participate in PIM.</td></tr></table>				Option	Description	enable	Listen only.	disable	Participate in PIM.
Option	Description									
enable	Listen only.									
disable	Participate in PIM.									
pim-mode	PIM operation mode.	option	-	sparse-mode						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>sparse-mode</td><td>sparse-mode</td></tr><tr><td>dense-mode</td><td>dense-mode</td></tr></table>				Option	Description	sparse-mode	sparse-mode	dense-mode	dense-mode
Option	Description									
sparse-mode	sparse-mode									
dense-mode	dense-mode									
propagation-delay	Delay flooding packets on this interface (100 - 5000 msec, default = 500).	integer	Minimum value: 100 100 Maximum value: 5000	500						
rp-candidate	Enable/disable compete to become RP in elections.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Compete for RP elections.</td></tr><tr><td>disable</td><td>Do not compete for RP elections.</td></tr></table>				Option	Description	enable	Compete for RP elections.	disable	Do not compete for RP elections.
Option	Description									
enable	Compete for RP elections.									
disable	Do not compete for RP elections.									

Parameter	Description	Type	Size	Default						
rp-candidate-group	Multicast groups managed by this RP.	string	Maximum length: 35							
rp-candidate-interval	RP candidate advertisement interval (1 - 16383 sec, default = 60).	integer	Minimum value: 1 Maximum value: 16383	60						
rp-candidate-priority	Router's priority as RP.	integer	Minimum value: 0 Maximum value: 255	192						
rpf-nbr-fail-back	Enable/disable fail back for RPF neighbor query.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable fail back for RPF neighbor query.</td></tr><tr><td>disable</td><td>Disable fail back for RPF neighbor query.</td></tr></table>				Option	Description	enable	Enable fail back for RPF neighbor query.	disable	Disable fail back for RPF neighbor query.
Option	Description									
enable	Enable fail back for RPF neighbor query.									
disable	Disable fail back for RPF neighbor query.									
rpf-nbr-fail-back-filter	Filter for fail back RPF neighbors.	string	Maximum length: 35							
state-refresh-interval	Interval between sending state-refresh packets (1 - 100 sec, default = 60).	integer	Minimum value: 1 Maximum value: 100	60						
static-group	Statically set multicast groups to forward out.	string	Maximum length: 35							
ttl-threshold	Minimum TTL of multicast packets that will be forwarded (applied only to new multicast routes) (1 - 255, default = 1).	integer	Minimum value: 1 Maximum value: 255	1						

config igmp

Parameter	Description	Type	Size	Default
access-group	Groups IGMP hosts are allowed to join.	string	Maximum length: 35	
immediate-leave-group	Groups to drop membership for immediately after receiving IGMPv2 leave.	string	Maximum length: 35	
last-member-query-count	Number of group specific queries before removing group (2 - 7, default = 2).	integer	Minimum value: 2 Maximum value: 7	2

Parameter	Description	Type	Size	Default								
last-member-query-interval	Timeout between IGMPv2 leave and removing group (1 - 65535 msec, default = 1000).	integer	Minimum value: 1 Maximum value: 65535	1000								
query-interval	Interval between queries to IGMP hosts (1 - 65535 sec, default = 125).	integer	Minimum value: 1 Maximum value: 65535	125								
query-max-response-time	Maximum time to wait for a IGMP query response (1 - 25 sec, default = 10).	integer	Minimum value: 1 Maximum value: 25	10								
query-timeout	Timeout between queries before becoming querying unit for network (60 - 900, default = 255).	integer	Minimum value: 60 Maximum value: 900	255								
router-alert-check	Enable/disable require IGMP packets contain router alert option.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Require Router Alert option in IGMP packets.</td></tr><tr><td>disable</td><td>don't require Router Alert option in IGMP packets</td></tr></table>				Option	Description	enable	Require Router Alert option in IGMP packets.	disable	don't require Router Alert option in IGMP packets		
Option	Description											
enable	Require Router Alert option in IGMP packets.											
disable	don't require Router Alert option in IGMP packets											
version	Maximum version of IGMP to support.	option	-	3								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>3</td><td>Version 3 and lower.</td></tr><tr><td>2</td><td>Version 2 and lower.</td></tr><tr><td>1</td><td>Version 1.</td></tr></table>				Option	Description	3	Version 3 and lower.	2	Version 2 and lower.	1	Version 1.
Option	Description											
3	Version 3 and lower.											
2	Version 2 and lower.											
1	Version 1.											

config join-group

Parameter	Description	Type	Size	Default
address	Multicast group IP address.	ipv4-address-any	Not Specified	0.0.0.0

config pim-sm-global

Parameter	Description	Type	Size	Default						
accept-register-list	Sources allowed to register packets with this Rendezvous Point (RP).	string	Maximum length: 35							
accept-source-list	Sources allowed to send multicast traffic.	string	Maximum length: 35							
bsr-allow-quick-refresh	Enable/disable accept BSR quick refresh packets from neighbors.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Allow quick refresh packets.</td></tr><tr><td><i>disable</i></td><td>Do not allow quick refresh packets.</td></tr></table>	Option	Description	<i>enable</i>	Allow quick refresh packets.	<i>disable</i>	Do not allow quick refresh packets.			
Option	Description									
<i>enable</i>	Allow quick refresh packets.									
<i>disable</i>	Do not allow quick refresh packets.									
bsr-candidate	Enable/disable allowing this router to become a bootstrap router (BSR).	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Allow this router to function as a BSR.</td></tr><tr><td><i>disable</i></td><td>Do not allow this router to function as a BSR.</td></tr></table>	Option	Description	<i>enable</i>	Allow this router to function as a BSR.	<i>disable</i>	Do not allow this router to function as a BSR.			
Option	Description									
<i>enable</i>	Allow this router to function as a BSR.									
<i>disable</i>	Do not allow this router to function as a BSR.									
bsr-hash	BSR hash length (0 - 32, default = 10).	integer	Minimum value: 0 Maximum value: 32	10						
bsr-interface	Interface to advertise as candidate BSR.	string	Maximum length: 15							
bsr-priority	BSR priority (0 - 255, default = 0).	integer	Minimum value: 0 Maximum value: 255	0						
cisco-crp-prefix	Enable/disable making candidate RP compatible with old Cisco IOS.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Do not allow sending group prefix of zero.</td></tr><tr><td><i>disable</i></td><td>Allow sending group prefix of zero.</td></tr></table>	Option	Description	<i>enable</i>	Do not allow sending group prefix of zero.	<i>disable</i>	Allow sending group prefix of zero.			
Option	Description									
<i>enable</i>	Do not allow sending group prefix of zero.									
<i>disable</i>	Allow sending group prefix of zero.									
cisco-ignore-rp-set-priority	Use only hash for RP selection (compatibility with old Cisco IOS).	option	-	disable						

Parameter	Description	Type	Size	Default						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Ignore RP-SET priority value.</td></tr><tr><td><i>disable</i></td><td>Do not ignore RP-SET priority value.</td></tr></table>	Option	Description	<i>enable</i>	Ignore RP-SET priority value.	<i>disable</i>	Do not ignore RP-SET priority value.			
	Option	Description								
	<i>enable</i>	Ignore RP-SET priority value.								
<i>disable</i>	Do not ignore RP-SET priority value.									
cisco-register-checksum	Checksum entire register packet(for old Cisco IOS compatibility).	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>register checksum entire packet.</td></tr><tr><td><i>disable</i></td><td>Do not register checksum entire packet.</td></tr></table>	Option	Description	<i>enable</i>	register checksum entire packet.	<i>disable</i>	Do not register checksum entire packet.			
	Option	Description								
	<i>enable</i>	register checksum entire packet.								
<i>disable</i>	Do not register checksum entire packet.									
cisco-register-checksum-group	Cisco register checksum only these groups.	string	Maximum length: 35							
join-prune-holdtime	Join/prune holdtime (1 - 65535, default = 210).	integer	Minimum value: 1 Maximum value: 65535	210						
message-interval	Period of time between sending periodic PIM join/prune messages in seconds (1 - 65535, default = 60).	integer	Minimum value: 1 Maximum value: 65535	60						
null-register-retries	Maximum retries of null register (1 - 20, default = 1).	integer	Minimum value: 1 Maximum value: 20	1						
register-rate-limit	Limit of packets/sec per source registered through this RP (0 - 65535, default = 0 which means unlimited).	integer	Minimum value: 0 Maximum value: 65535	0						
register-rp-reachability	Enable/disable check RP is reachable before registering packets.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Check target RP is unicast reachable before registering.</td></tr><tr><td><i>disable</i></td><td>Do not check RP unicast reachability.</td></tr></table>	Option	Description	<i>enable</i>	Check target RP is unicast reachable before registering.	<i>disable</i>	Do not check RP unicast reachability.			
	Option	Description								
	<i>enable</i>	Check target RP is unicast reachable before registering.								
<i>disable</i>	Do not check RP unicast reachability.									

Parameter	Description	Type	Size	Default								
register-source	Override source address in register packets.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Use source address of RPF interface.</td></tr><tr><td>interface</td><td>Use primary IP of an interface.</td></tr><tr><td>ip-address</td><td>Use a local IP address.</td></tr></table>	Option	Description	disable	Use source address of RPF interface.	interface	Use primary IP of an interface.	ip-address	Use a local IP address.			
Option	Description											
disable	Use source address of RPF interface.											
interface	Use primary IP of an interface.											
ip-address	Use a local IP address.											
register-source-interface	Override with primary interface address.	string	Maximum length: 15									
register-source-ip	Override with local IP address.	ipv4-address	Not Specified	0.0.0.0								
register-supression	Period of time to honor register-stop message (1 - 65535 sec, default = 60).	integer	Minimum value: 1 Maximum value: 65535	60								
rp-register-keepalive	Timeout for RP receiving data on (S,G) tree (1 - 65535 sec, default = 185).	integer	Minimum value: 1 Maximum value: 65535	185								
spt-threshold	Enable/disable switching to source specific trees.	option	-	enable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Switch to Source tree when available.</td></tr><tr><td>disable</td><td>Do not switch to Source tree when available.</td></tr></table>	Option	Description	enable	Switch to Source tree when available.	disable	Do not switch to Source tree when available.					
Option	Description											
enable	Switch to Source tree when available.											
disable	Do not switch to Source tree when available.											
spt-threshold-group	Groups allowed to switch to source tree.	string	Maximum length: 35									
ssm	Enable/disable source specific multicast.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Allow source specific multicast.</td></tr><tr><td>disable</td><td>Do not allow source specific multicast.</td></tr></table>	Option	Description	enable	Allow source specific multicast.	disable	Do not allow source specific multicast.					
Option	Description											
enable	Allow source specific multicast.											
disable	Do not allow source specific multicast.											
ssm-range	Groups allowed to source specific multicast.	string	Maximum length: 35									

config rp-address

Parameter	Description	Type	Size	Default
group	Groups to use this RP.	string	Maximum length: 35	
id	ID.	integer	Minimum value: 0 Maximum value: 4294967295	0
ip-address	RP router address.	ipv4-address	Not Specified	0.0.0.0

config router multicast6

Configure IPv6 multicast.

```
config router multicast6
  Description: Configure IPv6 multicast.
  config interface
    Description: Protocol Independent Multicast (PIM) interfaces.
    edit <name>
      set hello-holdtime {integer}
      set hello-interval {integer}
    next
  end
  set multicast-pmtu [enable|disable]
  set multicast-routing [enable|disable]
  config pim-sm-global
    Description: PIM sparse-mode global settings.
    set register-rate-limit {integer}
    config rp-address
      Description: Statically configured RP addresses.
      edit <id>
        set ip6-address {ipv6-address}
      next
    end
  end
end
```

config router multicast6

Parameter	Description	Type	Size	Default
multicast-pmtu	Enable/disable PMTU for IPv6 multicast.	option	-	disable

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>enable</i>	Enable PMTU for IPv6 multicast.		
	<i>disable</i>	Disable PMTU for IPv6 multicast.		
multicast-routing	Enable/disable IPv6 multicast routing.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable IPv6 multicast routing.		
	<i>disable</i>	Disable IPv6 multicast routing.		

config interface

Parameter	Description	Type	Size	Default
hello-holdtime	Time before old neighbor information expires in seconds (1 - 65535, default = 105).	integer	Minimum value: 1 Maximum value: 65535	
hello-interval	Interval between sending PIM hello messages in seconds (1 - 65535, default = 30).	integer	Minimum value: 1 Maximum value: 65535	30
name	Interface name.	string	Maximum length: 15	

config pim-sm-global

Parameter	Description	Type	Size	Default
register-rate-limit	Limit of packets/sec per source registered through this RP (0 means unlimited).	integer	Minimum value: 0 Maximum value: 65535	0

config rp-address

Parameter	Description	Type	Size	Default
id	ID of the entry.	integer	Minimum value: 0 Maximum value: 4294967295	0
ipv6-address	RP router IPv6 address.	ipv6-address	Not Specified	::

config router multicast-flow

Configure multicast-flow.

```
config router multicast-flow
  Description: Configure multicast-flow.
  edit <name>
    set comments {string}
    config flows
      Description: Multicast-flow entries.
      edit <id>
        set group-addr {ipv4-address-any}
        set source-addr {ipv4-address-any}
      next
    end
  next
end
```

config router multicast-flow

Parameter	Description	Type	Size	Default
comments	Comment.	string	Maximum length: 127	
name	Name.	string	Maximum length: 35	

config flows

Parameter	Description	Type	Size	Default
group-addr	Multicast group IP address.	ipv4-address-any	Not Specified	0.0.0.0

Parameter	Description	Type	Size	Default
id	Flow ID.	integer	Minimum value: 0 Maximum value: 4294967295	0
source-addr	Multicast source IP address.	ipv4-address-any	Not Specified	0.0.0.0

config router ospf

Configure OSPF.

```

config router ospf
  Description: Configure OSPF.
  set abr-type [cisco|ibm|...]
  config area
    Description: OSPF area configuration.
    edit <id>
      set authentication [none|text|...]
      set comments {var-string}
      set default-cost {integer}
      config filter-list
        Description: OSPF area filter-list configuration.
        edit <id>
          set direction [in|out]
          set list {string}
        next
      end
      set nssa-default-information-originate [enable|always|...]
      set nssa-default-information-originate-metric {integer}
      set nssa-default-information-originate-metric-type [1|2]
      set nssa-redistribution [enable|disable]
      set nssa-translator-role [candidate|never|...]
      config range
        Description: OSPF area range configuration.
        edit <id>
          set advertise [disable|enable]
          set prefix {ipv4-classnet-any}
          set substitute {ipv4-classnet-any}
          set substitute-status [enable|disable]
        next
      end
      set shortcut [disable|enable|...]
      set stub-type [no-summary|summary]
      set type [regular|nssa|...]
      config virtual-link
        Description: OSPF virtual link configuration.

```

```

        edit <name>
            set authentication [none|text|...]
            set authentication-key {password}
            set dead-interval {integer}
            set hello-interval {integer}
            set keychain {string}
            config md5-keys
                Description: MD5 key.
                edit <id>
                    set key-string {password}
                next
            end
            set peer {ipv4-address-any}
            set retransmit-interval {integer}
            set transmit-delay {integer}
        next
    end
next
end
set auto-cost-ref-bandwidth {integer}
set bfd [enable|disable]
set database-overflow [enable|disable]
set database-overflow-max-lsas {integer}
set database-overflow-time-to-recover {integer}
set default-information-metric {integer}
set default-information-metric-type [1|2]
set default-information-originate [enable|always|...]
set default-information-route-map {string}
set default-metric {integer}
set distance {integer}
set distance-external {integer}
set distance-inter-area {integer}
set distance-intra-area {integer}
config distribute-list
    Description: Distribute list configuration.
    edit <id>
        set access-list {string}
        set protocol [connected|static|...]
    next
end
set distribute-list-in {string}
set distribute-route-map-in {string}
set log-neighbour-changes [enable|disable]
config neighbor
    Description: OSPF neighbor configuration are used when OSPF runs on non-broadcast media.
    edit <id>
        set cost {integer}
        set ip {ipv4-address}
        set poll-interval {integer}
        set priority {integer}
    next
end

```

```

config network
    Description: OSPF network configuration.
    edit <id>
        set area {ipv4-address-any}
        set comments {var-string}
        set prefix {ipv4-classnet}
    next
end
config ospf-interface
    Description: OSPF interface configuration.
    edit <name>
        set authentication [none|text|...]
        set authentication-key {password}
        set bfd [global|enable|...]
        set comments {var-string}
        set cost {integer}
        set database-filter-out [enable|disable]
        set dead-interval {integer}
        set hello-interval {integer}
        set hello-multiplier {integer}
        set interface {string}
        set ip {ipv4-address}
        set keychain {string}
        config md5-keys
            Description: MD5 key.
            edit <id>
                set key-string {password}
            next
        end
        set mtu {integer}
        set mtu-ignore [enable|disable]
        set network-type [broadcast|non-broadcast|...]
        set prefix-length {integer}
        set priority {integer}
        set resync-timeout {integer}
        set retransmit-interval {integer}
        set status [disable|enable]
        set transmit-delay {integer}
    next
end
set passive-interface <name1>, <name2>, ...
config redistribute
    Description: Redistribute configuration. Read-only.
    edit <name>
        set metric {integer}
        set metric-type [1|2]
        set routemap {string}
        set status [enable|disable]
        set tag {integer}
    next
end
set restart-mode [none|l1s|...]

```

```

set restart-on-topology-change [enable|disable]
set restart-period {integer}
set rfc1583-compatible [enable|disable]
set router-id {ipv4-address-any}
set spf-timers {user}
config summary-address
    Description: IP address summary configuration.
    edit <id>
        set advertise [disable|enable]
        set prefix {ipv4-classnet}
        set tag {integer}
    next
end
end

```

config router ospf

Parameter	Description	Type	Size	Default										
abr-type	Area border router type.	option	-	standard										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>cisco</td><td>Cisco.</td></tr><tr><td>ibm</td><td>IBM.</td></tr><tr><td>shortcut</td><td>Shortcut.</td></tr><tr><td>standard</td><td>Standard.</td></tr></table>	Option	Description	cisco	Cisco.	ibm	IBM.	shortcut	Shortcut.	standard	Standard.			
Option	Description													
cisco	Cisco.													
ibm	IBM.													
shortcut	Shortcut.													
standard	Standard.													
auto-cost-ref-bandwidth	Reference bandwidth in terms of megabits per second.	integer	Minimum value: 1 Maximum value: 1000000	1000										
bfd	Bidirectional Forwarding Detection (BFD).	option	-	disable										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable setting.</td></tr><tr><td>disable</td><td>Disable setting.</td></tr></table>	Option	Description	enable	Enable setting.	disable	Disable setting.							
Option	Description													
enable	Enable setting.													
disable	Disable setting.													
database-overflow	Enable/disable database overflow.	option	-	disable										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable setting.</td></tr><tr><td>disable</td><td>Disable setting.</td></tr></table>	Option	Description	enable	Enable setting.	disable	Disable setting.							
Option	Description													
enable	Enable setting.													
disable	Disable setting.													

Parameter	Description	Type	Size	Default								
database-overflow-max-lsas	Database overflow maximum LSAs.	integer	Minimum value: 0 Maximum value: 4294967295	10000								
database-overflow-time-to-recover	Database overflow time to recover (sec).	integer	Minimum value: 0 Maximum value: 65535	300								
default-information-metric	Default information metric.	integer	Minimum value: 1 Maximum value: 16777214	10								
default-information-metric-type	Default information metric type.	option	-	2								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>1</td><td>Type 1.</td></tr><tr><td>2</td><td>Type 2.</td></tr></table>				Option	Description	1	Type 1.	2	Type 2.		
	Option	Description										
	1	Type 1.										
2	Type 2.											
default-information-originate	Enable/disable generation of default route.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable setting.</td></tr><tr><td>always</td><td>Always advertise the default router.</td></tr><tr><td>disable</td><td>Disable setting.</td></tr></table>				Option	Description	enable	Enable setting.	always	Always advertise the default router.	disable	Disable setting.
	Option	Description										
	enable	Enable setting.										
	always	Always advertise the default router.										
disable	Disable setting.											
default-information-route-map	Default information route map.	string	Maximum length: 35									
default-metric	Default metric of redistribute routes.	integer	Minimum value: 1 Maximum value: 16777214	10								
distance	Distance of the route.	integer	Minimum value: 1 Maximum value: 255	110								

Parameter	Description	Type	Size	Default								
distance-external	Administrative external distance.	integer	Minimum value: 1 Maximum value: 255	110								
distance-inter-area	Administrative inter-area distance.	integer	Minimum value: 1 Maximum value: 255	110								
distance-intra-area	Administrative intra-area distance.	integer	Minimum value: 1 Maximum value: 255	110								
distribute-list-in	Filter incoming routes.	string	Maximum length: 35									
distribute-route-map-in	Filter incoming external routes by route-map.	string	Maximum length: 35									
log-neighbour-changes	Log of OSPF neighbor changes.	option	-	enable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable setting.</td></tr><tr><td>disable</td><td>Disable setting.</td></tr></table>				Option	Description	enable	Enable setting.	disable	Disable setting.		
Option	Description											
enable	Enable setting.											
disable	Disable setting.											
passive-interface <name>	Passive interface configuration. Passive interface name.	string	Maximum length: 79									
restart-mode	OSPF restart mode (graceful or LLS).	option	-	none								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>none</td><td>Hitless restart disabled.</td></tr><tr><td>lls</td><td>LLS mode.</td></tr><tr><td>graceful-restart</td><td>Graceful Restart Mode.</td></tr></table>				Option	Description	none	Hitless restart disabled.	lls	LLS mode.	graceful-restart	Graceful Restart Mode.
Option	Description											
none	Hitless restart disabled.											
lls	LLS mode.											
graceful-restart	Graceful Restart Mode.											
restart-on-topology-change	Enable/disable continuing graceful restart upon topology change.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Continue graceful restart upon topology change.</td></tr><tr><td>disable</td><td>Exit graceful restart upon topology change.</td></tr></table>				Option	Description	enable	Continue graceful restart upon topology change.	disable	Exit graceful restart upon topology change.		
Option	Description											
enable	Continue graceful restart upon topology change.											
disable	Exit graceful restart upon topology change.											

Parameter	Description	Type	Size	Default
restart-period	Graceful restart period.	integer	Minimum value: 1 Maximum value: 3600	120
rfc1583-compatible	Enable/disable RFC1583 compatibility.	option	-	disable
	Option		Description	
	<i>enable</i>		Enable setting.	
	<i>disable</i>		Disable setting.	
router-id	Router ID.	ipv4-address-any	Not Specified	0.0.0.0
spf-timers	SPF calculation frequency.	user	Not Specified	

config area

Parameter	Description	Type	Size	Default
authentication	Authentication type.	option	-	none
	Option		Description	
	<i>none</i>		None.	
	<i>text</i>		Text.	
	<i>message-digest</i>		Message digest.	
comments	Comment.	var-string	Maximum length: 255	
default-cost	Summary default cost of stub or NSSA area.	integer	Minimum value: 0 Maximum value: 4294967295	10
id	Area entry IP address.	ipv4-address-any	Not Specified	0.0.0.0
nssa-default-information-originate	Redistribute, advertise, or do not originate Type-7 default route into NSSA area.	option	-	disable

Parameter	Description	Type	Size	Default								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Redistribute Type-7 default route from routing table.</td></tr><tr><td><i>always</i></td><td>Advertise a self-originated Type-7 default route.</td></tr><tr><td><i>disable</i></td><td>Do not advertise Type-7 default route.</td></tr></table>	Option	Description	<i>enable</i>	Redistribute Type-7 default route from routing table.	<i>always</i>	Advertise a self-originated Type-7 default route.	<i>disable</i>	Do not advertise Type-7 default route.			
	Option	Description										
	<i>enable</i>	Redistribute Type-7 default route from routing table.										
	<i>always</i>	Advertise a self-originated Type-7 default route.										
<i>disable</i>	Do not advertise Type-7 default route.											
nssa-default-information-originate-metric	OSPF default metric.	integer	Minimum value: 0 Maximum value: 16777214	10								
nssa-default-information-originate-metric-type	OSPF metric type for default routes.	option	-	2								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>1</td><td>Type 1.</td></tr><tr><td>2</td><td>Type 2.</td></tr></table>	Option	Description	1	Type 1.	2	Type 2.					
	Option	Description										
	1	Type 1.										
2	Type 2.											
nssa-redistribution	Enable/disable redistribute into NSSA area.	option	-	enable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable redistribute into NSSA area.</td></tr><tr><td><i>disable</i></td><td>Disable redistribute into NSSA area.</td></tr></table>	Option	Description	<i>enable</i>	Enable redistribute into NSSA area.	<i>disable</i>	Disable redistribute into NSSA area.					
	Option	Description										
<i>enable</i>	Enable redistribute into NSSA area.											
<i>disable</i>	Disable redistribute into NSSA area.											
nssa-translator-role	NSSA translator role type.	option	-	candidate								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>candidate</i></td><td>Candidate.</td></tr><tr><td><i>never</i></td><td>Never.</td></tr><tr><td><i>always</i></td><td>Always.</td></tr></table>	Option	Description	<i>candidate</i>	Candidate.	<i>never</i>	Never.	<i>always</i>	Always.			
	Option	Description										
	<i>candidate</i>	Candidate.										
	<i>never</i>	Never.										
<i>always</i>	Always.											
shortcut	Enable/disable shortcut option.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>disable</i></td><td>Disable shortcut option.</td></tr><tr><td><i>enable</i></td><td>Enable shortcut option.</td></tr><tr><td><i>default</i></td><td>Default shortcut option.</td></tr></table>	Option	Description	<i>disable</i>	Disable shortcut option.	<i>enable</i>	Enable shortcut option.	<i>default</i>	Default shortcut option.			
	Option	Description										
	<i>disable</i>	Disable shortcut option.										
	<i>enable</i>	Enable shortcut option.										
<i>default</i>	Default shortcut option.											

Parameter	Description	Type	Size	Default
stub-type	Stub summary setting.	option	-	summary
	Option	Description		
	<i>no-summary</i>	No summary.		
	<i>summary</i>	Summary.		
type	Area type setting.	option	-	regular
	Option	Description		
	<i>regular</i>	Regular.		
	<i>nssa</i>	NSSA.		
	<i>stub</i>	Stub.		

config filter-list

Parameter	Description	Type	Size	Default
direction	Direction.	option	-	out
	Option	Description		
	<i>in</i>	In.		
	<i>out</i>	Out.		
id	Filter list entry ID.	integer	Minimum value: 0 Maximum value: 4294967295	
list	Access-list or prefix-list name.	string	Maximum length: 35	

config range

Parameter	Description	Type	Size	Default
advertise	Enable/disable advertise status.	option	-	enable
	Option	Description		
	<i>disable</i>	Disable advertise status.		
	<i>enable</i>	Enable advertise status.		

Parameter	Description	Type	Size	Default						
id	Range entry ID.	integer	Minimum value: 0 Maximum value: 4294967295	0						
prefix	Prefix.	ipv4-classnet-any	Not Specified	0.0.0.0 0.0.0.0						
substitute	Substitute prefix.	ipv4-classnet-any	Not Specified	0.0.0.0 0.0.0.0						
substitute-status	Enable/disable substitute status.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable substitute status.</td></tr><tr><td>disable</td><td>Disable substitute status.</td></tr></table>				Option	Description	enable	Enable substitute status.	disable	Disable substitute status.
	Option	Description								
	enable	Enable substitute status.								
disable	Disable substitute status.									

config virtual-link

Parameter	Description	Type	Size	Default
authentication	Authentication type.	option	-	none
	Option	Description		
	<i>none</i>	None.		
	<i>text</i>	Text.		
	<i>message-digest</i>	Message digest.		
authentication-key	Authentication key.	password	Not Specified	
dead-interval	Dead interval.	integer	Minimum value: 1 Maximum value: 65535	40
hello-interval	Hello interval.	integer	Minimum value: 1 Maximum value: 65535	10

Parameter	Description	Type	Size	Default
keychain	Message-digest key-chain name.	string	Maximum length: 35	
name	Virtual link entry name.	string	Maximum length: 35	
peer	Peer IP.	ipv4-address-any	Not Specified	0.0.0.0
retransmit-interval	Retransmit interval.	integer	Minimum value: 1 Maximum value: 65535	5
transmit-delay	Transmit delay.	integer	Minimum value: 1 Maximum value: 65535	1

config md5-keys

Parameter	Description	Type	Size	Default
id	Key ID (1 - 255).	integer	Minimum value: 1 Maximum value: 255	0
key-string	Password for the key.	password	Not Specified	

config distribute-list

Parameter	Description	Type	Size	Default
access-list	Access list name.	string	Maximum length: 35	
id	Distribute list entry ID.	integer	Minimum value: 0 Maximum value: 4294967295	0
protocol	Protocol type.	option	-	connected

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>connected</i>	Connected type.		
	<i>static</i>	Static type.		
	<i>rip</i>	RIP type.		

config neighbor

Parameter	Description	Type	Size	Default
cost	Cost of the interface, value range from 0 to 65535, 0 means auto-cost.	integer	Minimum value: 0 0 Maximum value: 65535	0
id	Neighbor entry ID.	integer	Minimum value: 0 0 Maximum value: 4294967295	0
ip	Interface IP address of the neighbor.	ipv4-address	Not Specified	0.0.0.0
poll-interval	Poll interval time in seconds.	integer	Minimum value: 10 1 Maximum value: 65535	10
priority	Priority.	integer	Minimum value: 0 0 Maximum value: 255	1

config network

Parameter	Description	Type	Size	Default
area	Attach the network to area.	ipv4-address-any	Not Specified	0.0.0.0
comments	Comment.	var-string	Maximum length: 255	
id	Network entry ID.	integer	Minimum value: 0 0 Maximum value: 4294967295	0
prefix	Prefix.	ipv4-classnet	Not Specified	0.0.0.0 0.0.0.0

config ospf-interface

Parameter	Description	Type	Size	Default								
authentication	Authentication type.	option	-	none								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>none</i></td><td>None.</td></tr><tr><td><i>text</i></td><td>Text.</td></tr><tr><td><i>message-digest</i></td><td>Message digest.</td></tr></table>	Option	Description	<i>none</i>	None.	<i>text</i>	Text.	<i>message-digest</i>	Message digest.			
Option	Description											
<i>none</i>	None.											
<i>text</i>	Text.											
<i>message-digest</i>	Message digest.											
authentication-key	Authentication key.	password	Not Specified									
bfd	Bidirectional Forwarding Detection (BFD).	option	-	global								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>global</i></td><td>Follow global configuration.</td></tr><tr><td><i>enable</i></td><td>Enable BFD on this interface.</td></tr><tr><td><i>disable</i></td><td>Disable BFD on this interface.</td></tr></table>	Option	Description	<i>global</i>	Follow global configuration.	<i>enable</i>	Enable BFD on this interface.	<i>disable</i>	Disable BFD on this interface.			
Option	Description											
<i>global</i>	Follow global configuration.											
<i>enable</i>	Enable BFD on this interface.											
<i>disable</i>	Disable BFD on this interface.											
comments	Comment.	var-string	Maximum length: 255									
cost	Cost of the interface, value range from 0 to 65535, 0 means auto-cost.	integer	Minimum value: 0 Maximum value: 65535	0								
database-filter-out	Enable/disable control of flooding out LSAs.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable setting.</td></tr><tr><td><i>disable</i></td><td>Disable setting.</td></tr></table>	Option	Description	<i>enable</i>	Enable setting.	<i>disable</i>	Disable setting.					
Option	Description											
<i>enable</i>	Enable setting.											
<i>disable</i>	Disable setting.											
dead-interval	Dead interval.	integer	Minimum value: 0 Maximum value: 65535	0								

Parameter	Description	Type	Size	Default
hello-interval	Hello interval.	integer	Minimum value: 0 Maximum value: 65535	0
hello-multiplier	Number of hello packets within dead interval.	integer	Minimum value: 3 Maximum value: 10	0
interface	Configuration interface name.	string	Maximum length: 15	
ip	IP address.	ipv4-address	Not Specified	0.0.0.0
keychain	Message-digest key-chain name.	string	Maximum length: 35	
mtu	MTU for database description packets.	integer	Minimum value: 576 Maximum value: 65535	0
mtu-ignore	Enable/disable ignore MTU.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		
name	Interface entry name.	string	Maximum length: 35	
network-type	Network type.	option	-	broadcast
	Option	Description		
	<i>broadcast</i>	Broadcast.		
	<i>non-broadcast</i>	Non-broadcast.		
	<i>point-to-point</i>	Point-to-point.		
	<i>point-to-multipoint</i>	Point-to-multipoint.		
	<i>point-to-multipoint-non-broadcast</i>	Point-to-multipoint and non-broadcast.		

Parameter	Description	Type	Size	Default
prefix-length	Prefix length.	integer	Minimum value: 0 Maximum value: 32	0
priority	Priority.	integer	Minimum value: 0 Maximum value: 255	1
resync-timeout	Graceful restart neighbor resynchronization timeout.	integer	Minimum value: 1 Maximum value: 3600	40
retransmit-interval	Retransmit interval.	integer	Minimum value: 1 Maximum value: 65535	5
status	Enable/disable status.	option	-	enable
	Option	Description		
	<i>disable</i>	Disable status.		
	<i>enable</i>	Enable status.		
transmit-delay	Transmit delay.	integer	Minimum value: 1 Maximum value: 65535	1

config md5-keys

Parameter	Description	Type	Size	Default
id	Key ID (1 - 255).	integer	Minimum value: 1 Maximum value: 255	0
key-string	Password for the key.	password	Not Specified	

config redistribute

Parameter	Description	Type	Size	Default
metric	Redistribute metric setting.	integer	Minimum value: 0 0 Maximum value: 16777214	0
metric-type	Metric type.	option	-	2
	Option	Description		
	1	Type 1.		
	2	Type 2.		
name	Redistribute name.	string	Maximum length: 35	
routemap	Route map name.	string	Maximum length: 35	
status	Status.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		
tag	Tag value.	integer	Minimum value: 0 0 Maximum value: 4294967295	0

config summary-address

Parameter	Description	Type	Size	Default
advertise	Enable/disable advertise status.	option	-	enable
	Option	Description		
	<i>disable</i>	Disable advertise status.		
	<i>enable</i>	Enable advertise status.		
id	Summary address entry ID.	integer	Minimum value: 0 0 Maximum value: 4294967295	0

Parameter	Description	Type	Size	Default
prefix	Prefix.	ipv4-classnet	Not Specified	0.0.0.0 0.0.0.0
tag	Tag value.	integer	Minimum value: 0 Maximum value: 4294967295	0

config router ospf6

Configure IPv6 OSPF.

```

config router ospf6
  Description: Configure IPv6 OSPF.
  set abr-type [cisco|ibm|...]
  config area
    Description: OSPF6 area configuration.
    edit <id>
      set authentication [none|ah|...]
      set default-cost {integer}
      set ipsec-auth-alg [md5|sha1|...]
      set ipsec-enc-alg [null|des|...]
      config ipsec-keys
        Description: IPsec authentication and encryption keys.
        edit <spi>
          set auth-key {password}
          set enc-key {password}
        next
      end
      set key-rollover-interval {integer}
      set nssa-default-information-originate [enable|disable]
      set nssa-default-information-originate-metric {integer}
      set nssa-default-information-originate-metric-type [1|2]
      set nssa-redistribution [enable|disable]
      set nssa-translator-role [candidate|never|...]
      config range
        Description: OSPF6 area range configuration.
        edit <id>
          set advertise [disable|enable]
          set prefix6 {ipv6-network}
        next
      end
      set stub-type [no-summary|summary]
      set type [regular|nssa|...]
      config virtual-link
        Description: OSPF6 virtual link configuration.
        edit <name>
          set authentication [none|ah|...]

```

```

        set dead-interval {integer}
        set hello-interval {integer}
        set ipsec-auth-alg [md5|sha1|...]
        set ipsec-enc-alg [null|des|...]
        config ipsec-keys
            Description: IPsec authentication and encryption keys.
            edit <spi>
                set auth-key {password}
                set enc-key {password}
            next
        end
        set key-rollover-interval {integer}
        set peer {ipv4-address-any}
        set retransmit-interval {integer}
        set transmit-delay {integer}
    next
end
next
end
set auto-cost-ref-bandwidth {integer}
set bfd [enable|disable]
set default-information-metric {integer}
set default-information-metric-type [1|2]
set default-information-originate [enable|always|...]
set default-information-route-map {string}
set default-metric {integer}
set log-neighbour-changes [enable|disable]
config ospf6-interface
    Description: OSPF6 interface configuration.
    edit <name>
        set area-id {ipv4-address-any}
        set authentication [none|ah|...]
        set bfd [global|enable|...]
        set cost {integer}
        set dead-interval {integer}
        set hello-interval {integer}
        set interface {string}
        set ipsec-auth-alg [md5|sha1|...]
        set ipsec-enc-alg [null|des|...]
        config ipsec-keys
            Description: IPsec authentication and encryption keys.
            edit <spi>
                set auth-key {password}
                set enc-key {password}
            next
        end
        set key-rollover-interval {integer}
        set mtu {integer}
        set mtu-ignore [enable|disable]
        config neighbor
            Description: OSPFv3 neighbors are used when OSPFv3 runs on non-broadcast media.
            edit <ip6>

```

```

        set cost {integer}
        set poll-interval {integer}
        set priority {integer}
    next
end
set network-type [broadcast|point-to-point|...]
set priority {integer}
set retransmit-interval {integer}
set status [disable|enable]
set transmit-delay {integer}
next
end
set passive-interface <name1>, <name2>, ...
config redistribute
    Description: Redistribute configuration. Read-only.
    edit <name>
        set metric {integer}
        set metric-type [1|2]
        set routemap {string}
        set status [enable|disable]
    next
end
set restart-mode [none|graceful-restart]
set restart-on-topology-change [enable|disable]
set restart-period {integer}
set router-id {ipv4-address-any}
set spf-timers {user}
config summary-address
    Description: IPv6 address summary configuration.
    edit <id>
        set advertise [disable|enable]
        set prefix6 {ipv6-network}
        set tag {integer}
    next
end
end
end

```

config router ospf6

Parameter	Description	Type	Size	Default								
abr-type	Area border router type.	option	-	standard								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>cisco</i></td><td>Cisco.</td></tr><tr><td><i>ibm</i></td><td>IBM.</td></tr><tr><td><i>standard</i></td><td>Standard.</td></tr></table>				Option	Description	<i>cisco</i>	Cisco.	<i>ibm</i>	IBM.	<i>standard</i>	Standard.
Option	Description											
<i>cisco</i>	Cisco.											
<i>ibm</i>	IBM.											
<i>standard</i>	Standard.											

Parameter	Description	Type	Size	Default								
auto-cost-ref-bandwidth	Reference bandwidth in terms of megabits per second.	integer	Minimum value: 1 Maximum value: 1000000	1000								
bfd	Enable/disable Bidirectional Forwarding Detection (BFD).	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable Bidirectional Forwarding Detection (BFD).</td></tr><tr><td>disable</td><td>Disable Bidirectional Forwarding Detection (BFD).</td></tr></table>	Option	Description	enable	Enable Bidirectional Forwarding Detection (BFD).	disable	Disable Bidirectional Forwarding Detection (BFD).					
Option	Description											
enable	Enable Bidirectional Forwarding Detection (BFD).											
disable	Disable Bidirectional Forwarding Detection (BFD).											
default-information-metric	Default information metric.	integer	Minimum value: 1 Maximum value: 16777214	10								
default-information-metric-type	Default information metric type.	option	-	2								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>1</td><td>Type 1.</td></tr><tr><td>2</td><td>Type 2.</td></tr></table>	Option	Description	1	Type 1.	2	Type 2.					
Option	Description											
1	Type 1.											
2	Type 2.											
default-information-originate	Enable/disable generation of default route.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable setting.</td></tr><tr><td>always</td><td>Always advertise the default router.</td></tr><tr><td>disable</td><td>Disable setting.</td></tr></table>	Option	Description	enable	Enable setting.	always	Always advertise the default router.	disable	Disable setting.			
Option	Description											
enable	Enable setting.											
always	Always advertise the default router.											
disable	Disable setting.											
default-information-route-map	Default information route map.	string	Maximum length: 35									
default-metric	Default metric of redistribute routes.	integer	Minimum value: 1 Maximum value: 16777214	10								

Parameter	Description	Type	Size	Default						
log-neighbour-changes	Log OSPFv3 neighbor changes.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable setting.</td></tr><tr><td><i>disable</i></td><td>Disable setting.</td></tr></table>	Option	Description	<i>enable</i>	Enable setting.	<i>disable</i>	Disable setting.			
Option	Description									
<i>enable</i>	Enable setting.									
<i>disable</i>	Disable setting.									
passive-interface <name>	Passive interface configuration. Passive interface name.	string	Maximum length: 79							
restart-mode	OSPFv3 restart mode (graceful or none).	option	-	none						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>none</i></td><td>Disable hitless restart.</td></tr><tr><td><i>graceful-restart</i></td><td>Enable graceful restart mode.</td></tr></table>	Option	Description	<i>none</i>	Disable hitless restart.	<i>graceful-restart</i>	Enable graceful restart mode.			
Option	Description									
<i>none</i>	Disable hitless restart.									
<i>graceful-restart</i>	Enable graceful restart mode.									
restart-on-topology-change	Enable/disable continuing graceful restart upon topology change.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Continue graceful restart upon topology change.</td></tr><tr><td><i>disable</i></td><td>Exit graceful restart upon topology change.</td></tr></table>	Option	Description	<i>enable</i>	Continue graceful restart upon topology change.	<i>disable</i>	Exit graceful restart upon topology change.			
Option	Description									
<i>enable</i>	Continue graceful restart upon topology change.									
<i>disable</i>	Exit graceful restart upon topology change.									
restart-period	Graceful restart period in seconds.	integer	Minimum value: 1 Maximum value: 3600	120						
router-id	A.B.C.D, in IPv4 address format.	ipv4-address-any	Not Specified	0.0.0.0						
spf-timers	SPF calculation frequency.	user	Not Specified							

config area

Parameter	Description	Type	Size	Default
authentication	Authentication mode.	option	-	none

Parameter	Description	Type	Size	Default														
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>none</i></td><td>Disable authentication.</td></tr><tr><td><i>ah</i></td><td>Authentication Header.</td></tr><tr><td><i>esp</i></td><td>Encapsulating Security Payload.</td></tr></table>	Option	Description	<i>none</i>	Disable authentication.	<i>ah</i>	Authentication Header.	<i>esp</i>	Encapsulating Security Payload.									
	Option	Description																
	<i>none</i>	Disable authentication.																
	<i>ah</i>	Authentication Header.																
<i>esp</i>	Encapsulating Security Payload.																	
default-cost	Summary default cost of stub or NSSA area.	integer	Minimum value: 0 Maximum value: 16777215	10														
id	Area entry IP address.	ipv4-address-any	Not Specified	0.0.0.0														
ipsec-auth-alg	Authentication algorithm.	option	-	md5														
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>md5</i></td><td>MD5.</td></tr><tr><td><i>sha1</i></td><td>SHA1.</td></tr><tr><td><i>sha256</i></td><td>SHA256.</td></tr><tr><td><i>sha384</i></td><td>SHA384.</td></tr><tr><td><i>sha512</i></td><td>SHA512.</td></tr></table>	Option	Description	<i>md5</i>	MD5.	<i>sha1</i>	SHA1.	<i>sha256</i>	SHA256.	<i>sha384</i>	SHA384.	<i>sha512</i>	SHA512.					
	Option	Description																
	<i>md5</i>	MD5.																
	<i>sha1</i>	SHA1.																
	<i>sha256</i>	SHA256.																
	<i>sha384</i>	SHA384.																
<i>sha512</i>	SHA512.																	
ipsec-enc-alg	Encryption algorithm.	option	-	null														
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>null</i></td><td>No encryption.</td></tr><tr><td><i>des</i></td><td>DES.</td></tr><tr><td><i>3des</i></td><td>3DES.</td></tr><tr><td><i>aes128</i></td><td>AES128.</td></tr><tr><td><i>aes192</i></td><td>AES192.</td></tr><tr><td><i>aes256</i></td><td>AES256.</td></tr></table>	Option	Description	<i>null</i>	No encryption.	<i>des</i>	DES.	<i>3des</i>	3DES.	<i>aes128</i>	AES128.	<i>aes192</i>	AES192.	<i>aes256</i>	AES256.			
	Option	Description																
	<i>null</i>	No encryption.																
	<i>des</i>	DES.																
	<i>3des</i>	3DES.																
	<i>aes128</i>	AES128.																
	<i>aes192</i>	AES192.																
<i>aes256</i>	AES256.																	
key-rollover-interval	Key roll-over interval.	integer	Minimum value: 300 Maximum value: 216000	300														

Parameter	Description	Type	Size	Default								
nssa-default-information-originate	Enable/disable originate type 7 default into NSSA area.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable originate type 7 default into NSSA area.</td></tr><tr><td><i>disable</i></td><td>Disable originate type 7 default into NSSA area.</td></tr></table>	Option	Description	<i>enable</i>	Enable originate type 7 default into NSSA area.	<i>disable</i>	Disable originate type 7 default into NSSA area.					
Option	Description											
<i>enable</i>	Enable originate type 7 default into NSSA area.											
<i>disable</i>	Disable originate type 7 default into NSSA area.											
nssa-default-information-originate-metric	OSPFv3 default metric.	integer	Minimum value: 0 Maximum value: 16777214	10								
nssa-default-information-originate-metric-type	OSPFv3 metric type for default routes.	option	-	2								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>1</i></td><td>Type 1.</td></tr><tr><td><i>2</i></td><td>Type 2.</td></tr></table>	Option	Description	<i>1</i>	Type 1.	<i>2</i>	Type 2.					
Option	Description											
<i>1</i>	Type 1.											
<i>2</i>	Type 2.											
nssa-redistribution	Enable/disable redistribute into NSSA area.	option	-	enable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable redistribute into NSSA area.</td></tr><tr><td><i>disable</i></td><td>Disable redistribute into NSSA area.</td></tr></table>	Option	Description	<i>enable</i>	Enable redistribute into NSSA area.	<i>disable</i>	Disable redistribute into NSSA area.					
Option	Description											
<i>enable</i>	Enable redistribute into NSSA area.											
<i>disable</i>	Disable redistribute into NSSA area.											
nssa-translator-role	NSSA translator role type.	option	-	candidate								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>candidate</i></td><td>Candidate.</td></tr><tr><td><i>never</i></td><td>Never.</td></tr><tr><td><i>always</i></td><td>Always.</td></tr></table>	Option	Description	<i>candidate</i>	Candidate.	<i>never</i>	Never.	<i>always</i>	Always.			
Option	Description											
<i>candidate</i>	Candidate.											
<i>never</i>	Never.											
<i>always</i>	Always.											
stub-type	Stub summary setting.	option	-	summary								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>no-summary</i></td><td>No summary.</td></tr></table>	Option	Description	<i>no-summary</i>	No summary.							
Option	Description											
<i>no-summary</i>	No summary.											

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>summary</i>	Summary.		
type	Area type setting.	option	-	regular
	Option	Description		
	<i>regular</i>	Regular.		
	<i>nssa</i>	NSSA.		
	<i>stub</i>	Stub.		

config ipsec-keys

Parameter	Description	Type	Size	Default
auth-key	Authentication key.	password	Not Specified	
enc-key	Encryption key.	password	Not Specified	
spi	Security Parameters Index.	integer	Minimum value: 0 256 Maximum value: 4294967295	0

config range

Parameter	Description	Type	Size	Default
advertise	Enable/disable advertise status.	option	-	enable
	Option	Description		
	<i>disable</i>	disable		
	<i>enable</i>	enable		
id	Range entry ID.	integer	Minimum value: 0 0 Maximum value: 4294967295	0
prefix6	IPv6 prefix.	ipv6-network	Not Specified	::/0

config virtual-link

Parameter	Description	Type	Size	Default														
authentication	Authentication mode.	option	-	area														
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>none</i></td><td>Disable authentication.</td></tr><tr><td><i>ah</i></td><td>Authentication Header.</td></tr><tr><td><i>esp</i></td><td>Encapsulating Security Payload.</td></tr><tr><td><i>area</i></td><td>Use the routing area's authentication configuration.</td></tr></table>	Option	Description	<i>none</i>	Disable authentication.	<i>ah</i>	Authentication Header.	<i>esp</i>	Encapsulating Security Payload.	<i>area</i>	Use the routing area's authentication configuration.							
	Option	Description																
	<i>none</i>	Disable authentication.																
	<i>ah</i>	Authentication Header.																
	<i>esp</i>	Encapsulating Security Payload.																
<i>area</i>	Use the routing area's authentication configuration.																	
dead-interval	Dead interval.	integer	Minimum value: 1 Maximum value: 65535	40														
hello-interval	Hello interval.	integer	Minimum value: 1 Maximum value: 65535	10														
ipsec-auth-alg	Authentication algorithm.	option	-	md5														
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>md5</i></td><td>MD5.</td></tr><tr><td><i>sha1</i></td><td>SHA1.</td></tr><tr><td><i>sha256</i></td><td>SHA256.</td></tr><tr><td><i>sha384</i></td><td>SHA384.</td></tr><tr><td><i>sha512</i></td><td>SHA512.</td></tr></table>	Option	Description	<i>md5</i>	MD5.	<i>sha1</i>	SHA1.	<i>sha256</i>	SHA256.	<i>sha384</i>	SHA384.	<i>sha512</i>	SHA512.					
	Option	Description																
	<i>md5</i>	MD5.																
	<i>sha1</i>	SHA1.																
	<i>sha256</i>	SHA256.																
	<i>sha384</i>	SHA384.																
<i>sha512</i>	SHA512.																	
ipsec-enc-alg	Encryption algorithm.	option	-	null														
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>null</i></td><td>No encryption.</td></tr><tr><td><i>des</i></td><td>DES.</td></tr><tr><td><i>3des</i></td><td>3DES.</td></tr><tr><td><i>aes128</i></td><td>AES128.</td></tr><tr><td><i>aes192</i></td><td>AES192.</td></tr><tr><td><i>aes256</i></td><td>AES256.</td></tr></table>	Option	Description	<i>null</i>	No encryption.	<i>des</i>	DES.	<i>3des</i>	3DES.	<i>aes128</i>	AES128.	<i>aes192</i>	AES192.	<i>aes256</i>	AES256.			
	Option	Description																
	<i>null</i>	No encryption.																
	<i>des</i>	DES.																
	<i>3des</i>	3DES.																
	<i>aes128</i>	AES128.																
	<i>aes192</i>	AES192.																
<i>aes256</i>	AES256.																	

Parameter	Description	Type	Size	Default
key-rollover-interval	Key roll-over interval.	integer	Minimum value: 300 Maximum value: 216000	300
name	Virtual link entry name.	string	Maximum length: 35	
peer	A.B.C.D, peer router ID.	ipv4-address-any	Not Specified	0.0.0.0
retransmit-interval	Retransmit interval.	integer	Minimum value: 1 Maximum value: 65535	5
transmit-delay	Transmit delay.	integer	Minimum value: 1 Maximum value: 65535	1

config ipsec-keys

Parameter	Description	Type	Size	Default
auth-key	Authentication key.	password	Not Specified	
enc-key	Encryption key.	password	Not Specified	
spi	Security Parameters Index.	integer	Minimum value: 0 256 Maximum value: 4294967295	

config ospf6-interface

Parameter	Description	Type	Size	Default
area-id	A.B.C.D, in IPv4 address format.	ipv4-address-any	Not Specified	0.0.0.0
authentication	Authentication mode.	option	-	area

Parameter	Description	Type	Size	Default										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>none</i></td><td>Disable authentication.</td></tr><tr><td><i>ah</i></td><td>Authentication Header.</td></tr><tr><td><i>esp</i></td><td>Encapsulating Security Payload.</td></tr><tr><td><i>area</i></td><td>Use the routing area's authentication configuration.</td></tr></table>	Option	Description	<i>none</i>	Disable authentication.	<i>ah</i>	Authentication Header.	<i>esp</i>	Encapsulating Security Payload.	<i>area</i>	Use the routing area's authentication configuration.			
	Option	Description												
	<i>none</i>	Disable authentication.												
	<i>ah</i>	Authentication Header.												
	<i>esp</i>	Encapsulating Security Payload.												
<i>area</i>	Use the routing area's authentication configuration.													
bfd	Enable/disable Bidirectional Forwarding Detection (BFD).	option	-	global										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>global</i></td><td>Use global configuration of Bidirectional Forwarding Detection (BFD).</td></tr><tr><td><i>enable</i></td><td>Enable Bidirectional Forwarding Detection (BFD) on this interface.</td></tr><tr><td><i>disable</i></td><td>Disable Bidirectional Forwarding Detection (BFD) on this interface.</td></tr></table>	Option	Description	<i>global</i>	Use global configuration of Bidirectional Forwarding Detection (BFD).	<i>enable</i>	Enable Bidirectional Forwarding Detection (BFD) on this interface.	<i>disable</i>	Disable Bidirectional Forwarding Detection (BFD) on this interface.					
	Option	Description												
	<i>global</i>	Use global configuration of Bidirectional Forwarding Detection (BFD).												
	<i>enable</i>	Enable Bidirectional Forwarding Detection (BFD) on this interface.												
<i>disable</i>	Disable Bidirectional Forwarding Detection (BFD) on this interface.													
cost	Cost of the interface, value range from 0 to 65535, 0 means auto-cost.	integer	Minimum value: 0 Maximum value: 65535	0										
dead-interval	Dead interval.	integer	Minimum value: 1 Maximum value: 65535	0										
hello-interval	Hello interval.	integer	Minimum value: 1 Maximum value: 65535	0										
interface	Configuration interface name.	string	Maximum length: 15											
ipsec-auth-alg	Authentication algorithm.	option	-	md5										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>md5</i></td><td>MD5.</td></tr><tr><td><i>sha1</i></td><td>SHA1.</td></tr><tr><td><i>sha256</i></td><td>SHA256.</td></tr></table>	Option	Description	<i>md5</i>	MD5.	<i>sha1</i>	SHA1.	<i>sha256</i>	SHA256.					
	Option	Description												
	<i>md5</i>	MD5.												
	<i>sha1</i>	SHA1.												
<i>sha256</i>	SHA256.													

Parameter	Description	Type	Size	Default														
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>sha384</td><td>SHA384.</td></tr><tr><td>sha512</td><td>SHA512.</td></tr></table>	Option	Description	sha384	SHA384.	sha512	SHA512.											
	Option	Description																
	sha384	SHA384.																
sha512	SHA512.																	
ipsec-enc-alg	Encryption algorithm.	option	-	null														
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>null</td><td>No encryption.</td></tr><tr><td>des</td><td>DES.</td></tr><tr><td>3des</td><td>3DES.</td></tr><tr><td>aes128</td><td>AES128.</td></tr><tr><td>aes192</td><td>AES192.</td></tr><tr><td>aes256</td><td>AES256.</td></tr></table>	Option	Description	null	No encryption.	des	DES.	3des	3DES.	aes128	AES128.	aes192	AES192.	aes256	AES256.			
	Option	Description																
	null	No encryption.																
	des	DES.																
	3des	3DES.																
	aes128	AES128.																
	aes192	AES192.																
aes256	AES256.																	
key-rollover-interval	Key roll-over interval.	integer	Minimum value: 300 Maximum value: 216000	300														
mtu	MTU for OSPFv3 packets.	integer	Minimum value: 576 Maximum value: 65535	0														
mtu-ignore	Enable/disable ignoring MTU field in DBD packets.	option	-	disable														
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Ignore MTU field in DBD packets.</td></tr><tr><td>disable</td><td>Do not ignore MTU field in DBD packets.</td></tr></table>	Option	Description	enable	Ignore MTU field in DBD packets.	disable	Do not ignore MTU field in DBD packets.											
	Option	Description																
	enable	Ignore MTU field in DBD packets.																
disable	Do not ignore MTU field in DBD packets.																	
name	Interface entry name.	string	Maximum length: 35															
network-type	Network type.	option	-	broadcast														
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>broadcast</td><td>broadcast</td></tr><tr><td>point-to-point</td><td>point-to-point</td></tr></table>	Option	Description	broadcast	broadcast	point-to-point	point-to-point											
	Option	Description																
	broadcast	broadcast																
point-to-point	point-to-point																	

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>non-broadcast</i>	non-broadcast		
	<i>point-to-multipoint</i>	point-to-multipoint		
	<i>point-to-multipoint-non-broadcast</i>	point-to-multipoint and non-broadcast.		
priority	Priority.	integer	Minimum value: 0 Maximum value: 255	1
retransmit-interval	Retransmit interval.	integer	Minimum value: 1 Maximum value: 65535	5
status	Enable/disable OSPF6 routing on this interface.	option	-	enable
	Option	Description		
	<i>disable</i>	Disable OSPF6 routing.		
	<i>enable</i>	Enable OSPF6 routing.		
transmit-delay	Transmit delay.	integer	Minimum value: 1 Maximum value: 65535	1

config ipsec-keys

Parameter	Description	Type	Size	Default
auth-key	Authentication key.	password	Not Specified	
enc-key	Encryption key.	password	Not Specified	
spi	Security Parameters Index.	integer	Minimum value: 0 256 Maximum value: 4294967295	0

config neighbor

Parameter	Description	Type	Size	Default
cost	Cost of the interface, value range from 0 to 65535, 0 means auto-cost.	integer	Minimum value: 0 Maximum value: 65535	0
ip6	IPv6 link local address of the neighbor.	ipv6-address	Not Specified	::
poll-interval	Poll interval time in seconds.	integer	Minimum value: 1 Maximum value: 65535	10
priority	Priority.	integer	Minimum value: 0 Maximum value: 255	1

config redistribute

Parameter	Description	Type	Size	Default						
metric	Redistribute metric setting.	integer	Minimum value: 0 Maximum value: 16777214	0						
metric-type	Metric type.	option	-	2						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>1</td><td>Type 1.</td></tr><tr><td>2</td><td>Type 2.</td></tr></table>				Option	Description	1	Type 1.	2	Type 2.
	Option	Description								
	1	Type 1.								
2	Type 2.									
name	Redistribute name.	string	Maximum length: 35							
roumap	Route map name.	string	Maximum length: 35							
status	Status.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable setting.</td></tr><tr><td>disable</td><td>Disable setting.</td></tr></table>				Option	Description	enable	Enable setting.	disable	Disable setting.
	Option	Description								
	enable	Enable setting.								
disable	Disable setting.									

config summary-address

Parameter	Description	Type	Size	Default						
advertise	Enable/disable advertise status.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>disable</td></tr><tr><td>enable</td><td>enable</td></tr></table>				Option	Description	disable	disable	enable	enable
	Option	Description								
	disable	disable								
	enable	enable								
id	Summary address entry ID.	integer	Minimum value: 0 0 Maximum value: 4294967295							
prefix6	IPv6 prefix.	ipv6-network	Not Specified	::/0						
tag	Tag value.	integer	Minimum value: 0 0 Maximum value: 4294967295							

config router policy

Configure IPv4 routing policies.

```
config router policy
  Description: Configure IPv4 routing policies.
  edit <seq-num>
    set action [deny|permit]
    set comments {var-string}
    set dst <subnet1>, <subnet2>, ...
    set dst-negate [enable|disable]
    set dstaddr <name1>, <name2>, ...
    set end-port {integer}
    set end-source-port {integer}
    set gateway {ipv4-address}
    set input-device <name1>, <name2>, ...
    set input-device-negate [enable|disable]
    set internet-service-custom <name1>, <name2>, ...
    set internet-service-id <id1>, <id2>, ...
    set output-device {string}
    set protocol {integer}
    set src <subnet1>, <subnet2>, ...
    set src-negate [enable|disable]
    set srcaddr <name1>, <name2>, ...
    set start-port {integer}
    set start-source-port {integer}
```

```

        set status [enable|disable]
        set tos {user}
        set tos-mask {user}
    next
end

```

config router policy

Parameter	Description	Type	Size	Default
action	Action of the policy route.	option	-	permit
	Option	Description		
	<i>deny</i>	Do not search policy route table.		
	<i>permit</i>	Use this policy route for forwarding.		
comments	Optional comments.	var-string	Maximum length: 255	
dst <subnet>	Destination IP and mask (x.x.x.x/x). IP and mask.	string	Maximum length: 79	
dst-negate	Enable/disable negating destination address match.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable destination address negation.		
	<i>disable</i>	Disable destination address negation.		
dstaddr <name>	Destination address name. Address/group name.	string	Maximum length: 79	
end-port	End destination port number (0 - 65535).	integer	Minimum value: 0 Maximum value: 65535	65535
end-source-port	End source port number (0 - 65535).	integer	Minimum value: 0 Maximum value: 65535	65535
gateway	IP address of the gateway.	ipv4-address	Not Specified	0.0.0.0
input-device <name>	Incoming interface name. Interface name.	string	Maximum length: 79	
input-device-negate	Enable/disable negation of input device match.	option	-	disable

Parameter	Description	Type	Size	Default						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable negation of input device match.</td></tr><tr><td><i>disable</i></td><td>Disable negation of input device match.</td></tr></table>	Option	Description	<i>enable</i>	Enable negation of input device match.	<i>disable</i>	Disable negation of input device match.			
	Option	Description								
	<i>enable</i>	Enable negation of input device match.								
<i>disable</i>	Disable negation of input device match.									
internet-service-custom <name>	Custom Destination Internet Service name. Custom Destination Internet Service name.	string	Maximum length: 79							
internet-service-id <id>	Destination Internet Service ID. Destination Internet Service ID.	integer	Minimum value: 0 Maximum value: 4294967295							
output-device	Outgoing interface name.	string	Maximum length: 35							
protocol	Protocol number (0 - 255).	integer	Minimum value: 0 Maximum value: 255	0						
seq-num	Sequence number(1-65535).	integer	Minimum value: 1 Maximum value: 65535	0						
src <subnet>	Source IP and mask (x.x.x.x/x). IP and mask.	string	Maximum length: 79							
src-negate	Enable/disable negating source address match.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable source address negation.</td></tr><tr><td><i>disable</i></td><td>Disable source address negation.</td></tr></table>	Option	Description	<i>enable</i>	Enable source address negation.	<i>disable</i>	Disable source address negation.			
	Option	Description								
	<i>enable</i>	Enable source address negation.								
<i>disable</i>	Disable source address negation.									
srcaddr <name>	Source address name. Address/group name.	string	Maximum length: 79							
start-port	Start destination port number (0 - 65535).	integer	Minimum value: 0 Maximum value: 65535	0						
start-source-port	Start source port number (0 - 65535).	integer	Minimum value: 0 Maximum value: 65535	0						
status	Enable/disable this policy route.	option	-	enable						

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>enable</i>	Enable this policy route.		
	<i>disable</i>	Disable this policy route.		
tos	Type of service bit pattern.	user	Not Specified	
tos-mask	Type of service evaluated bits.	user	Not Specified	

config router policy6

Configure IPv6 routing policies.

```

config router policy6
    Description: Configure IPv6 routing policies.
    edit <seq-num>
        set action [deny|permit]
        set comments {var-string}
        set dst <addr61>, <addr62>, ...
        set dst-negate [enable|disable]
        set dstaddr <name1>, <name2>, ...
        set end-port {integer}
        set gateway {ipv6-address}
        set input-device <name1>, <name2>, ...
        set input-device-negate [enable|disable]
        set internet-service-custom <name1>, <name2>, ...
        set internet-service-id <id1>, <id2>, ...
        set output-device {string}
        set protocol {integer}
        set src <addr61>, <addr62>, ...
        set src-negate [enable|disable]
        set srcaddr <name1>, <name2>, ...
        set start-port {integer}
        set status [enable|disable]
        set tos {user}
        set tos-mask {user}
    next
end

```

config router policy6

Parameter	Description	Type	Size	Default
action	Action of the policy route.	option	-	permit

Parameter	Description	Type	Size	Default						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>deny</i></td><td>Do not search policy route table.</td></tr><tr><td><i>permit</i></td><td>Use this policy route for forwarding.</td></tr></table>				Option	Description	<i>deny</i>	Do not search policy route table.	<i>permit</i>	Use this policy route for forwarding.
	Option	Description								
	<i>deny</i>	Do not search policy route table.								
<i>permit</i>	Use this policy route for forwarding.									
comments	Optional comments.	var-string	Maximum length: 255							
dst <addr6>	Destination IPv6 prefix. IPv6 address prefix.	string	Maximum length: 79							
dst-negate	Enable/disable negating destination address match.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable destination address negation.</td></tr><tr><td><i>disable</i></td><td>Disable destination address negation.</td></tr></table>				Option	Description	<i>enable</i>	Enable destination address negation.	<i>disable</i>	Disable destination address negation.
	Option	Description								
	<i>enable</i>	Enable destination address negation.								
<i>disable</i>	Disable destination address negation.									
dstaddr <name>	Destination address name. Address/group name.	string	Maximum length: 79							
end-port	End destination port number (1 - 65535).	integer	Minimum value: 1 Maximum value: 65535	65535						
gateway	IPv6 address of the gateway.	ipv6-address	Not Specified	::						
input-device <name>	Incoming interface name. Interface name.	string	Maximum length: 79							
input-device-negate	Enable/disable negation of input device match.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable negation of input device match.</td></tr><tr><td><i>disable</i></td><td>Disable negation of input device match.</td></tr></table>				Option	Description	<i>enable</i>	Enable negation of input device match.	<i>disable</i>	Disable negation of input device match.
	Option	Description								
	<i>enable</i>	Enable negation of input device match.								
<i>disable</i>	Disable negation of input device match.									
internet-service-custom <name>	Custom Destination Internet Service name. Custom Destination Internet Service name.	string	Maximum length: 79							
internet-service-id <id>	Destination Internet Service ID. Destination Internet Service ID.	integer	Minimum value: 0 Maximum value: 4294967295							

Parameter	Description	Type	Size	Default						
output-device	Outgoing interface name.	string	Maximum length: 35							
protocol	Protocol number (0 - 255).	integer	Minimum value: 0 Maximum value: 255							
seq-num	Sequence number(1-65535).	integer	Minimum value: 1 Maximum value: 65535							
src <addr6>	Source IPv6 prefix. IPv6 address prefix.	string	Maximum length: 79							
src-negate	Enable/disable negating source address match.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable source address negation.</td></tr><tr><td>disable</td><td>Disable source address negation.</td></tr></table>	Option	Description	enable	Enable source address negation.	disable	Disable source address negation.			
Option	Description									
enable	Enable source address negation.									
disable	Disable source address negation.									
srcaddr <name>	Source address name. Address/group name.	string	Maximum length: 79							
start-port	Start destination port number (1 - 65535).	integer	Minimum value: 1 Maximum value: 65535							
status	Enable/disable this policy route.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable this policy route.</td></tr><tr><td>disable</td><td>Disable this policy route.</td></tr></table>	Option	Description	enable	Enable this policy route.	disable	Disable this policy route.			
Option	Description									
enable	Enable this policy route.									
disable	Disable this policy route.									
tos	Type of service bit pattern.	user	Not Specified							
tos-mask	Type of service evaluated bits.	user	Not Specified							

config router prefix-list

Configure IPv4 prefix lists.

```

config router prefix-list
  Description: Configure IPv4 prefix lists.
  edit <name>
    set comments {string}
    config rule
      Description: IPv4 prefix list rule.

```

```

        edit <id>
            set action [permit|deny]
            set ge {integer}
            set le {integer}
            set prefix {user}
        next
    end
next
end

```

config router prefix-list

Parameter	Description	Type	Size	Default
comments	Comment.	string	Maximum length: 127	
name	Name.	string	Maximum length: 35	

config rule

Parameter	Description	Type	Size	Default
action	Permit or deny this IP address and netmask prefix.	option	-	permit
	Option	Description		
	permit	Allow or permit packets that match this rule.		
	deny	Deny packets that match this rule.		
ge	Minimum prefix length to be matched (0 - 32).	integer	Minimum value: 0 Maximum value: 32	
id	Rule ID.	integer	Minimum value: 0 Maximum value: 4294967295	
le	Maximum prefix length to be matched (0 - 32).	integer	Minimum value: 0 Maximum value: 32	
prefix	IPv4 prefix to define regular filter criteria, such as "any" or subnets.	user	Not Specified	0.0.0.0 0.0.0.0

config router prefix-list6

Configure IPv6 prefix lists.

```
config router prefix-list6
  Description: Configure IPv6 prefix lists.
  edit <name>
    set comments {string}
    config rule
      Description: IPv6 prefix list rule.
      edit <id>
        set action [permit|deny]
        set flags {integer}
        set ge {integer}
        set le {integer}
        set prefix6 {user}
      next
    end
  next
end
```

config router prefix-list6

Parameter	Description	Type	Size	Default
comments	Comment.	string	Maximum length: 127	
name	Name.	string	Maximum length: 35	

config rule

Parameter	Description	Type	Size	Default
action	Permit or deny packets that match this rule.	option	-	permit
	Option	Description		
	<i>permit</i>	Allow or permit packets that match this rule.		
	<i>deny</i>	Deny packets that match this rule.		
flags	Flags. Read-only.	integer	Minimum value: 0 0 Maximum value: 4294967295	0

Parameter	Description	Type	Size	Default
ge	Minimum prefix length to be matched (0 - 128).	integer	Minimum value: 0 Maximum value: 128	
id	Rule ID.	integer	Minimum value: 0 Maximum value: 4294967295	0
le	Maximum prefix length to be matched (0 - 128).	integer	Minimum value: 0 Maximum value: 128	
prefix6	IPv6 prefix to define regular filter criteria, such as "any" or subnets.	user	Not Specified	

config router rip

Configure RIP.

```

config router rip
  Description: Configure RIP.
  set default-information-originate [enable|disable]
  set default-metric {integer}
  config distance
    Description: Distance.
    edit <id>
      set access-list {string}
      set distance {integer}
      set prefix {ipv4-classnet-any}
    next
  end
  config distribute-list
    Description: Distribute list.
    edit <id>
      set direction [in|out]
      set interface {string}
      set listname {string}
      set status [enable|disable]
    next
  end
  set garbage-timer {integer}
  config interface
    Description: RIP interface configuration.
    edit <name>
      set auth-keychain {string}
      set auth-mode [none|text|...]
      set auth-string {password}
      set flags {integer}

```

```

        set receive-version {option1}, {option2}, ...
        set send-version {option1}, {option2}, ...
        set send-version2-broadcast [disable|enable]
        set split-horizon [poisoned|regular]
        set split-horizon-status [enable|disable]
    next
end
set max-out-metric {integer}
config neighbor
    Description: Neighbor.
    edit <id>
        set ip {ipv4-address}
    next
end
config network
    Description: Network.
    edit <id>
        set prefix {ipv4-classnet}
    next
end
config offset-list
    Description: Offset list.
    edit <id>
        set access-list {string}
        set direction [in|out]
        set interface {string}
        set offset {integer}
        set status [enable|disable]
    next
end
set passive-interface <name1>, <name2>, ...
config redistribute
    Description: Redistribute configuration. Read-only.
    edit <name>
        set metric {integer}
        set routemap {string}
        set status [enable|disable]
    next
end
set timeout-timer {integer}
set update-timer {integer}
set version [1|2]
end

```


config router rip

Parameter	Description	Type	Size	Default						
default-information-originate	Enable/disable generation of default route.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable setting.</td></tr><tr><td><i>disable</i></td><td>Disable setting.</td></tr></table>	Option	Description	<i>enable</i>	Enable setting.	<i>disable</i>	Disable setting.			
Option	Description									
<i>enable</i>	Enable setting.									
<i>disable</i>	Disable setting.									
default-metric	Default metric.	integer	Minimum value: 1 Maximum value: 16	1						
garbage-timer	Garbage timer in seconds.	integer	Minimum value: 5 Maximum value: 2147483647	120						
max-out-metric	Maximum metric allowed to output(0 means 'not set').	integer	Minimum value: 0 Maximum value: 15	0						
passive-interface <name>	Passive interface configuration. Passive interface name.	string	Maximum length: 79							
timeout-timer	Timeout timer in seconds.	integer	Minimum value: 5 Maximum value: 2147483647	180						
update-timer	Update timer in seconds.	integer	Minimum value: 1 Maximum value: 2147483647	30						
version	RIP version.	option	-	2						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>1</td><td>Version 1.</td></tr><tr><td>2</td><td>Version 2.</td></tr></table>	Option	Description	1	Version 1.	2	Version 2.			
Option	Description									
1	Version 1.									
2	Version 2.									

config distance

Parameter	Description	Type	Size	Default
access-list	Access list for route destination.	string	Maximum length: 35	
distance	Distance (1 - 255).	integer	Minimum value: 1 Maximum value: 255	0
id	Distance ID.	integer	Minimum value: 0 Maximum value: 4294967295	0
prefix	Distance prefix.	ipv4-classnet-any	Not Specified	0.0.0.0 0.0.0.0

config distribute-list

Parameter	Description	Type	Size	Default
direction	Distribute list direction.	option	-	out
	Option	Description		
	<i>in</i>	Filter incoming packets.		
	<i>out</i>	Filter outgoing packets.		
id	Distribute list ID.	integer	Minimum value: 0 0 Maximum value: 4294967295	
interface	Distribute list interface name.	string	Maximum length: 15	
listname	Distribute access/prefix list name.	string	Maximum length: 35	
status	Status.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		

config interface

Parameter	Description	Type	Size	Default
auth-keychain	Authentication key-chain name.	string	Maximum length: 35	
auth-mode	Authentication mode.	option	-	none
	Option	Description		
	none	None.		
	text	Text.		
	md5	MD5.		
auth-string	Authentication string/password.	password	Not Specified	
flags	Flags. Read-only.	integer	Minimum value: 0 Maximum value: 255	8
name	Interface name.	string	Maximum length: 35	
receive-version	Receive version.	option	-	
	Option	Description		
	1	Version 1.		
	2	Version 2.		
send-version	Send version.	option	-	
	Option	Description		
	1	Version 1.		
	2	Version 2.		
send-version2-broadcast	Enable/disable broadcast version 1 compatible packets.	option	-	disable
	Option	Description		
	disable	Disable broadcasting.		
	enable	Enable broadcasting.		
split-horizon	Enable/disable split horizon.	option	-	poisoned

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>poisoned</i>	Poisoned.		
	<i>regular</i>	Regular.		
split-horizon-status	Enable/disable split horizon.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		

config neighbor

Parameter	Description	Type	Size	Default
id	Neighbor entry ID.	integer	Minimum value: 0 0 Maximum value: 4294967295	0
ip	IP address.	ipv4-address	Not Specified	0.0.0.0

config network

Parameter	Description	Type	Size	Default
id	Network entry ID.	integer	Minimum value: 0 0 Maximum value: 4294967295	0
prefix	Network prefix.	ipv4-classnet	Not Specified	0.0.0.0 0.0.0.0

config offset-list

Parameter	Description	Type	Size	Default
access-list	Access list name.	string	Maximum length: 35	
direction	Offset list direction.	option	-	out

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>in</i>	Filter incoming packets.		
	<i>out</i>	Filter outgoing packets.		
id	Offset-list ID.	integer	Minimum value: 0 0 Maximum value: 4294967295	
interface	Interface name.	string	Maximum length: 15	
offset	Offset.	integer	Minimum value: 0 1 Maximum value: 16	
status	Status.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		

config redistribute

Parameter	Description	Type	Size	Default
metric	Redistribute metric setting.	integer	Minimum value: 1 Maximum value: 16	0
name	Redistribute name.	string	Maximum length: 35	
roumap	Route map name.	string	Maximum length: 35	
status	Status.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		

config router ripng

Configure RIPng.

```
config router ripng
  Description: Configure RIPng.
  config aggregate-address
    Description: Aggregate address.
    edit <id>
      set prefix6 {ipv6-prefix}
    next
  end
  set default-information-originate [enable|disable]
  set default-metric {integer}
  config distance
    Description: Distance.
    edit <id>
      set access-list6 {string}
      set distance {integer}
      set prefix6 {ipv6-prefix}
    next
  end
  config distribute-list
    Description: Distribute list.
    edit <id>
      set direction [in|out]
      set interface {string}
      set listname {string}
      set status [enable|disable]
    next
  end
  set garbage-timer {integer}
  config interface
    Description: RIPng interface configuration.
    edit <name>
      set flags {integer}
      set split-horizon [poisoned|regular]
      set split-horizon-status [enable|disable]
    next
  end
  set max-out-metric {integer}
  config neighbor
    Description: Neighbor.
    edit <id>
      set interface {string}
      set ip6 {ipv6-address}
    next
  end
  config network
    Description: Network.
    edit <id>
```

```

        set prefix {ipv6-prefix}
    next
end
config offset-list
    Description: Offset list.
    edit <id>
        set access-list6 {string}
        set direction [in|out]
        set interface {string}
        set offset {integer}
        set status [enable|disable]
    next
end
set passive-interface <name1>, <name2>, ...
config redistribute
    Description: Redistribute configuration. Read-only.
    edit <name>
        set metric {integer}
        set routemap {string}
        set status [enable|disable]
    next
end
set timeout-timer {integer}
set update-timer {integer}
end

```

config router ripng

Parameter	Description	Type	Size	Default						
default-information-originate	Enable/disable generation of default route.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable setting.</td></tr><tr><td><i>disable</i></td><td>Disable setting.</td></tr></table>	Option	Description	<i>enable</i>	Enable setting.	<i>disable</i>	Disable setting.			
Option	Description									
<i>enable</i>	Enable setting.									
<i>disable</i>	Disable setting.									
default-metric	Default metric.	integer	Minimum value: 1 Maximum value: 16	1						
garbage-timer	Garbage timer.	integer	Minimum value: 5 Maximum value: 2147483647	120						

Parameter	Description	Type	Size	Default
max-out-metric	Maximum metric allowed to output(0 means 'not set').	integer	Minimum value: 0 Maximum value: 15	0
passive-interface <name>	Passive interface configuration. Passive interface name.	string	Maximum length: 79	
timeout-timer	Timeout timer.	integer	Minimum value: 5 Maximum value: 2147483647	180
update-timer	Update timer.	integer	Minimum value: 5 Maximum value: 2147483647	30

config aggregate-address

Parameter	Description	Type	Size	Default
id	Aggregate address entry ID.	integer	Minimum value: 0 Maximum value: 4294967295	0
prefix6	Aggregate address prefix.	ipv6-prefix	Not Specified	::/0

config distance

Parameter	Description	Type	Size	Default
access-list6	Access list for route destination.	string	Maximum length: 35	
distance	Distance (1 - 255).	integer	Minimum value: 1 Maximum value: 255	0
id	Distance ID.	integer	Minimum value: 0 Maximum value: 4294967295	0
prefix6	Distance prefix6.	ipv6-prefix	Not Specified	::/0

config distribute-list

Parameter	Description	Type	Size	Default
direction	Distribute list direction.	option	-	out
	Option	Description		
	<i>in</i>	Filter incoming packets.		
	<i>out</i>	Filter outgoing packets.		
id	Distribute list ID.	integer	Minimum value: 0 Maximum value: 4294967295	0
interface	Distribute list interface name.	string	Maximum length: 15	
listname	Distribute access/prefix list name.	string	Maximum length: 35	
status	Status.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		

config interface

Parameter	Description	Type	Size	Default
flags	Flags. Read-only.	integer	Minimum value: 0 Maximum value: 255	8
name	Interface name.	string	Maximum length: 35	
split-horizon	Enable/disable split horizon.	option	-	poisoned
	Option	Description		
	<i>poisoned</i>	Poisoned.		
	<i>regular</i>	Regular.		
split-horizon-status	Enable/disable split horizon.	option	-	enable

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		

config neighbor

Parameter	Description	Type	Size	Default
id	Neighbor entry ID.	integer	Minimum value: 0 0 Maximum value: 4294967295	0
interface	Interface name.	string	Maximum length: 15	
ip6	IPv6 link-local address.	ipv6-address	Not Specified	::

config network

Parameter	Description	Type	Size	Default
id	Network entry ID.	integer	Minimum value: 0 0 Maximum value: 4294967295	0
prefix	Network IPv6 link-local prefix.	ipv6-prefix	Not Specified	::/0

config offset-list

Parameter	Description	Type	Size	Default
access-list6	IPv6 access list name.	string	Maximum length: 35	
direction	Offset list direction.	option	-	out
	Option	Description		
	<i>in</i>	Filter incoming packets.		
	<i>out</i>	Filter outgoing packets.		

Parameter	Description	Type	Size	Default
id	Offset-list ID.	integer	Minimum value: 0 0 Maximum value: 4294967295	0
interface	Interface name.	string	Maximum length: 15	
offset	Offset.	integer	Minimum value: 1 1 Maximum value: 16	0
status	Status.	option	-	enable
	Option	Description		
	enable	Enable setting.		
	disable	Disable setting.		

config redistribute

Parameter	Description	Type	Size	Default						
metric	Redistribute metric setting.	integer	Minimum value: 1 Maximum value: 16	0						
name	Redistribute name.	string	Maximum length: 35							
route-map	Route map name.	string	Maximum length: 35							
status	Status.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable setting.</td></tr><tr><td>disable</td><td>Disable setting.</td></tr></table>				Option	Description	enable	Enable setting.	disable	Disable setting.
	Option	Description								
	enable	Enable setting.								
disable	Disable setting.									

config router route-map

Configure route maps.

```
config router route-map
  Description: Configure route maps.
  edit <name>
```

```

set comments {string}
config rule
    Description: Rule.
    edit <id>
        set action [permit|deny]
        set match-as-path {string}
        set match-community {string}
        set match-community-exact [enable|disable]
        set match-extcommunity {string}
        set match-extcommunity-exact [enable|disable]
        set match-interface {string}
        set match-ip-address {string}
        set match-ip-nexthop {string}
        set match-ip6-address {string}
        set match-ip6-nexthop {string}
        set match-metric {integer}
        set match-origin [none|egp|...]
        set match-route-type [external-type1|external-type2|...]
        set match-tag {integer}
        set match-vrf {integer}
        set set-aggregator-as {integer}
        set set-aggregator-ip {ipv4-address-any}
        set set-aspath <as1>, <as2>, ...
        set set-aspath-action [prepend|replace]
        set set-atomic-aggregate [enable|disable]
        set set-community <community1>, <community2>, ...
        set set-community-additive [enable|disable]
        set set-community-delete {string}
        set set-dampening-max-suppress {integer}
        set set-dampening-reachability-half-life {integer}
        set set-dampening-reuse {integer}
        set set-dampening-suppress {integer}
        set set-dampening-unreachability-half-life {integer}
        set set-extcommunity-rt <community1>, <community2>, ...
        set set-extcommunity-soo <community1>, <community2>, ...
        set set-ip-nexthop {ipv4-address}
        set set-ip6-nexthop {ipv6-address}
        set set-ip6-nexthop-local {ipv6-address}
        set set-local-preference {integer}
        set set-metric {integer}
        set set-metric-type [external-type1|external-type2|...]
        set set-origin [none|egp|...]
        set set-originator-id {ipv4-address-any}
        set set-priority {integer}
        set set-route-tag {integer}
        set set-tag {integer}
        set set-weight {integer}
    next
end
next
end

```

config router route-map

Parameter	Description	Type	Size	Default
comments	Optional comments.	string	Maximum length: 127	
name	Name.	string	Maximum length: 35	

config rule

Parameter	Description	Type	Size	Default
action	Action.	option	-	permit
	Option	Description		
	<i>permit</i>	Permit.		
	<i>deny</i>	Deny.		
id	Rule ID.	integer	Minimum value: 0 0 Maximum value: 4294967295	
match-as-path	Match BGP AS path list.	string	Maximum length: 35	
match-community	Match BGP community list.	string	Maximum length: 35	
match-community-exact	Enable/disable exact matching of communities.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable exact matching of communities.		
	<i>disable</i>	Disable exact matching of communities.		
match-extcommunity	Match BGP extended community list.	string	Maximum length: 35	
match-extcommunity-exact	Enable/disable exact matching of extended communities.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable exact matching of extended communities.		
	<i>disable</i>	Disable exact matching of extended communities.		

Parameter	Description	Type	Size	Default										
match-interface	Match interface configuration.	string	Maximum length: 15											
match-ip-address	Match IP address permitted by access-list or prefix-list.	string	Maximum length: 35											
match-ip-nexthop	Match next hop IP address passed by access-list or prefix-list.	string	Maximum length: 35											
match-ip6-address	Match IPv6 address permitted by access-list6 or prefix-list6.	string	Maximum length: 35											
match-ip6-nexthop	Match next hop IPv6 address passed by access-list6 or prefix-list6.	string	Maximum length: 35											
match-metric	Match metric for redistribute routes.	integer	Minimum value: 0 Maximum value: 4294967295											
match-origin	Match BGP origin code.	option	-	none										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>none</i></td><td>None.</td></tr><tr><td><i>egp</i></td><td>Remote EGP.</td></tr><tr><td><i>igp</i></td><td>Local IGP.</td></tr><tr><td><i>incomplete</i></td><td>Unknown heritage.</td></tr></table>				Option	Description	<i>none</i>	None.	<i>egp</i>	Remote EGP.	<i>igp</i>	Local IGP.	<i>incomplete</i>	Unknown heritage.
Option	Description													
<i>none</i>	None.													
<i>egp</i>	Remote EGP.													
<i>igp</i>	Local IGP.													
<i>incomplete</i>	Unknown heritage.													
match-route-type	Match route type.	option	-											
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>external-type1</i></td><td>External type 1.</td></tr><tr><td><i>external-type2</i></td><td>External type 2.</td></tr><tr><td><i>none</i></td><td>No type specified.</td></tr></table>				Option	Description	<i>external-type1</i>	External type 1.	<i>external-type2</i>	External type 2.	<i>none</i>	No type specified.		
Option	Description													
<i>external-type1</i>	External type 1.													
<i>external-type2</i>	External type 2.													
<i>none</i>	No type specified.													
match-tag	Match tag.	integer	Minimum value: 0 Maximum value: 4294967295											
match-vrf	Match VRF ID.	integer	Minimum value: 0 Maximum value: 251											

Parameter	Description	Type	Size	Default						
set-aggregator-as	BGP aggregator AS.	integer	Minimum value: 0 0 Maximum value: 4294967295	0						
set-aggregator-ip	BGP aggregator IP.	ipv4-address-any	Not Specified	0.0.0.0						
set-aspath <as>	Prepend BGP AS path attribute. AS number (0 - 4294967295). Use quotes for repeating numbers, For example, "1 1 2".	string	Maximum length: 79							
set-aspath-action	Specify preferred action of set-aspath.	option	-	prepend						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>prepend</i></td><td>Prepend.</td></tr><tr><td><i>replace</i></td><td>Replace.</td></tr></table>				Option	Description	<i>prepend</i>	Prepend.	<i>replace</i>	Replace.
Option	Description									
<i>prepend</i>	Prepend.									
<i>replace</i>	Replace.									
set-atomic-aggregate	Enable/disable BGP atomic aggregate attribute.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable BGP atomic aggregate attribute.</td></tr><tr><td><i>disable</i></td><td>Disable BGP atomic aggregate attribute.</td></tr></table>				Option	Description	<i>enable</i>	Enable BGP atomic aggregate attribute.	<i>disable</i>	Disable BGP atomic aggregate attribute.
Option	Description									
<i>enable</i>	Enable BGP atomic aggregate attribute.									
<i>disable</i>	Disable BGP atomic aggregate attribute.									
set-community <community>	BGP community attribute. Attribute: AA AA:NN internet local-AS no-advertise no-export.	string	Maximum length: 79							
set-community-additive	Enable/disable adding set-community to existing community.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable adding set-community to existing community.</td></tr><tr><td><i>disable</i></td><td>Disable adding set-community to existing community.</td></tr></table>				Option	Description	<i>enable</i>	Enable adding set-community to existing community.	<i>disable</i>	Disable adding set-community to existing community.
Option	Description									
<i>enable</i>	Enable adding set-community to existing community.									
<i>disable</i>	Disable adding set-community to existing community.									
set-community-delete	Delete communities matching community list.	string	Maximum length: 35							
set-dampening-max-suppress	Maximum duration to suppress a route (1 - 255 min, 0 = unset).	integer	Minimum value: 0 0 Maximum value: 255	0						

Parameter	Description	Type	Size	Default								
set-dampening-reachability-half-life	Reachability half-life time for the penalty (1 - 45 min, 0 = unset).	integer	Minimum value: 0 Maximum value: 45	0								
set-dampening-reuse	Value to start reusing a route (1 - 20000, 0 = unset).	integer	Minimum value: 0 Maximum value: 20000	0								
set-dampening-suppress	Value to start suppressing a route (1 - 20000, 0 = unset).	integer	Minimum value: 0 Maximum value: 20000	0								
set-dampening-unreachability-half-life	Unreachability Half-life time for the penalty (1 - 45 min, 0 = unset).	integer	Minimum value: 0 Maximum value: 45	0								
set-extcommunity-rt <community>	Route Target extended community. AA:NN.	string	Maximum length: 79									
set-extcommunity-soo <community>	Site-of-Origin extended community. Community (format = AA:NN).	string	Maximum length: 79									
set-ip-nexthop	IP address of next hop.	ipv4-address	Not Specified									
set-ip6-nexthop	IPv6 global address of next hop.	ipv6-address	Not Specified									
set-ip6-nexthop-local	IPv6 local address of next hop.	ipv6-address	Not Specified									
set-local-preference	BGP local preference path attribute.	integer	Minimum value: 0 Maximum value: 4294967295									
set-metric	Metric value.	integer	Minimum value: 0 Maximum value: 4294967295									
set-metric-type	Metric type.	option	-									
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>external-type1</td><td>External type 1.</td></tr><tr><td>external-type2</td><td>External type 2.</td></tr><tr><td>none</td><td>No type specified.</td></tr></table>				Option	Description	external-type1	External type 1.	external-type2	External type 2.	none	No type specified.
Option	Description											
external-type1	External type 1.											
external-type2	External type 2.											
none	No type specified.											

Parameter	Description	Type	Size	Default										
set-origin	BGP origin code.	option	-	none										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>none</i></td><td>None.</td></tr><tr><td><i>egp</i></td><td>Remote EGP.</td></tr><tr><td><i>igp</i></td><td>Local IGP.</td></tr><tr><td><i>incomplete</i></td><td>Unknown heritage.</td></tr></table>				Option	Description	<i>none</i>	None.	<i>egp</i>	Remote EGP.	<i>igp</i>	Local IGP.	<i>incomplete</i>	Unknown heritage.
	Option	Description												
	<i>none</i>	None.												
	<i>egp</i>	Remote EGP.												
	<i>igp</i>	Local IGP.												
<i>incomplete</i>	Unknown heritage.													
set-originator-id	BGP originator ID attribute.	ipv4-address-any	Not Specified											
set-priority	Priority for routing table.	integer	Minimum value: 1 Maximum value: 65535											
set-route-tag	Route tag for routing table.	integer	Minimum value: 0 Maximum value: 4294967295											
set-tag	Tag value.	integer	Minimum value: 0 Maximum value: 4294967295											
set-weight	BGP weight for routing table.	integer	Minimum value: 0 Maximum value: 4294967295											

config router setting

Configure router settings.

```

config router setting
    Description: Configure router settings.
    set hostname {string}
    set show-filter {string}
end

```

config router setting

Parameter	Description	Type	Size	Default
hostname	Hostname for this virtual domain router.	string	Maximum length: 14	
show-filter	Prefix-list as filter for showing routes.	string	Maximum length: 35	

config router static

Configure IPv4 static routing tables.

```
config router static
  Description: Configure IPv4 static routing tables.
  edit <seq-num>
    set bfd [enable|disable]
    set blackhole [enable|disable]
    set comment {var-string}
    set device {string}
    set distance {integer}
    set dst {ipv4-classnet}
    set dstaddr {string}
    set dynamic-gateway [enable|disable]
    set gateway {ipv4-address}
    set internet-service {integer}
    set internet-service-custom {string}
    set link-monitor-exempt [enable|disable]
    set priority {integer}
    set sdwan-zone <name1>, <name2>, ...
    set src {ipv4-classnet}
    set status [enable|disable]
    set tag {integer}
    set vrf {integer}
    set weight {integer}
  next
end
```

config router static

Parameter	Description	Type	Size	Default
bfd	Enable/disable Bidirectional Forwarding Detection (BFD).	option	-	disable

Parameter	Description	Type	Size	Default						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable Bidirectional Forwarding Detection (BFD).</td></tr><tr><td><i>disable</i></td><td>Disable Bidirectional Forwarding Detection (BFD).</td></tr></table>	Option	Description	<i>enable</i>	Enable Bidirectional Forwarding Detection (BFD).	<i>disable</i>	Disable Bidirectional Forwarding Detection (BFD).			
	Option	Description								
	<i>enable</i>	Enable Bidirectional Forwarding Detection (BFD).								
	<i>disable</i>	Disable Bidirectional Forwarding Detection (BFD).								
blackhole	Enable/disable black hole.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable black hole.</td></tr><tr><td><i>disable</i></td><td>Disable black hole.</td></tr></table>	Option	Description	<i>enable</i>	Enable black hole.	<i>disable</i>	Disable black hole.			
	Option	Description								
	<i>enable</i>	Enable black hole.								
	<i>disable</i>	Disable black hole.								
comment	Optional comments.	var-string	Maximum length: 255							
device	Gateway out interface or tunnel.	string	Maximum length: 35							
distance	Administrative distance (1 - 255).	integer	Minimum value: 1 Maximum value: 255	10						
dst	Destination IP and mask for this route.	ipv4-classnet	Not Specified	0.0.0.0 0.0.0.0						
dstaddr	Name of firewall address or address group.	string	Maximum length: 79							
dynamic-gateway	Enable use of dynamic gateway retrieved from a DHCP or PPP server.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable dynamic gateway.</td></tr><tr><td><i>disable</i></td><td>Disable dynamic gateway.</td></tr></table>	Option	Description	<i>enable</i>	Enable dynamic gateway.	<i>disable</i>	Disable dynamic gateway.			
	Option	Description								
	<i>enable</i>	Enable dynamic gateway.								
	<i>disable</i>	Disable dynamic gateway.								
gateway	Gateway IP for this route.	ipv4-address	Not Specified	0.0.0.0						
internet-service	Application ID in the Internet service database.	integer	Minimum value: 0 Maximum value: 4294967295	0						
internet-service-custom	Application name in the Internet service custom database.	string	Maximum length: 64							
link-monitor-exempt	Enable/disable withdrawal of this static route when link monitor or health check is down.	option	-	disable						

Parameter	Description	Type	Size	Default						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Keep this static route when link monitor or health check is down.</td></tr><tr><td><i>disable</i></td><td>Withdraw this static route when link monitor or health check is down. (default)</td></tr></table>	Option	Description	<i>enable</i>	Keep this static route when link monitor or health check is down.	<i>disable</i>	Withdraw this static route when link monitor or health check is down. (default)			
	Option	Description								
	<i>enable</i>	Keep this static route when link monitor or health check is down.								
<i>disable</i>	Withdraw this static route when link monitor or health check is down. (default)									
priority	Administrative priority (1 - 65535).	integer	Minimum value: 1 Maximum value: 65535							
sdwan-zone <name>	Choose SD-WAN Zone. SD-WAN zone name.	string	Maximum length: 79							
seq-num	Sequence number.	integer	Minimum value: 0 Maximum value: 4294967295							
src	Source prefix for this route.	ipv4-classnet	Not Specified	0.0.0.0 0.0.0.0						
status	Enable/disable this static route.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable static route.</td></tr><tr><td><i>disable</i></td><td>Disable static route.</td></tr></table>	Option	Description	<i>enable</i>	Enable static route.	<i>disable</i>	Disable static route.			
	Option	Description								
	<i>enable</i>	Enable static route.								
<i>disable</i>	Disable static route.									
tag	Route tag.	integer	Minimum value: 0 Maximum value: 4294967295							
vrf	Virtual Routing Forwarding ID.	integer	Minimum value: 0 Maximum value: 251	unspecified						
weight	Administrative weight (0 - 255).	integer	Minimum value: 0 Maximum value: 255							

config router static6

Configure IPv6 static routing tables.

```
config router static6
  Description: Configure IPv6 static routing tables.
  edit <seq-num>
```

```

set bfd [enable|disable]
set blackhole [enable|disable]
set comment {var-string}
set device {string}
set devindex {integer}
set distance {integer}
set dst {ipv6-network}
set dstaddr {string}
set dynamic-gateway [enable|disable]
set gateway {ipv6-address}
set link-monitor-exempt [enable|disable]
set priority {integer}
set sdwan-zone <name1>, <name2>, ...
set status [enable|disable]
set vrf {integer}
set weight {integer}
next
end

```

config router static6

Parameter	Description	Type	Size	Default						
bfd	Enable/disable Bidirectional Forwarding Detection (BFD).	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable Bidirectional Forwarding Detection (BFD).</td></tr><tr><td><i>disable</i></td><td>Disable Bidirectional Forwarding Detection (BFD).</td></tr></table>	Option	Description	<i>enable</i>	Enable Bidirectional Forwarding Detection (BFD).	<i>disable</i>	Disable Bidirectional Forwarding Detection (BFD).			
Option	Description									
<i>enable</i>	Enable Bidirectional Forwarding Detection (BFD).									
<i>disable</i>	Disable Bidirectional Forwarding Detection (BFD).									
blackhole	Enable/disable black hole.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable black hole.</td></tr><tr><td><i>disable</i></td><td>Disable black hole.</td></tr></table>	Option	Description	<i>enable</i>	Enable black hole.	<i>disable</i>	Disable black hole.			
Option	Description									
<i>enable</i>	Enable black hole.									
<i>disable</i>	Disable black hole.									
comment	Optional comments.	var-string	Maximum length: 255							
device	Gateway out interface or tunnel.	string	Maximum length: 35							
devindex	Device index (0 - 4294967295).	integer	Minimum value: 0 0 Maximum value: 4294967295							

Parameter	Description	Type	Size	Default						
distance	Administrative distance (1 - 255).	integer	Minimum value: 1 Maximum value: 255	10						
dst	Destination IPv6 prefix.	ipv6-network	Not Specified	::/0						
dstaddr	Name of firewall address or address group.	string	Maximum length: 79							
dynamic-gateway	Enable use of dynamic gateway retrieved from Router Advertisement (RA).	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable dynamic gateway.</td></tr><tr><td>disable</td><td>Disable dynamic gateway.</td></tr></table>				Option	Description	enable	Enable dynamic gateway.	disable	Disable dynamic gateway.
Option	Description									
enable	Enable dynamic gateway.									
disable	Disable dynamic gateway.									
gateway	IPv6 address of the gateway.	ipv6-address	Not Specified	::						
link-monitor-exempt	Enable/disable withdrawal of this static route when link monitor or health check is down.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Keep this static route when link monitor or health check is down.</td></tr><tr><td>disable</td><td>Withdraw this static route when link monitor or health check is down. (default)</td></tr></table>				Option	Description	enable	Keep this static route when link monitor or health check is down.	disable	Withdraw this static route when link monitor or health check is down. (default)
Option	Description									
enable	Keep this static route when link monitor or health check is down.									
disable	Withdraw this static route when link monitor or health check is down. (default)									
priority	Administrative priority (1 - 65535).	integer	Minimum value: 1 Maximum value: 65535	1024						
sdwan-zone <name>	Choose SD-WAN Zone. SD-WAN zone name.	string	Maximum length: 79							
seq-num	Sequence number.	integer	Minimum value: 0 Maximum value: 4294967295	0						
status	Enable/disable this static route.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable static route.</td></tr><tr><td>disable</td><td>Disable static route.</td></tr></table>				Option	Description	enable	Enable static route.	disable	Disable static route.
Option	Description									
enable	Enable static route.									
disable	Disable static route.									

Parameter	Description	Type	Size	Default
vrf	Virtual Routing Forwarding ID.	integer	Minimum value: 0 0 Maximum value: 251	0
weight	Administrative weight (0 - 255).	integer	Minimum value: 0 0 Maximum value: 255	0

rule

This section includes syntax for the following commands:

- [config rule fmwp on page 1017](#)

config rule fmwp

Show FMWP rules. Read-only.

```
config rule fmwp
  Description: Show FMWP rules. Read-only.
  edit <name>
    set action [pass|block]
    set application {user}
    set date {integer}
    set group {string}
    set location {user}
    set log [disable|enable]
    set log-packet [disable|enable]
    config metadata
      Description: Meta data. Read-only.
      edit <id>
        set metaid {integer}
        set valueid {integer}
      next
    end
    set os {user}
    set rev {integer}
    set rule-id {integer}
    set service {user}
    set severity {user}
  next
end
```

config rule fmwp

Parameter	Description	Type	Size	Default
action	Action. Read-only.	option	-	pass

Parameter	Description	Type	Size	Default						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>pass</i></td><td>Pass or allow matching traffic.</td></tr><tr><td><i>block</i></td><td>Block or drop matching traffic.</td></tr></table>	Option	Description	<i>pass</i>	Pass or allow matching traffic.	<i>block</i>	Block or drop matching traffic.			
	Option	Description								
	<i>pass</i>	Pass or allow matching traffic.								
<i>block</i>	Block or drop matching traffic.									
application	Vulnerable applications. Read-only.	user	Not Specified							
date	Date. Read-only.	integer	Minimum value: 0 0 Maximum value: 4294967295							
group	Group. Read-only.	string	Maximum length: 63							
location	Vulnerable location. Read-only.	user	Not Specified							
log	Enable/disable logging. Read-only.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>disable</i></td><td>Disable logging.</td></tr><tr><td><i>enable</i></td><td>Enable logging.</td></tr></table>	Option	Description	<i>disable</i>	Disable logging.	<i>enable</i>	Enable logging.			
	Option	Description								
	<i>disable</i>	Disable logging.								
<i>enable</i>	Enable logging.									
log-packet	Enable/disable packet logging. Read-only.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>disable</i></td><td>Disable packet logging.</td></tr><tr><td><i>enable</i></td><td>Enable packet logging.</td></tr></table>	Option	Description	<i>disable</i>	Disable packet logging.	<i>enable</i>	Enable packet logging.			
	Option	Description								
	<i>disable</i>	Disable packet logging.								
<i>enable</i>	Enable packet logging.									
name	Rule name.	string	Maximum length: 63							
os	Vulnerable operation systems. Read-only.	user	Not Specified							
rev	Revision. Read-only.	integer	Minimum value: 0 0 Maximum value: 4294967295							
rule-id	Rule ID. Read-only.	integer	Minimum value: 0 0 Maximum value: 4294967295							
service	Vulnerable service. Read-only.	user	Not Specified							
severity	Severity. Read-only.	user	Not Specified							

config metadata

Parameter	Description	Type	Size	Default
id	ID. Read-only.	integer	Minimum value: 0 0 Maximum value: 4294967295	0
metaid	Meta ID. Read-only.	integer	Minimum value: 0 0 Maximum value: 4294967295	0
valueid	Value ID. Read-only.	integer	Minimum value: 0 0 Maximum value: 4294967295	0

sctp-filter

This section includes syntax for the following commands:

- [config sctp-filter profile on page 1020](#)

config sctp-filter profile

Configure SCTP filter profiles.

```
config sctp-filter profile
  Description: Configure SCTP filter profiles.
  edit <name>
    set comment {var-string}
    config ppid-filters
      Description: PPID filters list.
      edit <id>
        set action [pass|reset|...]
        set comment {var-string}
        set ppid {integer}
      next
    end
  next
end
```

config sctp-filter profile

Parameter	Description	Type	Size	Default
comment	Comment.	var-string	Maximum length: 255	
name	Profile name.	string	Maximum length: 35	

config ppid-filters

Parameter	Description	Type	Size	Default
action	Action taken when PPID is matched.	option	-	reset

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>pass</i>	Pass data chunk.		
	<i>reset</i>	Reset SCTP session.		
	<i>replace</i>	Replace data chunk.		
comment	Comment.	var-string	Maximum length: 255	
id	ID.	integer	Minimum value: 0 Maximum value: 4294967295	
ppid	Payload protocol identifier.	integer	Minimum value: 0 Maximum value: 4294967295	

ssh-filter

This section includes syntax for the following commands:

- [config ssh-filter profile on page 1022](#)

config ssh-filter profile

Configure SSH filter profile.

```
config ssh-filter profile
  Description: Configure SSH filter profile.
  edit <name>
    set block {option1}, {option2}, ...
    set default-command-log [enable|disable]
    set log {option1}, {option2}, ...
    config shell-commands
      Description: SSH command filter.
      edit <id>
        set action [block|allow]
        set alert [enable|disable]
        set log [enable|disable]
        set pattern {string}
        set severity [low|medium|...]
        set type [simple|regex]
      next
    end
  next
end
```

config ssh-filter profile

Parameter	Description	Type	Size	Default
block	SSH blocking options.	option	-	
	Option	Description		
	<i>x11</i>	X server forwarding.		
	<i>shell</i>	SSH shell.		
	<i>exec</i>	SSH execution.		

Parameter	Description	Type	Size	Default																		
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>port-forward</i></td><td>Port forwarding.</td></tr><tr><td><i>tun-forward</i></td><td>Tunnel forwarding.</td></tr><tr><td><i>sftp</i></td><td>SFTP.</td></tr><tr><td><i>scp</i></td><td>SCP.</td></tr><tr><td><i>unknown</i></td><td>Unknown channel.</td></tr></table>	Option	Description	<i>port-forward</i>	Port forwarding.	<i>tun-forward</i>	Tunnel forwarding.	<i>sftp</i>	SFTP.	<i>scp</i>	SCP.	<i>unknown</i>	Unknown channel.									
	Option	Description																				
	<i>port-forward</i>	Port forwarding.																				
	<i>tun-forward</i>	Tunnel forwarding.																				
	<i>sftp</i>	SFTP.																				
	<i>scp</i>	SCP.																				
<i>unknown</i>	Unknown channel.																					
default-command-log	Enable/disable logging unmatched shell commands.	option	-	disable																		
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable log unmatched shell commands.</td></tr><tr><td><i>disable</i></td><td>Disable log unmatched shell commands.</td></tr></table>	Option	Description	<i>enable</i>	Enable log unmatched shell commands.	<i>disable</i>	Disable log unmatched shell commands.															
	Option	Description																				
	<i>enable</i>	Enable log unmatched shell commands.																				
<i>disable</i>	Disable log unmatched shell commands.																					
log	SSH logging options.	option	-																			
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>x11</i></td><td>X server forwarding.</td></tr><tr><td><i>shell</i></td><td>SSH shell.</td></tr><tr><td><i>exec</i></td><td>SSH execution.</td></tr><tr><td><i>port-forward</i></td><td>Port forwarding.</td></tr><tr><td><i>tun-forward</i></td><td>Tunnel forwarding.</td></tr><tr><td><i>sftp</i></td><td>SFTP.</td></tr><tr><td><i>scp</i></td><td>SCP.</td></tr><tr><td><i>unknown</i></td><td>Unknown channel.</td></tr></table>	Option	Description	<i>x11</i>	X server forwarding.	<i>shell</i>	SSH shell.	<i>exec</i>	SSH execution.	<i>port-forward</i>	Port forwarding.	<i>tun-forward</i>	Tunnel forwarding.	<i>sftp</i>	SFTP.	<i>scp</i>	SCP.	<i>unknown</i>	Unknown channel.			
	Option	Description																				
	<i>x11</i>	X server forwarding.																				
	<i>shell</i>	SSH shell.																				
	<i>exec</i>	SSH execution.																				
	<i>port-forward</i>	Port forwarding.																				
	<i>tun-forward</i>	Tunnel forwarding.																				
	<i>sftp</i>	SFTP.																				
	<i>scp</i>	SCP.																				
	<i>unknown</i>	Unknown channel.																				
name	SSH filter profile name.	string	Maximum length: 35																			

config shell-commands

Parameter	Description	Type	Size	Default
action	Action to take for SSH shell command matches.	option	-	block

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>block</i>	Block the SSH shell command.		
	<i>allow</i>	Allow the SSH shell command.		
alert	Enable/disable alert.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable alert.		
	<i>disable</i>	Disable alert.		
id	Id.	integer	Minimum value: 0 0 Maximum value: 4294967295	
log	Enable/disable logging.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable logging.		
	<i>disable</i>	Disable logging.		
pattern	SSH shell command pattern.	string	Maximum length: 128	
severity	Log severity.	option	-	medium
	Option	Description		
	<i>low</i>	Severity low.		
	<i>medium</i>	Severity medium.		
	<i>high</i>	Severity high.		
	<i>critical</i>	Severity critical.		
type	Matching type.	option	-	simple
	Option	Description		
	<i>simple</i>	Match single command.		
	<i>regex</i>	Match command line using regular expression.		

switch-controller

This section includes syntax for the following commands:

- [config switch-controller 802-1X-settings on page 1026](#)
- [config switch-controller auto-config custom on page 1028](#)
- [config switch-controller auto-config default on page 1029](#)
- [config switch-controller auto-config policy on page 1030](#)
- [config switch-controller custom-command on page 1032](#)
- [config switch-controller dsl policy on page 1033](#)
- [config switch-controller dynamic-port-policy on page 1036](#)
- [config switch-controller flow-tracking on page 1039](#)
- [config switch-controller fortilink-settings on page 1043](#)
- [config switch-controller global on page 1045](#)
- [config switch-controller igmp-snooping on page 1050](#)
- [config switch-controller initial-config template on page 1051](#)
- [config switch-controller initial-config vlans on page 1053](#)
- [config switch-controller lldp-profile on page 1055](#)
- [config switch-controller lldp-settings on page 1059](#)
- [config switch-controller location on page 1061](#)
- [config switch-controller mac-policy on page 1066](#)
- [config switch-controller managed-switch on page 1068](#)
- [config switch-controller network-monitor-settings on page 1106](#)
- [config switch-controller ptp policy on page 1107](#)
- [config switch-controller ptp settings on page 1108](#)
- [config switch-controller qos dot1p-map on page 1109](#)
- [config switch-controller qos ip-dscp-map on page 1113](#)
- [config switch-controller qos qos-policy on page 1116](#)
- [config switch-controller qos queue-policy on page 1117](#)
- [config switch-controller quarantine on page 1120](#)
- [config switch-controller remote-log on page 1121](#)
- [config switch-controller security-policy 802-1X on page 1124](#)
- [config switch-controller security-policy local-access on page 1128](#)
- [config switch-controller sflow on page 1130](#)
- [config switch-controller snmp-community on page 1131](#)
- [config switch-controller snmp-sysinfo on page 1134](#)
- [config switch-controller snmp-trap-threshold on page 1135](#)
- [config switch-controller snmp-user on page 1137](#)
- [config switch-controller storm-control-policy on page 1141](#)
- [config switch-controller storm-control on page 1139](#)

- [config switch-controller stp-instance on page 1143](#)
- [config switch-controller stp-settings on page 1144](#)
- [config switch-controller switch-group on page 1146](#)
- [config switch-controller switch-interface-tag on page 1147](#)
- [config switch-controller switch-log on page 1148](#)
- [config switch-controller switch-profile on page 1150](#)
- [config switch-controller system on page 1152](#)
- [config switch-controller traffic-policy on page 1154](#)
- [config switch-controller traffic-sniffer on page 1156](#)
- [config switch-controller virtual-port-pool on page 1158](#)
- [config switch-controller vlan-policy on page 1159](#)

config switch-controller 802-1X-settings



This command is available for model(s): FortiGate 1000D, FortiGate 1000F, FortiGate 1001F, FortiGate 100EF, FortiGate 100E, FortiGate 100F, FortiGate 101F, FortiGate 1100E, FortiGate 1101E, FortiGate 140E-POE, FortiGate 140E, FortiGate 1500DT, FortiGate 1500D, FortiGate 1800F, FortiGate 1801F, FortiGate 2000E, FortiGate 200E, FortiGate 200F, FortiGate 201E, FortiGate 201F, FortiGate 2201E, FortiGate 2500E, FortiGate 2600F, FortiGate 2601F, FortiGate 3000D, FortiGate 3000F, FortiGate 3001F, FortiGate 300E, FortiGate 301E, FortiGate 3100D, FortiGate 3200D, FortiGate 3200F, FortiGate 3201F, FortiGate 3300E, FortiGate 3301E, FortiGate 3400E, FortiGate 3401E, FortiGate 3501F, FortiGate 3600E, FortiGate 3601E, FortiGate 3700D, FortiGate 3700F, FortiGate 3701F, FortiGate 3960E, FortiGate 3980E, FortiGate 400E Bypass, FortiGate 400E, FortiGate 400F, FortiGate 401E, FortiGate 401F, FortiGate 40F 3G4G, FortiGate 4200F, FortiGate 4201F, FortiGate 4400F, FortiGate 4401F, FortiGate 500E, FortiGate 501E, FortiGate 600E, FortiGate 601E, FortiGate 60E-POE, FortiGate 60E, FortiGate 60F, FortiGate 61E, FortiGate 70F, FortiGate 71F, FortiGate 800D, FortiGate 80E-POE, FortiGate 80E, FortiGate 80F Bypass, FortiGate 80F DSL, FortiGate 80F-POE, FortiGate 80F, FortiGate 81E-POE, FortiGate 81E, FortiGate 81F-POE, FortiGate 81F, FortiGate 900D, FortiGate 90E, FortiGate 91E, FortiGate-VM64 Aliyun, FortiGate-VM64 AWS, FortiGate-VM64 Azure, FortiGate-VM64 GCP, FortiGate-VM64 OPC, FortiGate-VM64, FortiGateRugged 60F 3G4G, FortiGateRugged 60F, FortiGateRugged 70F 3G4G, FortiGateRugged 70F, FortiWiFi 40F 3G4G, FortiWiFi 40F, FortiWiFi 60E, FortiWiFi 60F, FortiWiFi 61E, FortiWiFi 61F, FortiWiFi 80F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G-POE, FortiWiFi 81F 2R-POE, FortiWiFi 81F 2R.

It is not available for: FortiGate 5001E1, FortiGate 5001E.

Configure global 802.1X settings.

```
config switch-controller 802-1X-settings
  Description: Configure global 802.1X settings.
  set link-down-auth [set-unauth|no-action]
  set mab-reauth [disable|enable]
  set max-reauth-attempt {integer}
  set reauth-period {integer}
```

```

    set tx-period {integer}
end

```

config switch-controller 802-1X-settings

Parameter	Description	Type	Size	Default						
link-down-auth	Interface-reauthentication state to set if a link is down.	option	-	set-unauth						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>set-unauth</td><td>Interface set to unauth when down. Reauthentication is needed.</td></tr><tr><td>no-action</td><td>Interface reauthentication is not needed.</td></tr></table>	Option	Description	set-unauth	Interface set to unauth when down. Reauthentication is needed.	no-action	Interface reauthentication is not needed.			
Option	Description									
set-unauth	Interface set to unauth when down. Reauthentication is needed.									
no-action	Interface reauthentication is not needed.									
mab-reauth	Enable/disable MAB re-authentication.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Disable MAB re-authentication.</td></tr><tr><td>enable</td><td>Enable MAB re-authentication.</td></tr></table>	Option	Description	disable	Disable MAB re-authentication.	enable	Enable MAB re-authentication.			
Option	Description									
disable	Disable MAB re-authentication.									
enable	Enable MAB re-authentication.									
max-reauth-attempt	Maximum number of authentication attempts (0 - 15, default = 3).	integer	Minimum value: 0 Maximum value: 15	3						
reauth-period	Period of time to allow for reauthentication (1 - 1440 sec, default = 60, 0 = disable reauthentication).	integer	Minimum value: 0 Maximum value: 1440	60						
tx-period	802.1X Tx period (seconds, default=30).	integer	Minimum value: 12 Maximum value: 60	30						

config switch-controller auto-config custom



This command is available for model(s): FortiGate 1000D, FortiGate 1000F, FortiGate 1001F, FortiGate 100EF, FortiGate 100E, FortiGate 100F, FortiGate 101F, FortiGate 1100E, FortiGate 1101E, FortiGate 140E-POE, FortiGate 140E, FortiGate 1500DT, FortiGate 1500D, FortiGate 1800F, FortiGate 1801F, FortiGate 2000E, FortiGate 200E, FortiGate 200F, FortiGate 201E, FortiGate 201F, FortiGate 2201E, FortiGate 2500E, FortiGate 2600F, FortiGate 2601F, FortiGate 3000D, FortiGate 3000F, FortiGate 3001F, FortiGate 300E, FortiGate 301E, FortiGate 3100D, FortiGate 3200D, FortiGate 3200F, FortiGate 3201F, FortiGate 3300E, FortiGate 3301E, FortiGate 3400E, FortiGate 3401E, FortiGate 3501F, FortiGate 3600E, FortiGate 3601E, FortiGate 3700D, FortiGate 3700F, FortiGate 3701F, FortiGate 3960E, FortiGate 3980E, FortiGate 400E Bypass, FortiGate 400E, FortiGate 400F, FortiGate 401E, FortiGate 401F, FortiGate 40F 3G4G, FortiGate 4200F, FortiGate 4201F, FortiGate 4400F, FortiGate 4401F, FortiGate 500E, FortiGate 501E, FortiGate 600E, FortiGate 601E, FortiGate 60E-POE, FortiGate 60E, FortiGate 60F, FortiGate 61E, FortiGate 70F, FortiGate 71F, FortiGate 800D, FortiGate 80E-POE, FortiGate 80E, FortiGate 80F Bypass, FortiGate 80F DSL, FortiGate 80F-POE, FortiGate 80F, FortiGate 81E-POE, FortiGate 81E, FortiGate 81F-POE, FortiGate 81F, FortiGate 900D, FortiGate 90E, FortiGate 91E, FortiGate-VM64 Aliyun, FortiGate-VM64 AWS, FortiGate-VM64 Azure, FortiGate-VM64 GCP, FortiGate-VM64 OPC, FortiGate-VM64, FortiGateRugged 60F 3G4G, FortiGateRugged 60F, FortiGateRugged 70F 3G4G, FortiGateRugged 70F, FortiWiFi 40F 3G4G, FortiWiFi 40F, FortiWiFi 60E, FortiWiFi 60F, FortiWiFi 61E, FortiWiFi 61F, FortiWiFi 80F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G-POE, FortiWiFi 81F 2R-POE, FortiWiFi 81F 2R.

It is not available for: FortiGate 5001E1, FortiGate 5001E.

Policies which can override the 'default' for specific ISL/ICL/FortiLink interface.

```
config switch-controller auto-config custom
  Description: Policies which can override the 'default' for specific ISL/ICL/FortiLink
  interface.
  edit <name>
    config switch-binding
      Description: Switch binding list.
      edit <switch-id>
        set policy {string}
      next
    end
  next
end
```

config switch-controller auto-config custom

Parameter	Description	Type	Size	Default
name	Auto-Config FortiLink or ISL/ICL interface name.	string	Maximum length: 15	

config switch-binding

Parameter	Description	Type	Size	Default
policy	Custom auto-config policy.	string	Maximum length: 63	default
switch-id	Switch name.	string	Maximum length: 16	

config switch-controller auto-config default



This command is available for model(s): FortiGate 1000D, FortiGate 1000F, FortiGate 1001F, FortiGate 100EF, FortiGate 100E, FortiGate 100F, FortiGate 101F, FortiGate 1100E, FortiGate 1101E, FortiGate 140E-POE, FortiGate 140E, FortiGate 1500DT, FortiGate 1500D, FortiGate 1800F, FortiGate 1801F, FortiGate 2000E, FortiGate 200E, FortiGate 200F, FortiGate 201E, FortiGate 201F, FortiGate 2201E, FortiGate 2500E, FortiGate 2600F, FortiGate 2601F, FortiGate 3000D, FortiGate 3000F, FortiGate 3001F, FortiGate 300E, FortiGate 301E, FortiGate 3100D, FortiGate 3200D, FortiGate 3200F, FortiGate 3201F, FortiGate 3300E, FortiGate 3301E, FortiGate 3400E, FortiGate 3401E, FortiGate 3501F, FortiGate 3600E, FortiGate 3601E, FortiGate 3700D, FortiGate 3700F, FortiGate 3701F, FortiGate 3960E, FortiGate 3980E, FortiGate 400E Bypass, FortiGate 400E, FortiGate 400F, FortiGate 401E, FortiGate 401F, FortiGate 40F 3G4G, FortiGate 4200F, FortiGate 4201F, FortiGate 4400F, FortiGate 4401F, FortiGate 500E, FortiGate 501E, FortiGate 600E, FortiGate 601E, FortiGate 60E-POE, FortiGate 60E, FortiGate 60F, FortiGate 61E, FortiGate 70F, FortiGate 71F, FortiGate 800D, FortiGate 80E-POE, FortiGate 80E, FortiGate 80F Bypass, FortiGate 80F DSL, FortiGate 80F-POE, FortiGate 80F, FortiGate 81E-POE, FortiGate 81E, FortiGate 81F-POE, FortiGate 81F, FortiGate 900D, FortiGate 90E, FortiGate 91E, FortiGate-VM64 Aliyun, FortiGate-VM64 AWS, FortiGate-VM64 Azure, FortiGate-VM64 GCP, FortiGate-VM64 OPC, FortiGate-VM64, FortiGateRugged 60F 3G4G, FortiGateRugged 60F, FortiGateRugged 70F 3G4G, FortiGateRugged 70F, FortiWiFi 40F 3G4G, FortiWiFi 40F, FortiWiFi 60E, FortiWiFi 60F, FortiWiFi 61E, FortiWiFi 61F, FortiWiFi 80F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G-POE, FortiWiFi 81F 2R-POE, FortiWiFi 81F 2R.

It is not available for: FortiGate 5001E1, FortiGate 5001E.

Policies which are applied automatically to all ISL/ICL/FortiLink interfaces.

```
config switch-controller auto-config default
    Description: Policies which are applied automatically to all ISL/ICL/FortiLink interfaces.
    set fgt-policy {string}
    set icl-policy {string}
    set isl-policy {string}
end
```

config switch-controller auto-config default

Parameter	Description	Type	Size	Default
fgt-policy	Default FortiLink auto-config policy.	string	Maximum length: 63	default
icl-policy	Default ICL auto-config policy.	string	Maximum length: 63	default-icl
isl-policy	Default ISL auto-config policy.	string	Maximum length: 63	default

config switch-controller auto-config policy



This command is available for model(s): FortiGate 1000D, FortiGate 1000F, FortiGate 1001F, FortiGate 100EF, FortiGate 100E, FortiGate 100F, FortiGate 101F, FortiGate 1100E, FortiGate 1101E, FortiGate 140E-POE, FortiGate 140E, FortiGate 1500DT, FortiGate 1500D, FortiGate 1800F, FortiGate 1801F, FortiGate 2000E, FortiGate 200E, FortiGate 200F, FortiGate 201E, FortiGate 201F, FortiGate 2201E, FortiGate 2500E, FortiGate 2600F, FortiGate 2601F, FortiGate 3000D, FortiGate 3000F, FortiGate 3001F, FortiGate 300E, FortiGate 301E, FortiGate 3100D, FortiGate 3200D, FortiGate 3200F, FortiGate 3201F, FortiGate 3300E, FortiGate 3301E, FortiGate 3400E, FortiGate 3401E, FortiGate 3501F, FortiGate 3600E, FortiGate 3601E, FortiGate 3700D, FortiGate 3700F, FortiGate 3701F, FortiGate 3960E, FortiGate 3980E, FortiGate 400E Bypass, FortiGate 400E, FortiGate 400F, FortiGate 401E, FortiGate 401F, FortiGate 40F 3G4G, FortiGate 4200F, FortiGate 4201F, FortiGate 4400F, FortiGate 4401F, FortiGate 500E, FortiGate 501E, FortiGate 600E, FortiGate 601E, FortiGate 60E-POE, FortiGate 60E, FortiGate 60F, FortiGate 61E, FortiGate 70F, FortiGate 71F, FortiGate 800D, FortiGate 80E-POE, FortiGate 80E, FortiGate 80F Bypass, FortiGate 80F DSL, FortiGate 80F-POE, FortiGate 80F, FortiGate 81E-POE, FortiGate 81E, FortiGate 81F-POE, FortiGate 81F, FortiGate 900D, FortiGate 90E, FortiGate 91E, FortiGate-VM64 Aliyun, FortiGate-VM64 AWS, FortiGate-VM64 Azure, FortiGate-VM64 GCP, FortiGate-VM64 OPC, FortiGate-VM64, FortiGateRugged 60F 3G4G, FortiGateRugged 60F, FortiGateRugged 70F 3G4G, FortiGateRugged 70F, FortiWiFi 40F 3G4G, FortiWiFi 40F, FortiWiFi 60E, FortiWiFi 60F, FortiWiFi 61E, FortiWiFi 61F, FortiWiFi 80F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G-POE, FortiWiFi 81F 2R-POE, FortiWiFi 81F 2R.

It is not available for: FortiGate 5001E1, FortiGate 5001E.

Policy definitions which can define the behavior on auto configured interfaces.

```
config switch-controller auto-config policy
  Description: Policy definitions which can define the behavior on auto configured interfaces.
  edit <name>
    set igmp-flood-report [enable|disable]
    set igmp-flood-traffic [enable|disable]
    set poe-status [enable|disable]
    set qos-policy {string}
```

```

        set storm-control-policy {string}
    next
end

```

config switch-controller auto-config policy

Parameter	Description	Type	Size	Default
igmp-flood-report	Enable/disable IGMP flood report.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable IGMP flood report.		
	<i>disable</i>	Disable IGMP flood report.		
igmp-flood-traffic	Enable/disable IGMP flood traffic.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable IGMP flood traffic.		
	<i>disable</i>	Disable IGMP flood traffic.		
name	Auto-config policy name.	string	Maximum length: 63	
poe-status	Enable/disable PoE status.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable PoE status.		
	<i>disable</i>	Disable PoE status.		
qos-policy	Auto-Config QoS policy.	string	Maximum length: 63	default
storm-control-policy	Auto-Config storm control policy.	string	Maximum length: 63	auto-config

config switch-controller custom-command



This command is available for model(s): FortiGate 1000D, FortiGate 1000F, FortiGate 1001F, FortiGate 100EF, FortiGate 100E, FortiGate 100F, FortiGate 101F, FortiGate 1100E, FortiGate 1101E, FortiGate 140E-POE, FortiGate 140E, FortiGate 1500DT, FortiGate 1500D, FortiGate 1800F, FortiGate 1801F, FortiGate 2000E, FortiGate 200E, FortiGate 200F, FortiGate 201E, FortiGate 201F, FortiGate 2201E, FortiGate 2500E, FortiGate 2600F, FortiGate 2601F, FortiGate 3000D, FortiGate 3000F, FortiGate 3001F, FortiGate 300E, FortiGate 301E, FortiGate 3100D, FortiGate 3200D, FortiGate 3200F, FortiGate 3201F, FortiGate 3300E, FortiGate 3301E, FortiGate 3400E, FortiGate 3401E, FortiGate 3501F, FortiGate 3600E, FortiGate 3601E, FortiGate 3700D, FortiGate 3700F, FortiGate 3701F, FortiGate 3960E, FortiGate 3980E, FortiGate 400E Bypass, FortiGate 400E, FortiGate 400F, FortiGate 401E, FortiGate 401F, FortiGate 40F 3G4G, FortiGate 4200F, FortiGate 4201F, FortiGate 4400F, FortiGate 4401F, FortiGate 500E, FortiGate 501E, FortiGate 600E, FortiGate 601E, FortiGate 60E-POE, FortiGate 60E, FortiGate 60F, FortiGate 61E, FortiGate 70F, FortiGate 71F, FortiGate 800D, FortiGate 80E-POE, FortiGate 80E, FortiGate 80F Bypass, FortiGate 80F DSL, FortiGate 80F-POE, FortiGate 80F, FortiGate 81E-POE, FortiGate 81E, FortiGate 81F-POE, FortiGate 81F, FortiGate 900D, FortiGate 90E, FortiGate 91E, FortiGate-VM64 Aliyun, FortiGate-VM64 AWS, FortiGate-VM64 Azure, FortiGate-VM64 GCP, FortiGate-VM64 OPC, FortiGate-VM64, FortiGateRugged 60F 3G4G, FortiGateRugged 60F, FortiGateRugged 70F 3G4G, FortiGateRugged 70F, FortiWiFi 40F 3G4G, FortiWiFi 40F, FortiWiFi 60E, FortiWiFi 60F, FortiWiFi 61E, FortiWiFi 61F, FortiWiFi 80F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G-POE, FortiWiFi 81F 2R-POE, FortiWiFi 81F 2R.

It is not available for: FortiGate 5001E1, FortiGate 5001E.

Configure the FortiGate switch controller to send custom commands to managed FortiSwitch devices.

```
config switch-controller custom-command
  Description: Configure the FortiGate switch controller to send custom commands to managed
  FortiSwitch devices.
  edit <command-name>
    set command {var-string}
    set description {string}
  next
end
```

config switch-controller custom-command

Parameter	Description	Type	Size	Default
command	String of commands to send to FortiSwitch devices (For example (%0a = return key): config switch trunk %0a edit myTrunk %0a set members port1 port2 %0a end %0a).	var-string	Maximum length: 4095	

Parameter	Description	Type	Size	Default
command-name	Command name called by the FortiGate switch controller in the execute command.	string	Maximum length: 35	
description	Description.	string	Maximum length: 35	

config switch-controller dsl policy



This command is available for model(s): FortiGate 40F 3G4G, FortiGate 60F, FortiGate 80F Bypass, FortiGate 80F-POE, FortiGate 80F, FortiGate 81F-POE, FortiGate 81F, FortiGateRugged 60F 3G4G, FortiGateRugged 60F, FortiGateRugged 70F 3G4G, FortiGateRugged 70F, FortiWiFi 81F 2R 3G4G-POE, FortiWiFi 81F 2R-POE.

It is not available for: FortiGate 1000D, FortiGate 1000F, FortiGate 1001F, FortiGate 100EF, FortiGate 100E, FortiGate 100F, FortiGate 101F, FortiGate 1100E, FortiGate 1101E, FortiGate 140E-POE, FortiGate 140E, FortiGate 1500DT, FortiGate 1500D, FortiGate 1800F, FortiGate 1801F, FortiGate 2000E, FortiGate 200E, FortiGate 200F, FortiGate 201E, FortiGate 201F, FortiGate 2201E, FortiGate 2500E, FortiGate 2600F, FortiGate 2601F, FortiGate 3000D, FortiGate 3000F, FortiGate 3001F, FortiGate 300E, FortiGate 301E, FortiGate 3100D, FortiGate 3200D, FortiGate 3200F, FortiGate 3201F, FortiGate 3300E, FortiGate 3301E, FortiGate 3400E, FortiGate 3401E, FortiGate 3501F, FortiGate 3600E, FortiGate 3601E, FortiGate 3700D, FortiGate 3700F, FortiGate 3701F, FortiGate 3960E, FortiGate 3980E, FortiGate 400E Bypass, FortiGate 400E, FortiGate 400F, FortiGate 401E, FortiGate 401F, FortiGate 4200F, FortiGate 4201F, FortiGate 4400F, FortiGate 4401F, FortiGate 5001E1, FortiGate 5001E, FortiGate 500E, FortiGate 501E, FortiGate 600E, FortiGate 601E, FortiGate 60E-POE, FortiGate 60E, FortiGate 61E, FortiGate 70F, FortiGate 71F, FortiGate 800D, FortiGate 80E-POE, FortiGate 80E, FortiGate 80F DSL, FortiGate 81E-POE, FortiGate 81E, FortiGate 900D, FortiGate 90E, FortiGate 91E, FortiGate-VM64 Aliyun, FortiGate-VM64 AWS, FortiGate-VM64 Azure, FortiGate-VM64 GCP, FortiGate-VM64 OPC, FortiGate-VM64, FortiWiFi 40F 3G4G, FortiWiFi 40F, FortiWiFi 60E, FortiWiFi 60F, FortiWiFi 61E, FortiWiFi 61F, FortiWiFi 80F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G DSL, FortiWiFi 81F 2R.

DSL policy.

```
config switch-controller dsl policy
  Description: DSL policy.
  edit <name>
    set append_padding [disable|enable]
    set cpe-aele [disable|enable]
    set cpe-aele-mode [ELE_M0|ELE_DS|...]
    set cs {option1}, {option2}, ...
    set ds-bitswap [disable|enable]
    set pause-frame [disable|enable]
    set profile [auto-30a|auto-17a|...]
    set type {option}
    set us-bitswap [disable|enable]
```



```
next
end
```

config switch-controller dsl policy

Parameter	Description	Type	Size	Default
append_padding	Device pause frame configuration.	option	-	enable
	Option	Description		
	<i>disable</i>	Disable.		
	<i>enable</i>	Enable.		
cpe-aele	CPE AELE.	option	-	enable
	Option	Description		
	<i>disable</i>	Disable.		
	<i>enable</i>	Enable.		
cpe-aele-mode	CPE AELE-Mode with given string.	option	-	ELE_MIN
	Option	Description		
	<i>ELE_M0</i>	cpe AELE-Mode with given string.		
	<i>ELE_DS</i>	cpe AELE-Mode with given string.		
	<i>ELE_PB</i>	cpe AELE-Mode with given string.		
	<i>ELE_MIN</i>	cpe AELE-Mode with given string.		
cs	CPE carrier set.	option	-	A43 B43 A43C
	Option	Description		
	<i>A43</i>	CPE carrier set.		
	<i>B43</i>	CPE carrier set.		
	<i>A43C</i>	CPE carrier set.		
	<i>V43</i>	CPE carrier set.		
ds-bitswap	Enable/disable bitswap.	option	-	enable

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>disable</i>	Disable.		
	<i>enable</i>	Enable.		
name	Policy name.	string	Maximum length: 63	
pause-frame	Device pause frame configuration.	option	-	enable
	Option	Description		
	<i>disable</i>	Disable.		
	<i>enable</i>	Enable.		
profile	VDSL CPE profile.	option	-	auto-30a
	Option	Description		
	<i>auto-30a</i>	vdsl CPE profile.		
	<i>auto-17a</i>	vdsl CPE profile.		
	<i>auto-12ab</i>	vdsl CPE profile.		
type	Type.	option	-	Proscend
	Option	Description		
	<i>Proscend</i>	Proscend.		
us-bitswap	Enable/disable bitswap.	option	-	enable
	Option	Description		
	<i>disable</i>	Disable.		
	<i>enable</i>	Enable.		

config switch-controller dynamic-port-policy



This command is available for model(s): FortiGate 1000D, FortiGate 1000F, FortiGate 1001F, FortiGate 100EF, FortiGate 100E, FortiGate 100F, FortiGate 101F, FortiGate 1100E, FortiGate 1101E, FortiGate 140E-POE, FortiGate 140E, FortiGate 1500DT, FortiGate 1500D, FortiGate 1800F, FortiGate 1801F, FortiGate 2000E, FortiGate 200E, FortiGate 200F, FortiGate 201E, FortiGate 201F, FortiGate 2201E, FortiGate 2500E, FortiGate 2600F, FortiGate 2601F, FortiGate 3000D, FortiGate 3000F, FortiGate 3001F, FortiGate 300E, FortiGate 301E, FortiGate 3100D, FortiGate 3200D, FortiGate 3200F, FortiGate 3201F, FortiGate 3300E, FortiGate 3301E, FortiGate 3400E, FortiGate 3401E, FortiGate 3501F, FortiGate 3600E, FortiGate 3601E, FortiGate 3700D, FortiGate 3700F, FortiGate 3701F, FortiGate 3960E, FortiGate 3980E, FortiGate 400E Bypass, FortiGate 400E, FortiGate 400F, FortiGate 401E, FortiGate 401F, FortiGate 40F 3G4G, FortiGate 4200F, FortiGate 4201F, FortiGate 4400F, FortiGate 4401F, FortiGate 500E, FortiGate 501E, FortiGate 600E, FortiGate 601E, FortiGate 60E-POE, FortiGate 60E, FortiGate 60F, FortiGate 61E, FortiGate 70F, FortiGate 71F, FortiGate 800D, FortiGate 80E-POE, FortiGate 80E, FortiGate 80F Bypass, FortiGate 80F DSL, FortiGate 80F-POE, FortiGate 80F, FortiGate 81E-POE, FortiGate 81E, FortiGate 81F-POE, FortiGate 81F, FortiGate 900D, FortiGate 90E, FortiGate 91E, FortiGate-VM64 Aliyun, FortiGate-VM64 AWS, FortiGate-VM64 Azure, FortiGate-VM64 GCP, FortiGate-VM64 OPC, FortiGate-VM64, FortiGateRugged 60F 3G4G, FortiGateRugged 60F, FortiGateRugged 70F 3G4G, FortiGateRugged 70F, FortiWiFi 40F 3G4G, FortiWiFi 40F, FortiWiFi 60E, FortiWiFi 60F, FortiWiFi 61E, FortiWiFi 61F, FortiWiFi 80F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G-POE, FortiWiFi 81F 2R-POE, FortiWiFi 81F 2R.

It is not available for: FortiGate 5001E1, FortiGate 5001E.

Configure Dynamic port policy to be applied on the managed FortiSwitch ports through DPP device.

```
config switch-controller dynamic-port-policy
  Description: Configure Dynamic port policy to be applied on the managed FortiSwitch ports
  through DPP device.
  edit <name>
    set description {string}
    set fortilink {string}
    config policy
      Description: Port policies with matching criteria and actions.
      edit <name>
        set 802-1x {string}
        set bounce-port-link [disable|enable]
        set category [device|interface-tag]
        set description {string}
        set family {string}
        set host {string}
        set hw-vendor {string}
        set interface-tags <tag-name1>, <tag-name2>, ...
        set lldp-profile {string}
        set mac {string}
        set qos-policy {string}
        set status [enable|disable]
```

```

        set type {string}
        set vlan-policy {string}
    next
end
next
end

```

config switch-controller dynamic-port-policy

Parameter	Description	Type	Size	Default
description	Description for the Dynamic port policy.	string	Maximum length: 63	
fortilink	FortiLink interface for which this Dynamic port policy belongs to.	string	Maximum length: 15	
name	Dynamic port policy name.	string	Maximum length: 63	

config policy

Parameter	Description	Type	Size	Default						
802-1x	802.1x security policy to be applied when using this policy.	string	Maximum length: 31							
bounce-port-link	Enable/disable bouncing (administratively bring the link down, up) of a switch port where this policy is applied. Helps to clear and reassign VLAN from lldp-profile.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>disable</i></td><td>Disable bouncing (administratively bring the link down, up) of a switch port where this policy is applied.</td></tr><tr><td><i>enable</i></td><td>Enable bouncing (administratively bring the link down, up) of a switch port where this policy is applied.</td></tr></table>				Option	Description	<i>disable</i>	Disable bouncing (administratively bring the link down, up) of a switch port where this policy is applied.	<i>enable</i>	Enable bouncing (administratively bring the link down, up) of a switch port where this policy is applied.
Option	Description									
<i>disable</i>	Disable bouncing (administratively bring the link down, up) of a switch port where this policy is applied.									
<i>enable</i>	Enable bouncing (administratively bring the link down, up) of a switch port where this policy is applied.									
category	Category of Dynamic port policy.	option	-	device						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>device</i></td><td>Device category.</td></tr><tr><td><i>interface-tag</i></td><td>Interface Tag category.</td></tr></table>				Option	Description	<i>device</i>	Device category.	<i>interface-tag</i>	Interface Tag category.
Option	Description									
<i>device</i>	Device category.									
<i>interface-tag</i>	Interface Tag category.									
description	Description for the policy.	string	Maximum length: 63							

Parameter	Description	Type	Size	Default						
family	Match policy based on family.	string	Maximum length: 31							
host	Match policy based on host.	string	Maximum length: 64							
hw-vendor	Match policy based on hardware vendor.	string	Maximum length: 15							
interface-tags <tag-name>	Match policy based on the FortiSwitch interface object tags. FortiSwitch port tag name.	string	Maximum length: 63							
lldp-profile	LLDP profile to be applied when using this policy.	string	Maximum length: 63							
mac	Match policy based on MAC address.	string	Maximum length: 17							
name	Policy name.	string	Maximum length: 63							
qos-policy	QoS policy to be applied when using this policy.	string	Maximum length: 63							
status	Enable/disable policy.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable policy.</td></tr><tr><td>disable</td><td>Disable policy.</td></tr></table>				Option	Description	enable	Enable policy.	disable	Disable policy.
Option	Description									
enable	Enable policy.									
disable	Disable policy.									
type	Match policy based on type.	string	Maximum length: 15							
vlan-policy	VLAN policy to be applied when using this policy.	string	Maximum length: 63							

config switch-controller flow-tracking



This command is available for model(s): FortiGate 1000D, FortiGate 1000F, FortiGate 1001F, FortiGate 100EF, FortiGate 100E, FortiGate 100F, FortiGate 101F, FortiGate 1100E, FortiGate 1101E, FortiGate 140E-POE, FortiGate 140E, FortiGate 1500DT, FortiGate 1500D, FortiGate 1800F, FortiGate 1801F, FortiGate 2000E, FortiGate 200E, FortiGate 200F, FortiGate 201E, FortiGate 201F, FortiGate 2201E, FortiGate 2500E, FortiGate 2600F, FortiGate 2601F, FortiGate 3000D, FortiGate 3000F, FortiGate 3001F, FortiGate 300E, FortiGate 301E, FortiGate 3100D, FortiGate 3200D, FortiGate 3200F, FortiGate 3201F, FortiGate 3300E, FortiGate 3301E, FortiGate 3400E, FortiGate 3401E, FortiGate 3501F, FortiGate 3600E, FortiGate 3601E, FortiGate 3700D, FortiGate 3700F, FortiGate 3701F, FortiGate 3960E, FortiGate 3980E, FortiGate 400E Bypass, FortiGate 400E, FortiGate 400F, FortiGate 401E, FortiGate 401F, FortiGate 40F 3G4G, FortiGate 4200F, FortiGate 4201F, FortiGate 4400F, FortiGate 4401F, FortiGate 500E, FortiGate 501E, FortiGate 600E, FortiGate 601E, FortiGate 60E-POE, FortiGate 60E, FortiGate 60F, FortiGate 61E, FortiGate 70F, FortiGate 71F, FortiGate 800D, FortiGate 80E-POE, FortiGate 80E, FortiGate 80F Bypass, FortiGate 80F DSL, FortiGate 80F-POE, FortiGate 80F, FortiGate 81E-POE, FortiGate 81E, FortiGate 81F-POE, FortiGate 81F, FortiGate 900D, FortiGate 90E, FortiGate 91E, FortiGate-VM64 Aliyun, FortiGate-VM64 AWS, FortiGate-VM64 Azure, FortiGate-VM64 GCP, FortiGate-VM64 OPC, FortiGate-VM64, FortiGateRugged 60F 3G4G, FortiGateRugged 60F, FortiGateRugged 70F 3G4G, FortiGateRugged 70F, FortiWiFi 40F 3G4G, FortiWiFi 40F, FortiWiFi 60E, FortiWiFi 60F, FortiWiFi 61E, FortiWiFi 61F, FortiWiFi 80F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G-POE, FortiWiFi 81F 2R-POE, FortiWiFi 81F 2R.

It is not available for: FortiGate 5001E1, FortiGate 5001E.

Configure FortiSwitch flow tracking and export via ipfix/netflow.

```
config switch-controller flow-tracking
  Description: Configure FortiSwitch flow tracking and export via ipfix/netflow.
  config aggregates
    Description: Configure aggregates in which all traffic sessions matching the IP Address
    will be grouped into the same flow.
    edit <id>
      set ip {ipv4-classnet}
    next
  end
  config collectors
    Description: Configure collectors for the flow.
    edit <name>
      set ip {ipv4-address-any}
      set port {integer}
      set transport [udp|tcp|...]
    next
  end
  set format [netflow1|netflow5|...]
  set level [vlan|ip|...]
  set max-export-pkt-size {integer}
  set sample-mode [local|perimeter|...]
```

```

set sample-rate {integer}
set template-export-period {integer}
set timeout-general {integer}
set timeout-icmp {integer}
set timeout-max {integer}
set timeout-tcp {integer}
set timeout-tcp-fin {integer}
set timeout-tcp-rst {integer}
set timeout-udp {integer}
end

```

config switch-controller flow-tracking

Parameter	Description	Type	Size	Default												
format	Configure flow tracking protocol.	option	-	netflow9												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>netflow1</td><td>Netflow version 1 sampling.</td></tr><tr><td>netflow5</td><td>Netflow version 5 sampling.</td></tr><tr><td>netflow9</td><td>Netflow version 9 sampling.</td></tr><tr><td>ipfix</td><td>Ipfix sampling.</td></tr></table>	Option	Description	netflow1	Netflow version 1 sampling.	netflow5	Netflow version 5 sampling.	netflow9	Netflow version 9 sampling.	ipfix	Ipfix sampling.					
Option	Description															
netflow1	Netflow version 1 sampling.															
netflow5	Netflow version 5 sampling.															
netflow9	Netflow version 9 sampling.															
ipfix	Ipfix sampling.															
level	Configure flow tracking level.	option	-	ip												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>vlan</td><td>Collects srcip/dstip/srcport/dstport/protocol/tos/vlan from the sample packet.</td></tr><tr><td>ip</td><td>Collects srcip/dstip from the sample packet.</td></tr><tr><td>port</td><td>Collects srcip/dstip/srcport/dstport/protocol from the sample packet.</td></tr><tr><td>proto</td><td>Collects srcip/dstip/protocol from the sample packet.</td></tr><tr><td>mac</td><td>Collects smac/dmac from the sample packet.</td></tr></table>	Option	Description	vlan	Collects srcip/dstip/srcport/dstport/protocol/tos/vlan from the sample packet.	ip	Collects srcip/dstip from the sample packet.	port	Collects srcip/dstip/srcport/dstport/protocol from the sample packet.	proto	Collects srcip/dstip/protocol from the sample packet.	mac	Collects smac/dmac from the sample packet.			
Option	Description															
vlan	Collects srcip/dstip/srcport/dstport/protocol/tos/vlan from the sample packet.															
ip	Collects srcip/dstip from the sample packet.															
port	Collects srcip/dstip/srcport/dstport/protocol from the sample packet.															
proto	Collects srcip/dstip/protocol from the sample packet.															
mac	Collects smac/dmac from the sample packet.															
max-export-pkt-size	Configure flow max export packet size (512-9216, default=512 bytes).	integer	Minimum value: 512 Maximum value: 9216	512												
sample-mode	Configure sample mode for the flow tracking.	option	-	perimeter												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>local</td><td>Set local mode which samples on the specific switch port.</td></tr></table>	Option	Description	local	Set local mode which samples on the specific switch port.											
Option	Description															
local	Set local mode which samples on the specific switch port.															

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>perimeter</i>	Set perimeter mode which samples on all switch fabric ports and fortilink port at the ingress.		
	<i>device-ingress</i>	Set device -ingress mode which samples across all switch ports at the ingress.		
sample-rate	Configure sample rate for the perimeter and device-ingress sampling(0 - 99999).	integer	Minimum value: 0 Maximum value: 99999	512
template-export-period	Configure template export period (1-60, default=5 minutes).	integer	Minimum value: 1 Maximum value: 60	5
timeout-general	Configure flow session general timeout (60-604800, default=3600 seconds).	integer	Minimum value: 60 Maximum value: 604800	3600
timeout-icmp	Configure flow session ICMP timeout (60-604800, default=300 seconds).	integer	Minimum value: 60 Maximum value: 604800	300
timeout-max	Configure flow session max timeout (60-604800, default=604800 seconds).	integer	Minimum value: 60 Maximum value: 604800	604800
timeout-tcp	Configure flow session TCP timeout (60-604800, default=3600 seconds).	integer	Minimum value: 60 Maximum value: 604800	3600
timeout-tcp-fin	Configure flow session TCP FIN timeout (60-604800, default=300 seconds).	integer	Minimum value: 60 Maximum value: 604800	300
timeout-tcp-rst	Configure flow session TCP RST timeout (60-604800, default=120 seconds).	integer	Minimum value: 60 Maximum value: 604800	120
timeout-udp	Configure flow session UDP timeout (60-604800, default=300 seconds).	integer	Minimum value: 60 Maximum value: 604800	300

config aggregates

Parameter	Description	Type	Size	Default
id	Aggregate id.	integer	Minimum value: 0 Maximum value: 4294967295	0

Parameter	Description	Type	Size	Default
ip	IP address to group all matching traffic sessions to a flow.	ipv4-classnet	Not Specified	0.0.0.0 0.0.0.0

config collectors

Parameter	Description	Type	Size	Default
ip	Collector IP address.	ipv4-address-any	Not Specified	0.0.0.0
name	Collector name.	string	Maximum length: 63	
port	Collector port number(0-65535, default:0, netflow:2055, ipfix:4739).	integer	Minimum value: 0 Maximum value: 65535	0
transport	Collector L4 transport protocol for exporting packets.	option	-	udp
		Option	Description	
		udp	UDP protocol.	
		tcp	TCP protocol.	
		sctp	SCTP protocol.	

config switch-controller fortilink-settings



This command is available for model(s): FortiGate 1000D, FortiGate 1000F, FortiGate 1001F, FortiGate 100EF, FortiGate 100E, FortiGate 100F, FortiGate 101F, FortiGate 1100E, FortiGate 1101E, FortiGate 140E-POE, FortiGate 140E, FortiGate 1500DT, FortiGate 1500D, FortiGate 1800F, FortiGate 1801F, FortiGate 2000E, FortiGate 200E, FortiGate 200F, FortiGate 201E, FortiGate 201F, FortiGate 2201E, FortiGate 2500E, FortiGate 2600F, FortiGate 2601F, FortiGate 3000D, FortiGate 3000F, FortiGate 3001F, FortiGate 300E, FortiGate 301E, FortiGate 3100D, FortiGate 3200D, FortiGate 3200F, FortiGate 3201F, FortiGate 3300E, FortiGate 3301E, FortiGate 3400E, FortiGate 3401E, FortiGate 3501F, FortiGate 3600E, FortiGate 3601E, FortiGate 3700D, FortiGate 3700F, FortiGate 3701F, FortiGate 3960E, FortiGate 3980E, FortiGate 400E Bypass, FortiGate 400E, FortiGate 400F, FortiGate 401E, FortiGate 401F, FortiGate 40F 3G4G, FortiGate 4200F, FortiGate 4201F, FortiGate 4400F, FortiGate 4401F, FortiGate 500E, FortiGate 501E, FortiGate 600E, FortiGate 601E, FortiGate 60E-POE, FortiGate 60E, FortiGate 60F, FortiGate 61E, FortiGate 70F, FortiGate 71F, FortiGate 800D, FortiGate 80E-POE, FortiGate 80E, FortiGate 80F Bypass, FortiGate 80F DSL, FortiGate 80F-POE, FortiGate 80F, FortiGate 81E-POE, FortiGate 81E, FortiGate 81F-POE, FortiGate 81F, FortiGate 900D, FortiGate 90E, FortiGate 91E, FortiGate-VM64 Aliyun, FortiGate-VM64 AWS, FortiGate-VM64 Azure, FortiGate-VM64 GCP, FortiGate-VM64 OPC, FortiGate-VM64, FortiGateRugged 60F 3G4G, FortiGateRugged 60F, FortiGateRugged 70F 3G4G, FortiGateRugged 70F, FortiWiFi 40F 3G4G, FortiWiFi 40F, FortiWiFi 60E, FortiWiFi 60F, FortiWiFi 61E, FortiWiFi 61F, FortiWiFi 80F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G-POE, FortiWiFi 81F 2R-POE, FortiWiFi 81F 2R.

It is not available for: FortiGate 5001E1, FortiGate 5001E.

Configure integrated FortiLink settings for FortiSwitch.

```
config switch-controller fortilink-settings
  Description: Configure integrated FortiLink settings for FortiSwitch.
  edit <name>
    set fortilink {string}
    set inactive-timer {integer}
    set link-down-flush [disable|enable]
    config nac-ports
      Description: NAC specific configuration.
      set lan-segment [enabled|disabled]
      set member-change {integer}
      set nac-lan-interface {string}
      set nac-segment-vlans <vlan-name1>, <vlan-name2>, ...
      set onboarding-vlan {string}
      set parent-key {string}
    end
  next
end
```

config switch-controller fortilink-settings

Parameter	Description	Type	Size	Default						
fortilink	FortiLink interface to which this fortilink-setting belongs.	string	Maximum length: 15							
inactive-timer	Time interval(minutes) to be included in the inactive devices expiry calculation (mac age-out + inactive-time + periodic scan interval).	integer	Minimum value: 1 Maximum value: 1440	15						
link-down-flush	Clear NAC and dynamic devices on switch ports on link down event.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>disable</i></td><td>Disable clearing NAC and dynamic devices on a switch port when link down event happens.</td></tr><tr><td><i>enable</i></td><td>Enable clearing NAC and dynamic devices on a switch port when link down event happens.</td></tr></table>				Option	Description	<i>disable</i>	Disable clearing NAC and dynamic devices on a switch port when link down event happens.	<i>enable</i>	Enable clearing NAC and dynamic devices on a switch port when link down event happens.
Option	Description									
<i>disable</i>	Disable clearing NAC and dynamic devices on a switch port when link down event happens.									
<i>enable</i>	Enable clearing NAC and dynamic devices on a switch port when link down event happens.									
name	FortiLink settings name.	string	Maximum length: 35							

config nac-ports

Parameter	Description	Type	Size	Default						
lan-segment	Enable/disable LAN segment feature on the FortiLink interface.	option	-	disabled						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enabled</i></td><td>Enable lan-segment on this interface.</td></tr><tr><td><i>disabled</i></td><td>Disable lan-segment on this interface.</td></tr></table>				Option	Description	<i>enabled</i>	Enable lan-segment on this interface.	<i>disabled</i>	Disable lan-segment on this interface.
	Option	Description								
	<i>enabled</i>	Enable lan-segment on this interface.								
<i>disabled</i>	Disable lan-segment on this interface.									
member-change	Member change flag. Read-only.	integer	Minimum value: 0 Maximum value: 255	0						
nac-lan-interface	Configure NAC LAN interface.	string	Maximum length: 15							
nac-segment-vlans <vlan-name>	Configure NAC segment VLANs. VLAN interface name.	string	Maximum length: 79							
onboarding-vlan	Default NAC Onboarding VLAN when NAC devices are discovered.	string	Maximum length: 15							

Parameter	Description	Type	Size	Default
parent-key	Parent key name. Read-only.	string	Maximum length: 35	

config switch-controller global



This command is available for model(s): FortiGate 1000D, FortiGate 1000F, FortiGate 1001F, FortiGate 100EF, FortiGate 100E, FortiGate 100F, FortiGate 101F, FortiGate 1100E, FortiGate 1101E, FortiGate 140E-POE, FortiGate 140E, FortiGate 1500DT, FortiGate 1500D, FortiGate 1800F, FortiGate 1801F, FortiGate 2000E, FortiGate 200E, FortiGate 200F, FortiGate 201E, FortiGate 201F, FortiGate 2201E, FortiGate 2500E, FortiGate 2600F, FortiGate 2601F, FortiGate 3000D, FortiGate 3000F, FortiGate 3001F, FortiGate 300E, FortiGate 301E, FortiGate 3100D, FortiGate 3200D, FortiGate 3200F, FortiGate 3201F, FortiGate 3300E, FortiGate 3301E, FortiGate 3400E, FortiGate 3401E, FortiGate 3501F, FortiGate 3600E, FortiGate 3601E, FortiGate 3700D, FortiGate 3700F, FortiGate 3701F, FortiGate 3960E, FortiGate 3980E, FortiGate 400E Bypass, FortiGate 400E, FortiGate 400F, FortiGate 401E, FortiGate 401F, FortiGate 40F 3G4G, FortiGate 4200F, FortiGate 4201F, FortiGate 4400F, FortiGate 4401F, FortiGate 500E, FortiGate 501E, FortiGate 600E, FortiGate 601E, FortiGate 60E-POE, FortiGate 60E, FortiGate 60F, FortiGate 61E, FortiGate 70F, FortiGate 71F, FortiGate 800D, FortiGate 80E-POE, FortiGate 80E, FortiGate 80F Bypass, FortiGate 80F DSL, FortiGate 80F-POE, FortiGate 80F, FortiGate 81E-POE, FortiGate 81E, FortiGate 81F-POE, FortiGate 81F, FortiGate 900D, FortiGate 90E, FortiGate 91E, FortiGate-VM64 Aliyun, FortiGate-VM64 AWS, FortiGate-VM64 Azure, FortiGate-VM64 GCP, FortiGate-VM64 OPC, FortiGate-VM64, FortiGateRugged 60F 3G4G, FortiGateRugged 60F, FortiGateRugged 70F 3G4G, FortiGateRugged 70F, FortiWiFi 40F 3G4G, FortiWiFi 40F, FortiWiFi 60E, FortiWiFi 60F, FortiWiFi 61E, FortiWiFi 61F, FortiWiFi 80F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G-POE, FortiWiFi 81F 2R-POE, FortiWiFi 81F 2R.

It is not available for: FortiGate 5001E1, FortiGate 5001E.

Configure FortiSwitch global settings.

```
config switch-controller global
  Description: Configure FortiSwitch global settings.
  set bounce-quarantined-link [disable|enable]
  config custom-command
    Description: List of custom commands to be pushed to all FortiSwitches in the VDOM.
    edit <command-entry>
      set command-name {string}
    next
  end
  set default-virtual-switch-vlan {string}
  set dhcp-server-access-list [enable|disable]
  set disable-discovery <name1>, <name2>, ...
  set fips-enforce [disable|enable]
  set firmware-provision-on-authorization [enable|disable]
  set https-image-push [enable|disable]
```

```

set log-mac-limit-violations [enable|disable]
set mac-aging-interval {integer}
set mac-event-logging [enable|disable]
set mac-retention-period {integer}
set mac-violation-timer {integer}
set quarantine-mode [by-vlan|by-redirect]
set sn-dns-resolution [enable|disable]
set update-user-device {option1}, {option2}, ...
set vlan-all-mode [all|defined]
set vlan-identity [description|name]
set vlan-optimization [enable|disable]
end

```

config switch-controller global

Parameter	Description	Type	Size	Default						
bounce-quarantined-link	Enable/disable bouncing (administratively bring the link down, up) of a switch port where a quarantined device was seen last. Helps to re-initiate the DHCP process for a device.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Disable bouncing (administratively bring the link down, up) of a switch port where a quarantined device was seen last.</td></tr><tr><td>enable</td><td>Enable bouncing (administratively bring the link down, up) of a switch port where a quarantined device was seen last.</td></tr></table>				Option	Description	disable	Disable bouncing (administratively bring the link down, up) of a switch port where a quarantined device was seen last.	enable	Enable bouncing (administratively bring the link down, up) of a switch port where a quarantined device was seen last.
Option	Description									
disable	Disable bouncing (administratively bring the link down, up) of a switch port where a quarantined device was seen last.									
enable	Enable bouncing (administratively bring the link down, up) of a switch port where a quarantined device was seen last.									
default-virtual-switch-vlan	Default VLAN for ports when added to the virtual-switch.	string	Maximum length: 15							
dhcp-server-access-list	Enable/disable DHCP snooping server access list.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable DHCP server access list.</td></tr><tr><td>disable</td><td>Disable DHCP server access list.</td></tr></table>				Option	Description	enable	Enable DHCP server access list.	disable	Disable DHCP server access list.
Option	Description									
enable	Enable DHCP server access list.									
disable	Disable DHCP server access list.									
disable-discovery <name>	Prevent this FortiSwitch from discovering. Managed device ID.	string	Maximum length: 79							
fips-enforce	Enable/disable enforcement of FIPS on managed FortiSwitch devices.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Disable enforcement of FIPS on managed FortiSwitch devices.</td></tr></table>				Option	Description	disable	Disable enforcement of FIPS on managed FortiSwitch devices.		
Option	Description									
disable	Disable enforcement of FIPS on managed FortiSwitch devices.									

Parameter	Description	Type	Size	Default						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable enforcement of FIPS on managed FortiSwitch devices.</td></tr></table>	Option	Description	<i>enable</i>	Enable enforcement of FIPS on managed FortiSwitch devices.					
	Option	Description								
	<i>enable</i>	Enable enforcement of FIPS on managed FortiSwitch devices.								
firmware-provision-on-authorization	Enable/disable automatic provisioning of latest firmware on authorization.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable firmware provision on authorization.</td></tr><tr><td><i>disable</i></td><td>Disable firmware provision on authorization.</td></tr></table>	Option	Description	<i>enable</i>	Enable firmware provision on authorization.	<i>disable</i>	Disable firmware provision on authorization.			
	Option	Description								
	<i>enable</i>	Enable firmware provision on authorization.								
<i>disable</i>	Disable firmware provision on authorization.									
https-image-push	Enable/disable image push to FortiSwitch using HTTPS.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable image push to FortiSwitch using HTTPS.</td></tr><tr><td><i>disable</i></td><td>Disable image push to FortiSwitch using HTTPS.</td></tr></table>	Option	Description	<i>enable</i>	Enable image push to FortiSwitch using HTTPS.	<i>disable</i>	Disable image push to FortiSwitch using HTTPS.			
	Option	Description								
	<i>enable</i>	Enable image push to FortiSwitch using HTTPS.								
<i>disable</i>	Disable image push to FortiSwitch using HTTPS.									
log-mac-limit-violations	Enable/disable logs for Learning Limit Violations.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable Learn Limit Violation.</td></tr><tr><td><i>disable</i></td><td>Disable Learn Limit Violation.</td></tr></table>	Option	Description	<i>enable</i>	Enable Learn Limit Violation.	<i>disable</i>	Disable Learn Limit Violation.			
	Option	Description								
	<i>enable</i>	Enable Learn Limit Violation.								
<i>disable</i>	Disable Learn Limit Violation.									
mac-aging-interval	Time after which an inactive MAC is aged out (10 - 1000000 sec, default = 300, 0 = disable).	integer	Minimum value: 10 Maximum value: 1000000	300						
mac-event-logging	Enable/disable MAC address event logging.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable MAC address event logging.</td></tr><tr><td><i>disable</i></td><td>Disable MAC address event logging.</td></tr></table>	Option	Description	<i>enable</i>	Enable MAC address event logging.	<i>disable</i>	Disable MAC address event logging.			
	Option	Description								
	<i>enable</i>	Enable MAC address event logging.								
<i>disable</i>	Disable MAC address event logging.									
mac-retention-period	Time in hours after which an inactive MAC is removed from client DB (0 = aged out based on mac-aging-interval).	integer	Minimum value: 0 Maximum value: 168	24						

Parameter	Description	Type	Size	Default												
mac-violation-timer	Set timeout for Learning Limit Violations (0 = disabled).	integer	Minimum value: 0 0 Maximum value: 4294967295	0												
quarantine-mode	Quarantine mode.	option	-	by-vlan												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>by-vlan</td><td>Quarantined device traffic is sent to FortiGate on a separate quarantine VLAN.</td></tr><tr><td>by-redirect</td><td>Quarantined device traffic is redirected only to the FortiGate on the received VLAN.</td></tr></table>				Option	Description	by-vlan	Quarantined device traffic is sent to FortiGate on a separate quarantine VLAN.	by-redirect	Quarantined device traffic is redirected only to the FortiGate on the received VLAN.						
Option	Description															
by-vlan	Quarantined device traffic is sent to FortiGate on a separate quarantine VLAN.															
by-redirect	Quarantined device traffic is redirected only to the FortiGate on the received VLAN.															
sn-dns-resolution	Enable/disable DNS resolution of the FortiSwitch unit's IP address by use of its serial number.	option	-	enable												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable DNS resolution of the FortiSwitch unit's IP address by use of its serial number.</td></tr><tr><td>disable</td><td>Disable DNS resolution of the FortiSwitch unit's IP address by use of its serial number.</td></tr></table>				Option	Description	enable	Enable DNS resolution of the FortiSwitch unit's IP address by use of its serial number.	disable	Disable DNS resolution of the FortiSwitch unit's IP address by use of its serial number.						
Option	Description															
enable	Enable DNS resolution of the FortiSwitch unit's IP address by use of its serial number.															
disable	Disable DNS resolution of the FortiSwitch unit's IP address by use of its serial number.															
update-user-device	Control which sources update the device user list.	option	-	mac-cache lldp dhcp-snooping l2-db l3-db												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>mac-cache</td><td>Update MAC address from switch-controller mac-cache.</td></tr><tr><td>lldp</td><td>Update from FortiSwitch LLDP neighbor database.</td></tr><tr><td>dhcp-snooping</td><td>Update from FortiSwitch DHCP snooping client and server databases.</td></tr><tr><td>l2-db</td><td>Update from FortiSwitch Network-monitor Layer 2 tracking database.</td></tr><tr><td>l3-db</td><td>Update from FortiSwitch Network-monitor Layer 3 tracking database.</td></tr></table>				Option	Description	mac-cache	Update MAC address from switch-controller mac-cache.	lldp	Update from FortiSwitch LLDP neighbor database.	dhcp-snooping	Update from FortiSwitch DHCP snooping client and server databases.	l2-db	Update from FortiSwitch Network-monitor Layer 2 tracking database.	l3-db	Update from FortiSwitch Network-monitor Layer 3 tracking database.
Option	Description															
mac-cache	Update MAC address from switch-controller mac-cache.															
lldp	Update from FortiSwitch LLDP neighbor database.															
dhcp-snooping	Update from FortiSwitch DHCP snooping client and server databases.															
l2-db	Update from FortiSwitch Network-monitor Layer 2 tracking database.															
l3-db	Update from FortiSwitch Network-monitor Layer 3 tracking database.															
vlan-all-mode	VLAN configuration mode, user-defined-vlans or all-possible-vlans.	option	-	defined												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>all</td><td>Include all possible VLANs (1-4093).</td></tr><tr><td>defined</td><td>Include user defined VLANs.</td></tr></table>				Option	Description	all	Include all possible VLANs (1-4093).	defined	Include user defined VLANs.						
Option	Description															
all	Include all possible VLANs (1-4093).															
defined	Include user defined VLANs.															

Parameter	Description	Type	Size	Default						
vlan-identity	Identity of the VLAN. Commonly used for RADIUS Tunnel-Private-Group-Id.	option	-	name						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>description</i></td><td>Configure the VLAN description to that of the FortiOS interface description if available; otherwise use the interface name.</td></tr><tr><td><i>name</i></td><td>Configure the VLAN description to that of the FortiOS interface name.</td></tr></table>				Option	Description	<i>description</i>	Configure the VLAN description to that of the FortiOS interface description if available; otherwise use the interface name.	<i>name</i>	Configure the VLAN description to that of the FortiOS interface name.
Option	Description									
<i>description</i>	Configure the VLAN description to that of the FortiOS interface description if available; otherwise use the interface name.									
<i>name</i>	Configure the VLAN description to that of the FortiOS interface name.									
vlan-optimization	FortiLink VLAN optimization.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable VLAN optimization on FortiSwitch units for auto-generated trunks.</td></tr><tr><td><i>disable</i></td><td>Disable VLAN optimization on FortiSwitch units for auto-generated trunks.</td></tr></table>				Option	Description	<i>enable</i>	Enable VLAN optimization on FortiSwitch units for auto-generated trunks.	<i>disable</i>	Disable VLAN optimization on FortiSwitch units for auto-generated trunks.
Option	Description									
<i>enable</i>	Enable VLAN optimization on FortiSwitch units for auto-generated trunks.									
<i>disable</i>	Disable VLAN optimization on FortiSwitch units for auto-generated trunks.									

config custom-command

Parameter	Description	Type	Size	Default
command-entry	List of FortiSwitch commands.	string	Maximum length: 35	
command-name	Name of custom command to push to all FortiSwitches in VDOM.	string	Maximum length: 35	

config switch-controller igmp-snooping



This command is available for model(s): FortiGate 1000D, FortiGate 1000F, FortiGate 1001F, FortiGate 100EF, FortiGate 100E, FortiGate 100F, FortiGate 101F, FortiGate 1100E, FortiGate 1101E, FortiGate 140E-POE, FortiGate 140E, FortiGate 1500DT, FortiGate 1500D, FortiGate 1800F, FortiGate 1801F, FortiGate 2000E, FortiGate 200E, FortiGate 200F, FortiGate 201E, FortiGate 201F, FortiGate 2201E, FortiGate 2500E, FortiGate 2600F, FortiGate 2601F, FortiGate 3000D, FortiGate 3000F, FortiGate 3001F, FortiGate 300E, FortiGate 301E, FortiGate 3100D, FortiGate 3200D, FortiGate 3200F, FortiGate 3201F, FortiGate 3300E, FortiGate 3301E, FortiGate 3400E, FortiGate 3401E, FortiGate 3501F, FortiGate 3600E, FortiGate 3601E, FortiGate 3700D, FortiGate 3700F, FortiGate 3701F, FortiGate 3960E, FortiGate 3980E, FortiGate 400E Bypass, FortiGate 400E, FortiGate 400F, FortiGate 401E, FortiGate 401F, FortiGate 40F 3G4G, FortiGate 4200F, FortiGate 4201F, FortiGate 4400F, FortiGate 4401F, FortiGate 500E, FortiGate 501E, FortiGate 600E, FortiGate 601E, FortiGate 60E-POE, FortiGate 60E, FortiGate 60F, FortiGate 61E, FortiGate 70F, FortiGate 71F, FortiGate 800D, FortiGate 80E-POE, FortiGate 80E, FortiGate 80F Bypass, FortiGate 80F DSL, FortiGate 80F-POE, FortiGate 80F, FortiGate 81E-POE, FortiGate 81E, FortiGate 81F-POE, FortiGate 81F, FortiGate 900D, FortiGate 90E, FortiGate 91E, FortiGate-VM64 Aliyun, FortiGate-VM64 AWS, FortiGate-VM64 Azure, FortiGate-VM64 GCP, FortiGate-VM64 OPC, FortiGate-VM64, FortiGateRugged 60F 3G4G, FortiGateRugged 60F, FortiGateRugged 70F 3G4G, FortiGateRugged 70F, FortiWiFi 40F 3G4G, FortiWiFi 40F, FortiWiFi 60E, FortiWiFi 60F, FortiWiFi 61E, FortiWiFi 61F, FortiWiFi 80F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G-POE, FortiWiFi 81F 2R-POE, FortiWiFi 81F 2R.

It is not available for: FortiGate 5001E1, FortiGate 5001E.

Configure FortiSwitch IGMP snooping global settings.

```
config switch-controller igmp-snooping
  Description: Configure FortiSwitch IGMP snooping global settings.
  set aging-time {integer}
  set flood-unknown-multicast [enable|disable]
  set query-interval {integer}
end
```

config switch-controller igmp-snooping

Parameter	Description	Type	Size	Default
aging-time	Maximum number of seconds to retain a multicast snooping entry for which no packets have been seen (15 - 3600 sec, default = 300).	integer	Minimum value: 15 Maximum value: 3600	300
flood-unknown-multicast	Enable/disable unknown multicast flooding.	option	-	disable

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>enable</i>	Enable unknown multicast flooding.		
	<i>disable</i>	Disable unknown multicast flooding.		
query-interval	Maximum time after which IGMP query will be sent (10 - 1200 sec, default = 125).	integer	Minimum value: 10 Maximum value: 1200	125

config switch-controller initial-config template



This command is available for model(s): FortiGate 1000D, FortiGate 1000F, FortiGate 1001F, FortiGate 100EF, FortiGate 100E, FortiGate 100F, FortiGate 101F, FortiGate 1100E, FortiGate 1101E, FortiGate 140E-POE, FortiGate 140E, FortiGate 1500DT, FortiGate 1500D, FortiGate 1800F, FortiGate 1801F, FortiGate 2000E, FortiGate 200E, FortiGate 200F, FortiGate 201E, FortiGate 201F, FortiGate 2201E, FortiGate 2500E, FortiGate 2600F, FortiGate 2601F, FortiGate 3000D, FortiGate 3000F, FortiGate 3001F, FortiGate 300E, FortiGate 301E, FortiGate 3100D, FortiGate 3200D, FortiGate 3200F, FortiGate 3201F, FortiGate 3300E, FortiGate 3301E, FortiGate 3400E, FortiGate 3401E, FortiGate 3501F, FortiGate 3600E, FortiGate 3601E, FortiGate 3700D, FortiGate 3700F, FortiGate 3701F, FortiGate 3960E, FortiGate 3980E, FortiGate 400E Bypass, FortiGate 400E, FortiGate 400F, FortiGate 401E, FortiGate 401F, FortiGate 40F 3G4G, FortiGate 4200F, FortiGate 4201F, FortiGate 4400F, FortiGate 4401F, FortiGate 500E, FortiGate 501E, FortiGate 600E, FortiGate 601E, FortiGate 60E-POE, FortiGate 60E, FortiGate 60F, FortiGate 61E, FortiGate 70F, FortiGate 71F, FortiGate 800D, FortiGate 80E-POE, FortiGate 80E, FortiGate 80F Bypass, FortiGate 80F DSL, FortiGate 80F-POE, FortiGate 80F, FortiGate 81E-POE, FortiGate 81E, FortiGate 81F-POE, FortiGate 81F, FortiGate 900D, FortiGate 90E, FortiGate 91E, FortiGate-VM64 Aliyun, FortiGate-VM64 AWS, FortiGate-VM64 Azure, FortiGate-VM64 GCP, FortiGate-VM64 OPC, FortiGate-VM64, FortiGateRugged 60F 3G4G, FortiGateRugged 60F, FortiGateRugged 70F 3G4G, FortiGateRugged 70F, FortiWiFi 40F 3G4G, FortiWiFi 40F, FortiWiFi 60E, FortiWiFi 60F, FortiWiFi 61E, FortiWiFi 61F, FortiWiFi 80F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G-POE, FortiWiFi 81F 2R-POE, FortiWiFi 81F 2R.

It is not available for: FortiGate 5001E1, FortiGate 5001E.

Configure template for auto-generated VLANs.

```
config switch-controller initial-config template
  Description: Configure template for auto-generated VLANs.
  edit <name>
    set allowaccess {option1}, {option2}, ...
    set auto-ip [enable|disable]
    set dhcp-server [enable|disable]
    set ip {ipv4-classnet-host}
```

```

        set vlanid {integer}
    next
end

```

config switch-controller initial-config template

Parameter	Description	Type	Size	Default																								
allowaccess	Permitted types of management access to this interface.	option	-																									
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>ping</i></td><td>PING access.</td></tr><tr><td><i>https</i></td><td>HTTPS access.</td></tr><tr><td><i>ssh</i></td><td>SSH access.</td></tr><tr><td><i>snmp</i></td><td>SNMP access.</td></tr><tr><td><i>http</i></td><td>HTTP access.</td></tr><tr><td><i>telnet</i></td><td>TELNET access.</td></tr><tr><td><i>fgfm</i></td><td>FortiManager access.</td></tr><tr><td><i>radius-acct</i></td><td>RADIUS accounting access.</td></tr><tr><td><i>probe-response</i></td><td>Probe access.</td></tr><tr><td><i>fabric</i></td><td>Security Fabric access.</td></tr><tr><td><i>ftm</i></td><td>FTM access.</td></tr></table>	Option	Description	<i>ping</i>	PING access.	<i>https</i>	HTTPS access.	<i>ssh</i>	SSH access.	<i>snmp</i>	SNMP access.	<i>http</i>	HTTP access.	<i>telnet</i>	TELNET access.	<i>fgfm</i>	FortiManager access.	<i>radius-acct</i>	RADIUS accounting access.	<i>probe-response</i>	Probe access.	<i>fabric</i>	Security Fabric access.	<i>ftm</i>	FTM access.			
Option	Description																											
<i>ping</i>	PING access.																											
<i>https</i>	HTTPS access.																											
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<i>probe-response</i>	Probe access.																											
<i>fabric</i>	Security Fabric access.																											
<i>ftm</i>	FTM access.																											
auto-ip	Automatically allocate interface address and subnet block.	option	-	enable																								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable auto-ip status.</td></tr><tr><td><i>disable</i></td><td>Disable auto-ip status.</td></tr></table>	Option	Description	<i>enable</i>	Enable auto-ip status.	<i>disable</i>	Disable auto-ip status.																					
Option	Description																											
<i>enable</i>	Enable auto-ip status.																											
<i>disable</i>	Disable auto-ip status.																											
dhcp-server	Enable/disable a DHCP server on this interface.	option	-	disable																								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable DHCP server.</td></tr><tr><td><i>disable</i></td><td>Disable DHCP server.</td></tr></table>	Option	Description	<i>enable</i>	Enable DHCP server.	<i>disable</i>	Disable DHCP server.																					
Option	Description																											
<i>enable</i>	Enable DHCP server.																											
<i>disable</i>	Disable DHCP server.																											

Parameter	Description	Type	Size	Default
ip	Interface IPv4 address and subnet mask.	ipv4-classnet-host	Not Specified	0.0.0.0 0.0.0.0
name	Initial config template name.	string	Maximum length: 63	
vlanid	Unique VLAN ID.	integer	Minimum value: 1 Maximum value: 4094	0

config switch-controller initial-config vlans



This command is available for model(s): FortiGate 1000D, FortiGate 1000F, FortiGate 1001F, FortiGate 100EF, FortiGate 100E, FortiGate 100F, FortiGate 101F, FortiGate 1100E, FortiGate 1101E, FortiGate 140E-POE, FortiGate 140E, FortiGate 1500DT, FortiGate 1500D, FortiGate 1800F, FortiGate 1801F, FortiGate 2000E, FortiGate 200E, FortiGate 200F, FortiGate 201E, FortiGate 201F, FortiGate 2201E, FortiGate 2500E, FortiGate 2600F, FortiGate 2601F, FortiGate 3000D, FortiGate 3000F, FortiGate 3001F, FortiGate 300E, FortiGate 301E, FortiGate 3100D, FortiGate 3200D, FortiGate 3200F, FortiGate 3201F, FortiGate 3300E, FortiGate 3301E, FortiGate 3400E, FortiGate 3401E, FortiGate 3501F, FortiGate 3600E, FortiGate 3601E, FortiGate 3700D, FortiGate 3700F, FortiGate 3701F, FortiGate 3960E, FortiGate 3980E, FortiGate 400E Bypass, FortiGate 400E, FortiGate 400F, FortiGate 401E, FortiGate 401F, FortiGate 40F 3G4G, FortiGate 4200F, FortiGate 4201F, FortiGate 4400F, FortiGate 4401F, FortiGate 500E, FortiGate 501E, FortiGate 600E, FortiGate 601E, FortiGate 60E-POE, FortiGate 60E, FortiGate 60F, FortiGate 61E, FortiGate 70F, FortiGate 71F, FortiGate 800D, FortiGate 80E-POE, FortiGate 80E, FortiGate 80F Bypass, FortiGate 80F DSL, FortiGate 80F-POE, FortiGate 80F, FortiGate 81E-POE, FortiGate 81E, FortiGate 81F-POE, FortiGate 81F, FortiGate 900D, FortiGate 90E, FortiGate 91E, FortiGate-VM64 Aliyun, FortiGate-VM64 AWS, FortiGate-VM64 Azure, FortiGate-VM64 GCP, FortiGate-VM64 OPC, FortiGate-VM64, FortiGateRugged 60F 3G4G, FortiGateRugged 60F, FortiGateRugged 70F 3G4G, FortiGateRugged 70F, FortiWiFi 40F 3G4G, FortiWiFi 40F, FortiWiFi 60E, FortiWiFi 60F, FortiWiFi 61E, FortiWiFi 61F, FortiWiFi 80F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G-POE, FortiWiFi 81F 2R-POE, FortiWiFi 81F 2R.

It is not available for: FortiGate 5001E1, FortiGate 5001E.

Configure initial template for auto-generated VLAN interfaces.

```
config switch-controller initial-config vlans
  Description: Configure initial template for auto-generated VLAN interfaces.
  set default-vlan {string}
  set nac {string}
  set nac-segment {string}
  set quarantine {string}
```

```

set rspan {string}
set video {string}
set voice {string}
end

```

config switch-controller initial-config vlans

Parameter	Description	Type	Size	Default
default-vlan	Default VLAN (native) assigned to all switch ports upon discovery.	string	Maximum length: 63	_default
nac	VLAN for NAC onboarding devices.	string	Maximum length: 63	onboarding
nac-segment	VLAN for NAC segment primary interface.	string	Maximum length: 63	nac_segment
quarantine	VLAN for quarantined traffic.	string	Maximum length: 63	quarantine
rspan	VLAN for RSPAN/ERSPAN mirrored traffic.	string	Maximum length: 63	rspan
video	VLAN dedicated for video devices.	string	Maximum length: 63	video
voice	VLAN dedicated for voice devices.	string	Maximum length: 63	voice

config switch-controller lldp-profile



This command is available for model(s): FortiGate 1000D, FortiGate 1000F, FortiGate 1001F, FortiGate 100EF, FortiGate 100E, FortiGate 100F, FortiGate 101F, FortiGate 1100E, FortiGate 1101E, FortiGate 140E-POE, FortiGate 140E, FortiGate 1500DT, FortiGate 1500D, FortiGate 1800F, FortiGate 1801F, FortiGate 2000E, FortiGate 200E, FortiGate 200F, FortiGate 201E, FortiGate 201F, FortiGate 2201E, FortiGate 2500E, FortiGate 2600F, FortiGate 2601F, FortiGate 3000D, FortiGate 3000F, FortiGate 3001F, FortiGate 300E, FortiGate 301E, FortiGate 3100D, FortiGate 3200D, FortiGate 3200F, FortiGate 3201F, FortiGate 3300E, FortiGate 3301E, FortiGate 3400E, FortiGate 3401E, FortiGate 3501F, FortiGate 3600E, FortiGate 3601E, FortiGate 3700D, FortiGate 3700F, FortiGate 3701F, FortiGate 3960E, FortiGate 3980E, FortiGate 400E Bypass, FortiGate 400E, FortiGate 400F, FortiGate 401E, FortiGate 401F, FortiGate 40F 3G4G, FortiGate 4200F, FortiGate 4201F, FortiGate 4400F, FortiGate 4401F, FortiGate 500E, FortiGate 501E, FortiGate 600E, FortiGate 601E, FortiGate 60E-POE, FortiGate 60E, FortiGate 60F, FortiGate 61E, FortiGate 70F, FortiGate 71F, FortiGate 800D, FortiGate 80E-POE, FortiGate 80E, FortiGate 80F Bypass, FortiGate 80F DSL, FortiGate 80F-POE, FortiGate 80F, FortiGate 81E-POE, FortiGate 81E, FortiGate 81F-POE, FortiGate 81F, FortiGate 900D, FortiGate 90E, FortiGate 91E, FortiGate-VM64 Aliyun, FortiGate-VM64 AWS, FortiGate-VM64 Azure, FortiGate-VM64 GCP, FortiGate-VM64 OPC, FortiGate-VM64, FortiGateRugged 60F 3G4G, FortiGateRugged 60F, FortiGateRugged 70F 3G4G, FortiGateRugged 70F, FortiWiFi 40F 3G4G, FortiWiFi 40F, FortiWiFi 60E, FortiWiFi 60F, FortiWiFi 61E, FortiWiFi 61F, FortiWiFi 80F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G-POE, FortiWiFi 81F 2R-POE, FortiWiFi 81F 2R.

It is not available for: FortiGate 5001E1, FortiGate 5001E.

Configure FortiSwitch LLDP profiles.

```
config switch-controller lldp-profile
  Description: Configure FortiSwitch LLDP profiles.
  edit <name>
    set 802 1-tlvs {option1}, {option2}, ...
    set 802 3-tlvs {option1}, {option2}, ...
    set auto-isl [disable|enable]
    set auto-isl-hello-timer {integer}
    set auto-isl-port-group {integer}
    set auto-isl-receive-timeout {integer}
    set auto-mclag-icl [disable|enable]
    config custom-tlvs
      Description: Configuration method to edit custom TLV entries.
      edit <name>
        set information-string {user}
        set oui {user}
        set subtype {integer}
      next
    end
    config med-location-service
      Description: Configuration method to edit Media Endpoint Discovery (MED) location
      service type-length-value (TLV) categories.
```

```

    edit <name>
        set status [disable|enable]
        set sys-location-id {string}
    next
end
config med-network-policy
    Description: Configuration method to edit Media Endpoint Discovery (MED) network
policy type-length-value (TLV) categories.
    edit <name>
        set assign-vlan [disable|enable]
        set dscp {integer}
        set priority {integer}
        set status [disable|enable]
        set vlan-intf {string}
    next
end
set med-tlvs {option1}, {option2}, ...
next
end

```

config switch-controller lldp-profile

Parameter	Description	Type	Size	Default						
802 1-tlvs	Transmitted IEEE 802.1 TLVs.	option	-							
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>port-vlan-id</i></td><td>Port native VLAN TLV.</td></tr></table>	Option	Description	<i>port-vlan-id</i>	Port native VLAN TLV.					
Option	Description									
<i>port-vlan-id</i>	Port native VLAN TLV.									
802 3-tlvs	Transmitted IEEE 802.3 TLVs.	option	-							
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>max-frame-size</i></td><td>Maximum frame size TLV.</td></tr><tr><td><i>power-negotiation</i></td><td>PoE+ classification TLV.</td></tr></table>	Option	Description	<i>max-frame-size</i>	Maximum frame size TLV.	<i>power-negotiation</i>	PoE+ classification TLV.			
Option	Description									
<i>max-frame-size</i>	Maximum frame size TLV.									
<i>power-negotiation</i>	PoE+ classification TLV.									
auto-isl	Enable/disable auto inter-switch LAG.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>disable</i></td><td>Disable automatic MCLAG inter chassis link.</td></tr><tr><td><i>enable</i></td><td>Enable automatic MCLAG inter chassis link.</td></tr></table>	Option	Description	<i>disable</i>	Disable automatic MCLAG inter chassis link.	<i>enable</i>	Enable automatic MCLAG inter chassis link.			
Option	Description									
<i>disable</i>	Disable automatic MCLAG inter chassis link.									
<i>enable</i>	Enable automatic MCLAG inter chassis link.									
auto-isl-hello-timer	Auto inter-switch LAG hello timer duration (1 - 30 sec, default = 3).	integer	Minimum value: 1 Maximum value: 30	3						

Parameter	Description	Type	Size	Default										
auto-isl-port-group	Auto inter-switch LAG port group ID (0 - 9).	integer	Minimum value: 0 Maximum value: 9	0										
auto-isl-receive-timeout	Auto inter-switch LAG timeout if no response is received (3 - 90 sec, default = 9).	integer	Minimum value: 0 Maximum value: 90	60										
auto-mclag-icl	Enable/disable MCLAG inter chassis link.	option	-	disable										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>disable</i></td><td>Disable auto inter-switch-LAG.</td></tr><tr><td><i>enable</i></td><td>Enable auto inter-switch-LAG.</td></tr></table>				Option	Description	<i>disable</i>	Disable auto inter-switch-LAG.	<i>enable</i>	Enable auto inter-switch-LAG.				
Option	Description													
<i>disable</i>	Disable auto inter-switch-LAG.													
<i>enable</i>	Enable auto inter-switch-LAG.													
med-tlvs	Transmitted LLDP-MED TLVs (type-length-value descriptions).	option	-											
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>inventory-management</i></td><td>Inventory management TLVs.</td></tr><tr><td><i>network-policy</i></td><td>Network policy TLVs.</td></tr><tr><td><i>power-management</i></td><td>Power manangement TLVs.</td></tr><tr><td><i>location-identification</i></td><td>Location identificaion TLVs.</td></tr></table>				Option	Description	<i>inventory-management</i>	Inventory management TLVs.	<i>network-policy</i>	Network policy TLVs.	<i>power-management</i>	Power manangement TLVs.	<i>location-identification</i>	Location identificaion TLVs.
Option	Description													
<i>inventory-management</i>	Inventory management TLVs.													
<i>network-policy</i>	Network policy TLVs.													
<i>power-management</i>	Power manangement TLVs.													
<i>location-identification</i>	Location identificaion TLVs.													
name	Profile name.	string	Maximum length: 63											

config custom-tlvs

Parameter	Description	Type	Size	Default
information-string	Organizationally defined information string (0 - 507 hexadecimal bytes).	user	Not Specified	
name	TLV name (not sent).	string	Maximum length: 63	
oui	Organizationally unique identifier (OUI), a 3-byte hexadecimal number, for this TLV.	user	Not Specified	000000

Parameter	Description	Type	Size	Default
subtype	Organizationally defined subtype (0 - 255).	integer	Minimum value: 0 Maximum value: 255	0

config med-location-service

Parameter	Description	Type	Size	Default						
name	Location service type name.	string	Maximum length: 63							
status	Enable or disable this TLV.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>disable</i></td><td>Do not transmit this location service TLV.</td></tr><tr><td><i>enable</i></td><td>Transmit this location service TLV.</td></tr></table>				Option	Description	<i>disable</i>	Do not transmit this location service TLV.	<i>enable</i>	Transmit this location service TLV.
	Option	Description								
	<i>disable</i>	Do not transmit this location service TLV.								
<i>enable</i>	Transmit this location service TLV.									
sys-location-id	Location service ID.	string	Maximum length: 63							

config med-network-policy

Parameter	Description	Type	Size	Default						
assign-vlan	Enable/disable VLAN assignment when this profile is applied on managed FortiSwitch port.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Disable VLAN assignment when this profile is applied on port.</td></tr><tr><td>enable</td><td>Enable VLAN assignment when this profile is applied on port.</td></tr></table>	Option	Description	disable	Disable VLAN assignment when this profile is applied on port.	enable	Enable VLAN assignment when this profile is applied on port.			
Option	Description									
disable	Disable VLAN assignment when this profile is applied on port.									
enable	Enable VLAN assignment when this profile is applied on port.									
dscp	Advertised Differentiated Services Code Point (DSCP) value, a packet header value indicating the level of service requested for traffic, such as high priority or best effort delivery.	integer	Minimum value: 0 Maximum value: 63	0						
name	Policy type name.	string	Maximum length: 63							
priority	Advertised Layer 2 priority (0 - 7; from lowest to highest priority).	integer	Minimum value: 0 Maximum value: 7	0						
status	Enable or disable this TLV.	option	-	disable						

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>disable</i>	Do not transmit this network policy TLV.		
	<i>enable</i>	Transmit this TLV if a VLAN has been added to the port.		
vlan-intf	VLAN interface to advertise; if configured on port.	string	Maximum length: 15	

config switch-controller lldp-settings



This command is available for model(s): FortiGate 1000D, FortiGate 1000F, FortiGate 1001F, FortiGate 100EF, FortiGate 100E, FortiGate 100F, FortiGate 101F, FortiGate 1100E, FortiGate 1101E, FortiGate 140E-POE, FortiGate 140E, FortiGate 1500DT, FortiGate 1500D, FortiGate 1800F, FortiGate 1801F, FortiGate 2000E, FortiGate 200E, FortiGate 200F, FortiGate 201E, FortiGate 201F, FortiGate 2201E, FortiGate 2500E, FortiGate 2600F, FortiGate 2601F, FortiGate 3000D, FortiGate 3000F, FortiGate 3001F, FortiGate 300E, FortiGate 301E, FortiGate 3100D, FortiGate 3200D, FortiGate 3200F, FortiGate 3201F, FortiGate 3300E, FortiGate 3301E, FortiGate 3400E, FortiGate 3401E, FortiGate 3501F, FortiGate 3600E, FortiGate 3601E, FortiGate 3700D, FortiGate 3700F, FortiGate 3701F, FortiGate 3960E, FortiGate 3980E, FortiGate 400E Bypass, FortiGate 400E, FortiGate 400F, FortiGate 401E, FortiGate 401F, FortiGate 40F 3G4G, FortiGate 4200F, FortiGate 4201F, FortiGate 4400F, FortiGate 4401F, FortiGate 500E, FortiGate 501E, FortiGate 600E, FortiGate 601E, FortiGate 60E-POE, FortiGate 60E, FortiGate 60F, FortiGate 61E, FortiGate 70F, FortiGate 71F, FortiGate 800D, FortiGate 80E-POE, FortiGate 80E, FortiGate 80F Bypass, FortiGate 80F DSL, FortiGate 80F-POE, FortiGate 80F, FortiGate 81E-POE, FortiGate 81E, FortiGate 81F-POE, FortiGate 81F, FortiGate 900D, FortiGate 90E, FortiGate 91E, FortiGate-VM64 Aliyun, FortiGate-VM64 AWS, FortiGate-VM64 Azure, FortiGate-VM64 GCP, FortiGate-VM64 OPC, FortiGate-VM64, FortiGateRugged 60F 3G4G, FortiGateRugged 60F, FortiGateRugged 70F 3G4G, FortiGateRugged 70F, FortiWiFi 40F 3G4G, FortiWiFi 40F, FortiWiFi 60E, FortiWiFi 60F, FortiWiFi 61E, FortiWiFi 61F, FortiWiFi 80F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G-POE, FortiWiFi 81F 2R-POE, FortiWiFi 81F 2R.

It is not available for: FortiGate 5001E1, FortiGate 5001E.

Configure FortiSwitch LLDP settings.

```
config switch-controller lldp-settings
    Description: Configure FortiSwitch LLDP settings.
    set device-detection [disable|enable]
    set fast-start-interval {integer}
    set management-interface [internal|mgmt]
    set tx-hold {integer}
    set tx-interval {integer}
end
```

config switch-controller lldp-settings

Parameter	Description	Type	Size	Default
device-detection	Enable/disable dynamic detection of LLDP neighbor devices for VLAN assignment.	option	-	enable
	Option	Description		
	disable	Disable dynamic detection of LLDP neighbor devices.		
	enable	Enable dynamic detection of LLDP neighbor devices.		
fast-start-interval	Frequency of LLDP PDU transmission from FortiSwitch for the first 4 packets when the link is up (2 - 5 sec, default = 2, 0 = disable fast start).	integer	Minimum value: 0 Maximum value: 255	2
management-interface	Primary management interface to be advertised in LLDP and CDP PDUs.	option	-	internal
	Option	Description		
	internal	Use internal interface.		
	mgmt	Use management interface.		
tx-hold	Number of tx-intervals before local LLDP data expires (1 - 16, default = 4). Packet TTL is tx-hold * tx-interval.	integer	Minimum value: 1 Maximum value: 16	4
tx-interval	Frequency of LLDP PDU transmission from FortiSwitch (5 - 4095 sec, default = 30). Packet TTL is tx-hold * tx-interval.	integer	Minimum value: 5 Maximum value: 4095	30

config switch-controller location



This command is available for model(s): FortiGate 1000D, FortiGate 1000F, FortiGate 1001F, FortiGate 100EF, FortiGate 100E, FortiGate 100F, FortiGate 101F, FortiGate 1100E, FortiGate 1101E, FortiGate 140E-POE, FortiGate 140E, FortiGate 1500DT, FortiGate 1500D, FortiGate 1800F, FortiGate 1801F, FortiGate 2000E, FortiGate 200E, FortiGate 200F, FortiGate 201E, FortiGate 201F, FortiGate 2201E, FortiGate 2500E, FortiGate 2600F, FortiGate 2601F, FortiGate 3000D, FortiGate 3000F, FortiGate 3001F, FortiGate 300E, FortiGate 301E, FortiGate 3100D, FortiGate 3200D, FortiGate 3200F, FortiGate 3201F, FortiGate 3300E, FortiGate 3301E, FortiGate 3400E, FortiGate 3401E, FortiGate 3501F, FortiGate 3600E, FortiGate 3601E, FortiGate 3700D, FortiGate 3700F, FortiGate 3701F, FortiGate 3960E, FortiGate 3980E, FortiGate 400E Bypass, FortiGate 400E, FortiGate 400F, FortiGate 401E, FortiGate 401F, FortiGate 40F 3G4G, FortiGate 4200F, FortiGate 4201F, FortiGate 4400F, FortiGate 4401F, FortiGate 500E, FortiGate 501E, FortiGate 600E, FortiGate 601E, FortiGate 60E-POE, FortiGate 60E, FortiGate 60F, FortiGate 61E, FortiGate 70F, FortiGate 71F, FortiGate 800D, FortiGate 80E-POE, FortiGate 80E, FortiGate 80F Bypass, FortiGate 80F DSL, FortiGate 80F-POE, FortiGate 80F, FortiGate 81E-POE, FortiGate 81E, FortiGate 81F-POE, FortiGate 81F, FortiGate 900D, FortiGate 90E, FortiGate 91E, FortiGate-VM64 Aliyun, FortiGate-VM64 AWS, FortiGate-VM64 Azure, FortiGate-VM64 GCP, FortiGate-VM64 OPC, FortiGate-VM64, FortiGateRugged 60F 3G4G, FortiGateRugged 60F, FortiGateRugged 70F 3G4G, FortiGateRugged 70F, FortiWiFi 40F 3G4G, FortiWiFi 40F, FortiWiFi 60E, FortiWiFi 60F, FortiWiFi 61E, FortiWiFi 61F, FortiWiFi 80F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G-POE, FortiWiFi 81F 2R-POE, FortiWiFi 81F 2R.

It is not available for: FortiGate 5001E1, FortiGate 5001E.

Configure FortiSwitch location services.

```
config switch-controller location
  Description: Configure FortiSwitch location services.
  edit <name>
    config address-civic
      Description: Configure location civic address.
      set additional {string}
      set additional-code {string}
      set block {string}
      set branch-road {string}
      set building {string}
      set city {string}
      set city-division {string}
      set country {string}
      set country-subdivision {string}
      set county {string}
      set direction {string}
      set floor {string}
      set landmark {string}
      set language {string}
      set name {string}
      set number {string}
```

```

        set number-suffix {string}
        set parent-key {string}
        set place-type {string}
        set post-office-box {string}
        set postal-community {string}
        set primary-road {string}
        set road-section {string}
        set room {string}
        set script {string}
        set seat {string}
        set street {string}
        set street-name-post-mod {string}
        set street-name-pre-mod {string}
        set street-suffix {string}
        set sub-branch-road {string}
        set trailing-str-suffix {string}
        set unit {string}
        set zip {string}
    end
    config coordinates
        Description: Configure location GPS coordinates.
        set altitude {string}
        set altitude-unit [m|f]
        set datum [WGS84|NAD83|...]
        set latitude {string}
        set longitude {string}
        set parent-key {string}
    end
    config elin-number
        Description: Configure location ELIN number.
        set elin-num {string}
        set parent-key {string}
    end
next
end

```

config switch-controller location

Parameter	Description	Type	Size	Default
name	Unique location item name.	string	Maximum length: 63	

config address-civic

Parameter	Description	Type	Size	Default
additional	Location additional details.	string	Maximum length: 47	

Parameter	Description	Type	Size	Default
additional-code	Location additional code details.	string	Maximum length: 47	
block	Location block details.	string	Maximum length: 47	
branch-road	Location branch road details.	string	Maximum length: 47	
building	Location building details.	string	Maximum length: 47	
city	Location city details.	string	Maximum length: 47	
city-division	Location city division details.	string	Maximum length: 47	
country	The two-letter ISO 3166 country code in capital ASCII letters eg. US, CA, DK, DE.	string	Maximum length: 47	
country-subdivision	National subdivisions (state, canton, region, province, or prefecture).	string	Maximum length: 47	
county	County, parish, gun (JP), or district (IN).	string	Maximum length: 47	
direction	Leading street direction.	string	Maximum length: 47	
floor	Floor.	string	Maximum length: 47	
landmark	Landmark or vanity address.	string	Maximum length: 47	
language	Language.	string	Maximum length: 47	
name	Name (residence and office occupant).	string	Maximum length: 47	
number	House number.	string	Maximum length: 47	
number-suffix	House number suffix.	string	Maximum length: 47	
parent-key	Parent key name. Read-only.	string	Maximum length: 63	
place-type	Place type.	string	Maximum length: 47	

Parameter	Description	Type	Size	Default
post-office-box	Post office box.	string	Maximum length: 47	
postal-community	Postal community name.	string	Maximum length: 47	
primary-road	Primary road name.	string	Maximum length: 47	
road-section	Road section.	string	Maximum length: 47	
room	Room number.	string	Maximum length: 47	
script	Script used to present the address information.	string	Maximum length: 47	
seat	Seat number.	string	Maximum length: 47	
street	Street.	string	Maximum length: 47	
street-name-post-mod	Street name post modifier.	string	Maximum length: 47	
street-name-pre-mod	Street name pre modifier.	string	Maximum length: 47	
street-suffix	Street suffix.	string	Maximum length: 47	
sub-branch-road	Sub branch road name.	string	Maximum length: 47	
trailing-str-suffix	Trailing street suffix.	string	Maximum length: 47	
unit	Unit (apartment, suite).	string	Maximum length: 47	
zip	Postal/zip code.	string	Maximum length: 47	

config coordinates

Parameter	Description	Type	Size	Default
altitude	Plus or minus floating point number. For example, 117.47.	string	Maximum length: 15	
altitude-unit	Configure the unit for which the altitude is to (m = meters, f = floors of a building).	option	-	m

Parameter	Description	Type	Size	Default								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>m</i></td><td>set altitude unit meters</td></tr><tr><td><i>f</i></td><td>set altitude unit floors</td></tr></table>	Option	Description	<i>m</i>	set altitude unit meters	<i>f</i>	set altitude unit floors					
	Option	Description										
	<i>m</i>	set altitude unit meters										
<i>f</i>	set altitude unit floors											
datum	WGS84, NAD83, NAD83/MLLW.	option	-	WGS84								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>WGS84</i></td><td>set coordinates datum WGS84</td></tr><tr><td><i>NAD83</i></td><td>set coordinates datum NAD83</td></tr><tr><td><i>NAD83/MLLW</i></td><td>set coordinates datum NAD83/MLLW</td></tr></table>	Option	Description	<i>WGS84</i>	set coordinates datum WGS84	<i>NAD83</i>	set coordinates datum NAD83	<i>NAD83/MLLW</i>	set coordinates datum NAD83/MLLW			
	Option	Description										
	<i>WGS84</i>	set coordinates datum WGS84										
	<i>NAD83</i>	set coordinates datum NAD83										
<i>NAD83/MLLW</i>	set coordinates datum NAD83/MLLW											
latitude	Floating point starting with +/- or ending with (N or S). For example, +/-16.67 or 16.67N.	string	Maximum length: 15									
longitude	Floating point starting with +/- or ending with (N or S). For example, +/-26.789 or 26.789E.	string	Maximum length: 15									
parent-key	Parent key name. Read-only.	string	Maximum length: 63									

config elin-number

Parameter	Description	Type	Size	Default
elin-num	Configure ELIN callback number.	string	Maximum length: 31	
parent-key	Parent key name. Read-only.	string	Maximum length: 63	

config switch-controller mac-policy



This command is available for model(s): FortiGate 1000D, FortiGate 1000F, FortiGate 1001F, FortiGate 100EF, FortiGate 100E, FortiGate 100F, FortiGate 101F, FortiGate 1100E, FortiGate 1101E, FortiGate 140E-POE, FortiGate 140E, FortiGate 1500DT, FortiGate 1500D, FortiGate 1800F, FortiGate 1801F, FortiGate 2000E, FortiGate 200E, FortiGate 200F, FortiGate 201E, FortiGate 201F, FortiGate 2201E, FortiGate 2500E, FortiGate 2600F, FortiGate 2601F, FortiGate 3000D, FortiGate 3000F, FortiGate 3001F, FortiGate 300E, FortiGate 301E, FortiGate 3100D, FortiGate 3200D, FortiGate 3200F, FortiGate 3201F, FortiGate 3300E, FortiGate 3301E, FortiGate 3400E, FortiGate 3401E, FortiGate 3501F, FortiGate 3600E, FortiGate 3601E, FortiGate 3700D, FortiGate 3700F, FortiGate 3701F, FortiGate 3960E, FortiGate 3980E, FortiGate 400E Bypass, FortiGate 400E, FortiGate 400F, FortiGate 401E, FortiGate 401F, FortiGate 40F 3G4G, FortiGate 4200F, FortiGate 4201F, FortiGate 4400F, FortiGate 4401F, FortiGate 500E, FortiGate 501E, FortiGate 600E, FortiGate 601E, FortiGate 60E-POE, FortiGate 60E, FortiGate 60F, FortiGate 61E, FortiGate 70F, FortiGate 71F, FortiGate 800D, FortiGate 80E-POE, FortiGate 80E, FortiGate 80F Bypass, FortiGate 80F DSL, FortiGate 80F-POE, FortiGate 80F, FortiGate 81E-POE, FortiGate 81E, FortiGate 81F-POE, FortiGate 81F, FortiGate 900D, FortiGate 90E, FortiGate 91E, FortiGate-VM64 Aliyun, FortiGate-VM64 AWS, FortiGate-VM64 Azure, FortiGate-VM64 GCP, FortiGate-VM64 OPC, FortiGate-VM64, FortiGateRugged 60F 3G4G, FortiGateRugged 60F, FortiGateRugged 70F 3G4G, FortiGateRugged 70F, FortiWiFi 40F 3G4G, FortiWiFi 40F, FortiWiFi 60E, FortiWiFi 60F, FortiWiFi 61E, FortiWiFi 61F, FortiWiFi 80F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G-POE, FortiWiFi 81F 2R-POE, FortiWiFi 81F 2R.

It is not available for: FortiGate 5001E1, FortiGate 5001E.

Configure MAC policy to be applied on the managed FortiSwitch devices through NAC device.

```
config switch-controller mac-policy
    Description: Configure MAC policy to be applied on the managed FortiSwitch devices through NAC
    device.
    edit <name>
        set bounce-port-link [disable|enable]
        set count [disable|enable]
        set description {string}
        set fortilink {string}
        set traffic-policy {string}
        set vlan {string}
    next
end
```

config switch-controller mac-policy

Parameter	Description	Type	Size	Default						
bounce-port-link	Enable/disable bouncing (administratively bring the link down, up) of a switch port where this mac-policy is applied.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Disable bouncing (administratively bring the link down, up) of a switch port where this mac-policy is applied.</td></tr><tr><td>enable</td><td>Enable bouncing (administratively bring the link down, up) of a switch port where this mac-policy is applied.</td></tr></table>	Option	Description	disable	Disable bouncing (administratively bring the link down, up) of a switch port where this mac-policy is applied.	enable	Enable bouncing (administratively bring the link down, up) of a switch port where this mac-policy is applied.			
Option	Description									
disable	Disable bouncing (administratively bring the link down, up) of a switch port where this mac-policy is applied.									
enable	Enable bouncing (administratively bring the link down, up) of a switch port where this mac-policy is applied.									
count	Enable/disable packet count on the NAC device.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Enable packet count on the NAC device.</td></tr><tr><td>enable</td><td>Disable packet count on the NAC device.</td></tr></table>	Option	Description	disable	Enable packet count on the NAC device.	enable	Disable packet count on the NAC device.			
Option	Description									
disable	Enable packet count on the NAC device.									
enable	Disable packet count on the NAC device.									
description	Description for the MAC policy.	string	Maximum length: 63							
fortilink	FortiLink interface for which this MAC policy belongs to.	string	Maximum length: 15							
name	MAC policy name.	string	Maximum length: 63							
traffic-policy	Traffic policy to be applied when using this MAC policy.	string	Maximum length: 63							
vlan	Ingress traffic VLAN assignment for the MAC address matching this MAC policy.	string	Maximum length: 15							

config switch-controller managed-switch



This command is available for model(s): FortiGate 1000D, FortiGate 1000F, FortiGate 1001F, FortiGate 100EF, FortiGate 100E, FortiGate 100F, FortiGate 101F, FortiGate 1100E, FortiGate 1101E, FortiGate 140E-POE, FortiGate 140E, FortiGate 1500DT, FortiGate 1500D, FortiGate 1800F, FortiGate 1801F, FortiGate 2000E, FortiGate 200E, FortiGate 200F, FortiGate 201E, FortiGate 201F, FortiGate 2201E, FortiGate 2500E, FortiGate 2600F, FortiGate 2601F, FortiGate 3000D, FortiGate 3000F, FortiGate 3001F, FortiGate 300E, FortiGate 301E, FortiGate 3100D, FortiGate 3200D, FortiGate 3200F, FortiGate 3201F, FortiGate 3300E, FortiGate 3301E, FortiGate 3400E, FortiGate 3401E, FortiGate 3501F, FortiGate 3600E, FortiGate 3601E, FortiGate 3700D, FortiGate 3700F, FortiGate 3701F, FortiGate 3960E, FortiGate 3980E, FortiGate 400E Bypass, FortiGate 400E, FortiGate 400F, FortiGate 401E, FortiGate 401F, FortiGate 40F 3G4G, FortiGate 4200F, FortiGate 4201F, FortiGate 4400F, FortiGate 4401F, FortiGate 500E, FortiGate 501E, FortiGate 600E, FortiGate 601E, FortiGate 60E-POE, FortiGate 60E, FortiGate 60F, FortiGate 61E, FortiGate 70F, FortiGate 71F, FortiGate 800D, FortiGate 80E-POE, FortiGate 80E, FortiGate 80F Bypass, FortiGate 80F DSL, FortiGate 80F-POE, FortiGate 80F, FortiGate 81E-POE, FortiGate 81E, FortiGate 81F-POE, FortiGate 81F, FortiGate 900D, FortiGate 90E, FortiGate 91E, FortiGate-VM64 Aliyun, FortiGate-VM64 AWS, FortiGate-VM64 Azure, FortiGate-VM64 GCP, FortiGate-VM64 OPC, FortiGate-VM64, FortiGateRugged 60F 3G4G, FortiGateRugged 60F, FortiGateRugged 70F 3G4G, FortiGateRugged 70F, FortiWiFi 40F 3G4G, FortiWiFi 40F, FortiWiFi 60E, FortiWiFi 60F, FortiWiFi 61E, FortiWiFi 61F, FortiWiFi 80F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G-POE, FortiWiFi 81F 2R-POE, FortiWiFi 81F 2R.

It is not available for: FortiGate 5001E1, FortiGate 5001E.

Configure FortiSwitch devices that are managed by this FortiGate.

```
config switch-controller managed-switch
  Description: Configure FortiSwitch devices that are managed by this FortiGate.
  edit <switch-id>
    config 802-1X-settings
      Description: Configuration method to edit FortiSwitch 802.1X global settings.
      set link-down-auth [set-unauth|no-action]
      set local-override [enable|disable]
      set mab-reauth [disable|enable]
      set max-reauth-attempt {integer}
      set reauth-period {integer}
      set tx-period {integer}
    end
    set access-profile {string}
    config custom-command
      Description: Configuration method to edit FortiSwitch commands to be pushed to this
      FortiSwitch device upon rebooting the FortiGate switch controller or the FortiSwitch.
      edit <command-entry>
        set command-name {string}
      next
    end
    set delayed-restart-trigger {integer}
```

```

set description {string}
set dhcp-server-access-list [global|enable|...]
config dhcp-snooping-static-client
    Description: Configure FortiSwitch DHCP snooping static clients.
    edit <name>
        set ip {ipv4-address}
        set mac {mac-address}
        set port {string}
        set vlan {string}
    next
end
set directly-connected {integer}
set dynamic-capability {user}
set dynamically-discovered {integer}
set firmware-provision [enable|disable]
set firmware-provision-latest [disable|once]
set firmware-provision-version {string}
set flow-identity {user}
set fsw-wan1-admin [discovered|disable|...]
set fsw-wan1-peer {string}
config igmp-snooping
    Description: Configure FortiSwitch IGMP snooping global settings.
    set aging-time {integer}
    set flood-unknown-multicast [enable|disable]
    set local-override [enable|disable]
    config vlans
        Description: Configure IGMP snooping VLAN.
        edit <vlan-name>
            set proxy [disable|enable|...]
            set querier [disable|enable]
            set querier-addr {ipv4-address}
            set version {integer}
        next
    end
end
config ip-source-guard
    Description: IP source guard.
    edit <port>
        config binding-entry
            Description: IP and MAC address configuration.
            edit <entry-name>
                set ip {ipv4-address-any}
                set mac {mac-address}
            next
        end
        set description {string}
    next
end
set l3-discovered {integer}
set max-allowed-trunk-members {integer}
set mclag-igmp-snooping-aware [enable|disable]
config mirror

```

```

Description: Configuration method to edit FortiSwitch packet mirror.
edit <name>
    set dst {string}
    set src-egress <name1>, <name2>, ...
    set src-ingress <name1>, <name2>, ...
    set status [active|inactive]
    set switching-packet [enable|disable]
next
end
set name {string}
set override-snmp-community [enable|disable]
set override-snmp-sysinfo [disable|enable]
set override-snmp-trap-threshold [enable|disable]
set override-snmp-user [enable|disable]
set owner-vdom {string}
set poe-detection-type {integer}
set poe-pre-standard-detection [enable|disable]
config ports
    Description: Managed-switch port list.
    edit <port-name>
        set access-mode [dynamic|nac|...]
        set aggregator-mode [bandwidth|count]
        set allowed-vlans <vlan-name1>, <vlan-name2>, ...
        set allowed-vlans-all [enable|disable]
        set arp-inspection-trust [untrusted|trusted]
        set bundle [enable|disable]
        set description {string}
        set dhcp-snoop-option82-trust [enable|disable]
        set dhcp-snooping [untrusted|trusted]
        set discard-mode [none|all-untagged|...]
        set edge-port [enable|disable]
        set export-to {string}
        set export-to-pool {string}
        set fec-capable {integer}
        set fec-state [disabled|cl74|...]
        set fgt-peer-device-name {string}
        set fgt-peer-port-name {string}
        set fiber-port {integer}
        set flags {integer}
        set flap-duration {integer}
        set flap-rate {integer}
        set flap-timeout {integer}
        set flapguard [enable|disable]
        set flow-control [disable|tx|...]
        set fortilink-port {integer}
        set igmp-snooping-flood-reports [enable|disable]
        set interface-tags <tag-name1>, <tag-name2>, ...
        set ip-source-guard [disable|enable]
        set isl-local-trunk-name {string}
        set isl-peer-device-name {string}
        set isl-peer-port-name {string}
        set lacp-speed [slow|fast]

```

```

set learning-limit {integer}
set lldp-profile {string}
set lldp-status [disable|rx-only|...]
set loop-guard [enabled|disabled]
set loop-guard-timeout {integer}
set mac-addr {mac-address}
set matched-dpp-intf-tags {string}
set matched-dpp-policy {string}
set max-bundle {integer}
set mcast-snooping-flood-traffic [enable|disable]
set mclag [enable|disable]
set mclag-icl-port {integer}
set media-type {string}
set member-withdrawal-behavior [forward|block]
set members <member-name1>, <member-name2>, ...
set min-bundle {integer}
set mode [static|lacp-passive|...]
set p2p-port {integer}
set packet-sample-rate {integer}
set packet-sampler [enabled|disabled]
set pause-meter {integer}
set pause-meter-resume [75%|50%|...]
set poe-capable {integer}
set poe-max-power {string}
set poe-mode-bt-capable {integer}
set poe-port-mode [ieee802-3af|ieee802-3at|...]
set poe-port-power [normal|perpetual|...]
set poe-port-priority [critical-priority|high-priority|...]
set poe-pre-standard-detection [enable|disable]
set poe-standard {string}
set poe-status [enable|disable]
set port-number {integer}
set port-owner {string}
set port-policy {string}
set port-prefix-type {integer}
set port-security-policy {string}
set port-selection-criteria [src-mac|dst-mac|...]
set ptp-policy {string}
set qos-policy {string}
set rpvst-port [disabled|enabled]
set sample-direction [tx|rx|...]
set sflow-counter-interval {integer}
set speed [10half|10full|...]
set stacking-port {integer}
set status [up|down]
set sticky-mac [enable|disable]
set storm-control-policy {string}
set stp-bpdu-guard [enabled|disabled]
set stp-bpdu-guard-timeout {integer}
set stp-root-guard [enabled|disabled]
set stp-state [enabled|disabled]
set switch-id {string}

```

```

        set type [physical|trunk]
        set untagged-vlans <vlan-name1>, <vlan-name2>, ...
        set vlan {string}
    next
end
set pre-provisioned {integer}
set qos-drop-policy [taildrop|random-early-detection]
set qos-red-probability {integer}
set radius-nas-ip {ipv4-address}
set radius-nas-ip-override [disable|enable]
config remote-log
    Description: Configure logging by FortiSwitch device to a remote syslog server.
    edit <name>
        set csv [enable|disable]
        set facility [kernel|user|...]
        set port {integer}
        set server {string}
        set severity [emergency|alert|...]
        set status [enable|disable]
    next
end
config snmp-community
    Description: Configuration method to edit Simple Network Management Protocol (SNMP)
communities.
    edit <id>
        set events {option1}, {option2}, ...
        config hosts
            Description: Configure IPv4 SNMP managers (hosts).
            edit <id>
                set ip {user}
            next
        end
        set name {string}
        set query-v1-port {integer}
        set query-v1-status [disable|enable]
        set query-v2c-port {integer}
        set query-v2c-status [disable|enable]
        set status [disable|enable]
        set trap-v1-lport {integer}
        set trap-v1-rport {integer}
        set trap-v1-status [disable|enable]
        set trap-v2c-lport {integer}
        set trap-v2c-rport {integer}
        set trap-v2c-status [disable|enable]
    next
end
config snmp-sysinfo
    Description: Configuration method to edit Simple Network Management Protocol (SNMP)
system info.
    set contact-info {string}
    set description {string}
    set engine-id {string}

```

```

        set location {string}
        set status [disable|enable]
    end
    config snmp-trap-threshold
        Description: Configuration method to edit Simple Network Management Protocol (SNMP)
trap threshold values.
        set trap-high-cpu-threshold {integer}
        set trap-log-full-threshold {integer}
        set trap-low-memory-threshold {integer}
    end
    config snmp-user
        Description: Configuration method to edit Simple Network Management Protocol (SNMP)
users.
        edit <name>
            set auth-proto [md5|sha1|...]
            set auth-pwd {password}
            set priv-proto [aes128|aes192|...]
            set priv-pwd {password}
            set queries [disable|enable]
            set query-port {integer}
            set security-level [no-auth-no-priv|auth-no-priv|...]
        next
    end
    set staged-image-version {string}
    config static-mac
        Description: Configuration method to edit FortiSwitch Static and Sticky MAC.
        edit <id>
            set description {string}
            set interface {string}
            set mac {mac-address}
            set type [static|sticky]
            set vlan {string}
        next
    end
    config storm-control
        Description: Configuration method to edit FortiSwitch storm control for measuring
traffic activity using data rates to prevent traffic disruption.
        set broadcast [enable|disable]
        set local-override [enable|disable]
        set rate {integer}
        set unknown-multicast [enable|disable]
        set unknown-unicast [enable|disable]
    end
    config stp-instance
        Description: Configuration method to edit Spanning Tree Protocol (STP) instances.
        edit <id>
            set priority [0|4096|...]
        next
    end
    config stp-settings
        Description: Configuration method to edit Spanning Tree Protocol (STP) settings used
to prevent bridge loops.

```



```

        set forward-time {integer}
        set hello-time {integer}
        set local-override [enable|disable]
        set max-age {integer}
        set max-hops {integer}
        set name {string}
        set pending-timer {integer}
        set revision {integer}
    end
    set switch-device-tag {string}
    set switch-dhcp_opt43_key {string}
    config switch-log
        Description: Configuration method to edit FortiSwitch logging settings (logs are
transferred to and inserted into the FortiGate event log).
        set local-override [enable|disable]
        set severity [emergency|alert|...]
        set status [enable|disable]
    end
    set switch-profile {string}
    set tdr-supported {string}
    set type [virtual|physical]
    set version {integer}
next
end

```

config switch-controller managed-switch

Parameter	Description	Type	Size	Default
access-profile	FortiSwitch access profile.	string	Maximum length: 31	default
delayed-restart-trigger	Delayed restart triggered for this FortiSwitch.	integer	Minimum value: 0 Maximum value: 255	0
description	Description.	string	Maximum length: 63	
dhcp-server-access-list	DHCP snooping server access list.	option	-	global
		Option	Description	
		<i>global</i>	Use global setting for DHCP snooping server access list.	
		<i>enable</i>	Override global setting and enable DHCP server access list.	
		<i>disable</i>	Override global setting and disable DHCP server access list.	

Parameter	Description	Type	Size	Default
directly-connected	Directly connected FortiSwitch. Read-only.	integer	Minimum value: 0 Maximum value: 1	0
dynamic-capability	List of features this FortiSwitch supports (not configurable) that is sent to the FortiGate device for subsequent configuration initiated by the FortiGate device.	user	Not Specified	0x00000000000000000000000000000000
dynamically-discovered	Dynamically discovered FortiSwitch. Read-only.	integer	Minimum value: 0 Maximum value: 1	0
firmware-provision	Enable/disable provisioning of firmware to FortiSwitches on join connection.	option	-	disable
	Option	Description		
	enable	Enable firmware-provision.		
	disable	Disable firmware-provision.		
firmware-provision-latest	Enable/disable one-time automatic provisioning of the latest firmware version.	option	-	disable
	Option	Description		
	disable	Do not automatically provision the latest available firmware.		
	once	Automatically attempt a one-time upgrade to the latest available firmware version.		

Parameter	Description	Type	Size	Default								
firmware-provision-version	Firmware version to provision to this FortiSwitch on bootup (major.minor.build, i.e. 6.2.1234).	string	Maximum length: 35									
flow-identity	Flow-tracking netflow ipfix switch identity in hex format(00000000-FFFFFFFF default=0).	user	Not Specified	00000000								
fsw-wan1-admin	FortiSwitch WAN1 admin status; enable to authorize the FortiSwitch as a managed switch.	option	-	discovered								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>discovered</td><td>Link waiting to be authorized.</td></tr><tr><td>disable</td><td>Link unauthorized.</td></tr><tr><td>enable</td><td>Link authorized.</td></tr></table>				Option	Description	discovered	Link waiting to be authorized.	disable	Link unauthorized.	enable	Link authorized.
Option	Description											
discovered	Link waiting to be authorized.											
disable	Link unauthorized.											
enable	Link authorized.											
fsw-wan1-peer	FortiSwitch WAN1 peer port.	string	Maximum length: 35									
l3-discovered	Layer 3 management discovered. Read-only.	integer	Minimum value: 0 Maximum value: 1	0								
max-allowed-trunk-members	FortiSwitch maximum allowed trunk members.	integer	Minimum value: 0 Maximum value: 255	0								
mclag-igmp-snooping-aware	Enable/disable MCLAG IGMP-snooping awareness.	option	-	enable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable MCLAG IGMP-snooping awareness.</td></tr><tr><td>disable</td><td>Disable MCLAG IGMP-snooping awareness.</td></tr></table>				Option	Description	enable	Enable MCLAG IGMP-snooping awareness.	disable	Disable MCLAG IGMP-snooping awareness.		
Option	Description											
enable	Enable MCLAG IGMP-snooping awareness.											
disable	Disable MCLAG IGMP-snooping awareness.											

Parameter	Description	Type	Size	Default						
name	Managed-switch name.	string	Maximum length: 35							
override-snmcommunity	Enable/disable overriding the global SNMP communities.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Override the global SNMP communities.</td></tr><tr><td>disable</td><td>Use the global SNMP communities.</td></tr></table>				Option	Description	enable	Override the global SNMP communities.	disable	Use the global SNMP communities.
Option	Description									
enable	Override the global SNMP communities.									
disable	Use the global SNMP communities.									
override-snm-sysinfo	Enable/disable overriding the global SNMP system information.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Use the global SNMP system information.</td></tr><tr><td>enable</td><td>Override the global SNMP system information.</td></tr></table>				Option	Description	disable	Use the global SNMP system information.	enable	Override the global SNMP system information.
Option	Description									
disable	Use the global SNMP system information.									
enable	Override the global SNMP system information.									
override-snm-trap-threshold	Enable/disable overriding the global SNMP trap threshold values.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Override the global SNMP trap threshold values.</td></tr><tr><td>disable</td><td>Use the global SNMP trap threshold values.</td></tr></table>				Option	Description	enable	Override the global SNMP trap threshold values.	disable	Use the global SNMP trap threshold values.
Option	Description									
enable	Override the global SNMP trap threshold values.									
disable	Use the global SNMP trap threshold values.									
override-snm-user	Enable/disable overriding the global SNMP users.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Override the global SNMPv3 users.</td></tr><tr><td>disable</td><td>Use the global SNMPv3 users.</td></tr></table>				Option	Description	enable	Override the global SNMPv3 users.	disable	Use the global SNMPv3 users.
Option	Description									
enable	Override the global SNMPv3 users.									
disable	Use the global SNMPv3 users.									
owner-vdom	VDOM which owner of port belongs to.	string	Maximum length: 31							

Parameter	Description	Type	Size	Default
poe-detection-type	PoE detection type for FortiSwitch. Read-only.	integer	Minimum value: 0 Maximum value: 255	0
poe-pre-standard-detection	Enable/disable PoE pre-standard detection.	option	-	disable
	Option		Description	
	<i>enable</i>		Enable PoE pre-standard detection.	
	<i>disable</i>		Disable PoE pre-standard detection.	
pre-provisioned	Pre-provisioned managed switch.	integer	Minimum value: 0 Maximum value: 255	0
qos-drop-policy	Set QoS drop-policy.	option	-	taildrop
	Option		Description	
	<i>taildrop</i>		Taildrop policy.	
	<i>random-early-detection</i>		Random early detection drop policy.	
qos-red-probability	Set QoS RED/WRED drop probability.	integer	Minimum value: 0 Maximum value: 100	12
radius-nas-ip	NAS-IP address.	ipv4-address	Not Specified	0.0.0.0
radius-nas-ip-override	Use locally defined NAS-IP.	option	-	disable
	Option		Description	
	<i>disable</i>		Disable radius-nas-ip-override.	
	<i>enable</i>		Enable radius-nas-ip-override.	
staged-image-version	Staged image version for FortiSwitch.	string	Maximum length: 127	

Parameter	Description	Type	Size	Default
switch-device-tag	User definable label/tag.	string	Maximum length: 32	
switch-dhcp_opt43_key	DHCP option43 key.	string	Maximum length: 63	
switch-id	Managed-switch id.	string	Maximum length: 16	
switch-profile	FortiSwitch profile.	string	Maximum length: 35	default
tdr-supported	TDR supported. Read-only.	string	Maximum length: 31	
type	Indication of switch type, physical or virtual.	option	-	physical
	Option Description			
	<i>virtual</i>	Switch is of type virtual.		
	<i>physical</i>	Switch is of type physical.		
version	FortiSwitch version.	integer	Minimum value: 0 Maximum value: 255	0

config 802-1X-settings

Parameter	Description	Type	Size	Default
link-down-auth	Authentication state to set if a link is down.	option	-	set-unauth
	Option	Description		
	set-unauth	Interface set to unauth when down. Reauthentication is needed.		
	no-action	Interface reauthentication is not needed.		
local-override	Enable to override global 802.1X settings on individual FortiSwitches.	option	-	disable
	Option	Description		
	enable	Override global 802.1X settings.		
	disable	Use global 802.1X settings.		

Parameter	Description	Type	Size	Default						
mab-reauth	Enable or disable MAB reauthentication settings.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>disable</i></td><td>Disable MAB re-authentication setttings.</td></tr><tr><td><i>enable</i></td><td>Enable MAB re-authentication setttings.</td></tr></table>	Option	Description	<i>disable</i>	Disable MAB re-authentication setttings.	<i>enable</i>	Enable MAB re-authentication setttings.			
Option	Description									
<i>disable</i>	Disable MAB re-authentication setttings.									
<i>enable</i>	Enable MAB re-authentication setttings.									
max-reauth-attempt	Maximum number of authentication attempts (0 - 15, default = 3).	integer	Minimum value: 0 Maximum value: 15	3						
reauth-period	Reauthentication time interval (1 - 1440 min, default = 60, 0 = disable).	integer	Minimum value: 0 Maximum value: 1440	60						
tx-period	802.1X Tx period (seconds, default=30).	integer	Minimum value: 12 Maximum value: 60	30						

config custom-command

Parameter	Description	Type	Size	Default
command-entry	List of FortiSwitch commands.	string	Maximum length: 35	
command-name	Names of commands to be pushed to this FortiSwitch device, as configured under config switch-controller custom-command.	string	Maximum length: 35	

config dhcp-snooping-static-client

Parameter	Description	Type	Size	Default
ip	Client static IP address.	ipv4-address	Not Specified	0.0.0.0
mac	Client MAC address.	mac-address	Not Specified	00:00:00:00:00:00
name	Client name.	string	Maximum length: 35	
port	Interface name.	string	Maximum length: 15	
vlan	VLAN name.	string	Maximum length: 15	

config igmp-snooping

Parameter	Description	Type	Size	Default
aging-time	Maximum time to retain a multicast snooping entry for which no packets have been seen (15 - 3600 sec, default = 300).	integer	Minimum value: 15 Maximum value: 3600	300
flood-unknown-multicast	Enable/disable unknown multicast flooding.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable unknown multicast flooding.		
	<i>disable</i>	Disable unknown multicast flooding.		
local-override	Enable/disable overriding the global IGMP snooping configuration.	option	-	disable
	Option	Description		
	<i>enable</i>	Override the global IGMP snooping configuration.		
	<i>disable</i>	Use the global IGMP snooping configuration.		

config vlans

Parameter	Description	Type	Size	Default
proxy	IGMP snooping proxy for the VLAN interface.	option	-	global
	Option	Description		
	<i>disable</i>	Disable IGMP snooping proxy on VLAN interface.		
	<i>enable</i>	Enable IGMP snooping proxy on VLAN interface.		
	<i>global</i>	Use global setting for IGMP snooping proxy on VLAN interface.		
querier	Enable/disable IGMP snooping querier for the VLAN interface.	option	-	disable
	Option	Description		
	<i>disable</i>	Disable IGMP snooping querier on VLAN interface.		
	<i>enable</i>	Enable IGMP snooping querier on VLAN interface.		
querier-addr	IGMP snooping querier address.	ipv4-address	Not Specified	0.0.0.0

Parameter	Description	Type	Size	Default
version	IGMP snooping querying version.	integer	Minimum value: 2 Maximum value: 3	2
vlan-name	List of FortiSwitch VLANs.	string	Maximum length: 15	default

config ip-source-guard

Parameter	Description	Type	Size	Default
description	Description.	string	Maximum length: 63	
port	Ingress interface to which source guard is bound.	string	Maximum length: 15	

config binding-entry

Parameter	Description	Type	Size	Default
entry-name	Configure binding pair.	string	Maximum length: 16	
ip	Source IP for this rule.	ipv4-address-any	Not Specified	0.0.0.0
mac	MAC address for this rule.	mac-address	Not Specified	00:00:00:00:00:00

config mirror

Parameter	Description	Type	Size	Default
dst	Destination port.	string	Maximum length: 63	
name	Mirror name.	string	Maximum length: 63	
src-egress <name>	Source egress interfaces. Interface name.	string	Maximum length: 79	
src-ingress <name>	Source ingress interfaces. Interface name.	string	Maximum length: 79	
status	Active/inactive mirror configuration.	option	-	inactive

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>active</i>	Activate mirror configuration.		
	<i>inactive</i>	Deactivate mirror configuration.		
switching-packet	Enable/disable switching functionality when mirroring.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable switching functionality when mirroring.		
	<i>disable</i>	Disable switching functionality when mirroring.		

config ports

Parameter	Description	Type	Size	Default								
access-mode	Access mode of the port.	option	-	static								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>dynamic</i></td><td>Dynamic mode.</td></tr><tr><td><i>nac</i></td><td>NAC mode.</td></tr><tr><td><i>static</i></td><td>Static mode.</td></tr></table>	Option	Description	<i>dynamic</i>	Dynamic mode.	<i>nac</i>	NAC mode.	<i>static</i>	Static mode.			
Option	Description											
<i>dynamic</i>	Dynamic mode.											
<i>nac</i>	NAC mode.											
<i>static</i>	Static mode.											
aggregator-mode	LACP member select mode.	option	-	bandwidth								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>bandwidth</i></td><td>Member selection based on largest total bandwidth of links of similar speed.</td></tr><tr><td><i>count</i></td><td>Member selection based on largest count of similar link speed.</td></tr></table>	Option	Description	<i>bandwidth</i>	Member selection based on largest total bandwidth of links of similar speed.	<i>count</i>	Member selection based on largest count of similar link speed.					
Option	Description											
<i>bandwidth</i>	Member selection based on largest total bandwidth of links of similar speed.											
<i>count</i>	Member selection based on largest count of similar link speed.											
allowed-vlans <vlan-name>	Configure switch port tagged VLANs. VLAN name.	string	Maximum length: 79									
allowed-vlans-all	Enable/disable all defined vlans on this port.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable all defined VLANs on this port.</td></tr><tr><td><i>disable</i></td><td>Disable all defined VLANs on this port.</td></tr></table>	Option	Description	<i>enable</i>	Enable all defined VLANs on this port.	<i>disable</i>	Disable all defined VLANs on this port.					
Option	Description											
<i>enable</i>	Enable all defined VLANs on this port.											
<i>disable</i>	Disable all defined VLANs on this port.											

Parameter	Description	Type	Size	Default								
arp-inspection-trust	Trusted or untrusted dynamic ARP inspection.	option	-	untrusted								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>untrusted</i></td><td>Untrusted dynamic ARP inspection.</td></tr><tr><td><i>trusted</i></td><td>Trusted dynamic ARP inspection.</td></tr></table>	Option	Description	<i>untrusted</i>	Untrusted dynamic ARP inspection.	<i>trusted</i>	Trusted dynamic ARP inspection.					
Option	Description											
<i>untrusted</i>	Untrusted dynamic ARP inspection.											
<i>trusted</i>	Trusted dynamic ARP inspection.											
bundle	Enable/disable Link Aggregation Group (LAG) bundling for non-FortiLink interfaces.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable bundling.</td></tr><tr><td><i>disable</i></td><td>Disable bundling.</td></tr></table>	Option	Description	<i>enable</i>	Enable bundling.	<i>disable</i>	Disable bundling.					
Option	Description											
<i>enable</i>	Enable bundling.											
<i>disable</i>	Disable bundling.											
description	Description for port.	string	Maximum length: 63									
dhcp-snoop-option82-trust	Enable/disable allowance of DHCP with option-82 on untrusted interface.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable allowance of DHCP with option-82 on untrusted interface.</td></tr><tr><td><i>disable</i></td><td>Disable allowance of DHCP with option-82 on untrusted interface.</td></tr></table>	Option	Description	<i>enable</i>	Enable allowance of DHCP with option-82 on untrusted interface.	<i>disable</i>	Disable allowance of DHCP with option-82 on untrusted interface.					
Option	Description											
<i>enable</i>	Enable allowance of DHCP with option-82 on untrusted interface.											
<i>disable</i>	Disable allowance of DHCP with option-82 on untrusted interface.											
dhcp-snooping	Trusted or untrusted DHCP-snooping interface.	option	-	untrusted								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>untrusted</i></td><td>Untrusted DHCP snooping interface.</td></tr><tr><td><i>trusted</i></td><td>Trusted DHCP snooping interface.</td></tr></table>	Option	Description	<i>untrusted</i>	Untrusted DHCP snooping interface.	<i>trusted</i>	Trusted DHCP snooping interface.					
Option	Description											
<i>untrusted</i>	Untrusted DHCP snooping interface.											
<i>trusted</i>	Trusted DHCP snooping interface.											
discard-mode	Configure discard mode for port.	option	-	none								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>none</i></td><td>Discard disabled.</td></tr><tr><td><i>all-untagged</i></td><td>Discard all frames that are untagged.</td></tr><tr><td><i>all-tagged</i></td><td>Discard all frames that are tagged.</td></tr></table>	Option	Description	<i>none</i>	Discard disabled.	<i>all-untagged</i>	Discard all frames that are untagged.	<i>all-tagged</i>	Discard all frames that are tagged.			
Option	Description											
<i>none</i>	Discard disabled.											
<i>all-untagged</i>	Discard all frames that are untagged.											
<i>all-tagged</i>	Discard all frames that are tagged.											

Parameter	Description	Type	Size	Default								
edge-port	Enable/disable this interface as an edge port, bridging connections between workstations and/or computers.	option	-	enable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable this interface as an edge port.</td></tr><tr><td><i>disable</i></td><td>Disable this interface as an edge port.</td></tr></table>	Option	Description	<i>enable</i>	Enable this interface as an edge port.	<i>disable</i>	Disable this interface as an edge port.					
Option	Description											
<i>enable</i>	Enable this interface as an edge port.											
<i>disable</i>	Disable this interface as an edge port.											
export-to	Export managed-switch port to a tenant VDOM.	string	Maximum length: 31									
export-to-pool	Switch controller export port to pool-list.	string	Maximum length: 35									
fec-capable	FEC capable.	integer	Minimum value: 0 0 Maximum value: 1									
fec-state	State of forward error correction.	option	-	cl91								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>disabled</i></td><td>Disable forward error correction.</td></tr><tr><td><i>cl74</i></td><td>Enable Clause 74 FC-FEC, which only applies to 25Gbps.</td></tr><tr><td><i>cl91</i></td><td>Enable Clause 91 RS-FEC, which only applies to 100Gbps.</td></tr></table>	Option	Description	<i>disabled</i>	Disable forward error correction.	<i>cl74</i>	Enable Clause 74 FC-FEC, which only applies to 25Gbps.	<i>cl91</i>	Enable Clause 91 RS-FEC, which only applies to 100Gbps.			
Option	Description											
<i>disabled</i>	Disable forward error correction.											
<i>cl74</i>	Enable Clause 74 FC-FEC, which only applies to 25Gbps.											
<i>cl91</i>	Enable Clause 91 RS-FEC, which only applies to 100Gbps.											
fgt-peer-device-name	FGT peer device name. Read-only.	string	Maximum length: 16									
fgt-peer-port-name	FGT peer port name. Read-only.	string	Maximum length: 15									
fiber-port	Fiber-port. Read-only.	integer	Minimum value: 0 0 Maximum value: 1									
flags	Port properties flags. Read-only.	integer	Minimum value: 0 0 Maximum value: 4294967295									
flap-duration	Period over which flap events are calculated (seconds).	integer	Minimum value: 30 5 Maximum value: 300									
flap-rate	Number of stage change events needed within flap-duration.	integer	Minimum value: 5 1 Maximum value: 30									

Parameter	Description	Type	Size	Default										
flap-timeout	Flap guard disabling protection (min).	integer	Minimum value: 0 0 Maximum value: 120											
flapguard	Enable/disable flap guard.	option	-	disable										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable FlapGuard for this port.</td></tr><tr><td>disable</td><td>Disable FlapGuard for this port.</td></tr></table>	Option	Description	enable	Enable FlapGuard for this port.	disable	Disable FlapGuard for this port.							
Option	Description													
enable	Enable FlapGuard for this port.													
disable	Disable FlapGuard for this port.													
flow-control	Flow control direction.	option	-	disable										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Disable flow control.</td></tr><tr><td>tx</td><td>Enable flow control for transmission pause control frames.</td></tr><tr><td>rx</td><td>Enable flow control for receive pause control frames.</td></tr><tr><td>both</td><td>Enable flow control for both transmission and receive pause control frames.</td></tr></table>	Option	Description	disable	Disable flow control.	tx	Enable flow control for transmission pause control frames.	rx	Enable flow control for receive pause control frames.	both	Enable flow control for both transmission and receive pause control frames.			
Option	Description													
disable	Disable flow control.													
tx	Enable flow control for transmission pause control frames.													
rx	Enable flow control for receive pause control frames.													
both	Enable flow control for both transmission and receive pause control frames.													
fortilink-port	FortiLink uplink port. Read-only.	integer	Minimum value: 0 0 Maximum value: 1											
igmp-snooping-flood-reports	Enable/disable flooding of IGMP reports to this interface when igmp-snooping enabled.	option	-	disable										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable flooding of IGMP snooping reports to this interface.</td></tr><tr><td>disable</td><td>Disable flooding of IGMP snooping reports to this interface.</td></tr></table>	Option	Description	enable	Enable flooding of IGMP snooping reports to this interface.	disable	Disable flooding of IGMP snooping reports to this interface.							
Option	Description													
enable	Enable flooding of IGMP snooping reports to this interface.													
disable	Disable flooding of IGMP snooping reports to this interface.													
interface-tags <tag-name>	Tag(s) associated with the interface for various features including virtual port pool, dynamic port policy. FortiSwitch port tag name when exported to a virtual port pool or matched to dynamic port policy.	string	Maximum length: 63											
ip-source-guard	Enable/disable IP source guard.	option	-	disable										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Disable IP source guard.</td></tr></table>	Option	Description	disable	Disable IP source guard.									
Option	Description													
disable	Disable IP source guard.													

Parameter	Description	Type	Size	Default										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable IP source guard.</td></tr></table>	Option	Description	<i>enable</i>	Enable IP source guard.									
	Option	Description												
<i>enable</i>	Enable IP source guard.													
isl-local-trunk-name	ISL local trunk name. Read-only.	string	Maximum length: 15											
isl-peer-device-name	ISL peer device name. Read-only.	string	Maximum length: 16											
isl-peer-port-name	ISL peer port name. Read-only.	string	Maximum length: 15											
lACP-speed	End Link Aggregation Control Protocol (LACP) messages every 30 seconds (slow) or every second (fast).	option	-	slow										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>slow</i></td><td>Send LACP message every 30 seconds.</td></tr><tr><td><i>fast</i></td><td>Send LACP message every second.</td></tr></table>	Option	Description	<i>slow</i>	Send LACP message every 30 seconds.	<i>fast</i>	Send LACP message every second.							
	Option	Description												
	<i>slow</i>	Send LACP message every 30 seconds.												
<i>fast</i>	Send LACP message every second.													
learning-limit	Limit the number of dynamic MAC addresses on this Port (1 - 128, 0 = no limit, default).	integer	Minimum value: 0 0 Maximum value: 128											
lldp-profile	LLDP port TLV profile.	string	Maximum length: 63	default-auto-isl										
lldp-status	LLDP transmit and receive status.	option	-	tx-rx										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>disable</i></td><td>Disable LLDP TX and RX.</td></tr><tr><td><i>rx-only</i></td><td>Enable LLDP as RX only.</td></tr><tr><td><i>tx-only</i></td><td>Enable LLDP as TX only.</td></tr><tr><td><i>tx-rx</i></td><td>Enable LLDP TX and RX.</td></tr></table>	Option	Description	<i>disable</i>	Disable LLDP TX and RX.	<i>rx-only</i>	Enable LLDP as RX only.	<i>tx-only</i>	Enable LLDP as TX only.	<i>tx-rx</i>	Enable LLDP TX and RX.			
	Option	Description												
	<i>disable</i>	Disable LLDP TX and RX.												
	<i>rx-only</i>	Enable LLDP as RX only.												
	<i>tx-only</i>	Enable LLDP as TX only.												
<i>tx-rx</i>	Enable LLDP TX and RX.													
loop-guard	Enable/disable loop-guard on this interface, an STP optimization used to prevent network loops.	option	-	disabled										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enabled</i></td><td>Enable loop-guard on this interface.</td></tr><tr><td><i>disabled</i></td><td>Disable loop-guard on this interface.</td></tr></table>	Option	Description	<i>enabled</i>	Enable loop-guard on this interface.	<i>disabled</i>	Disable loop-guard on this interface.							
	Option	Description												
	<i>enabled</i>	Enable loop-guard on this interface.												
<i>disabled</i>	Disable loop-guard on this interface.													

Parameter	Description	Type	Size	Default						
loop-guard-timeout	Loop-guard timeout (0 - 120 min, default = 45).	integer	Minimum value: 0 Maximum value: 120	45						
mac-addr	Port/Trunk MAC.	mac-address	Not Specified	00:00:00:00:00:00						
matched-dpp-intf-tags	Matched interface tags in the dynamic port policy.	string	Maximum length: 63							
matched-dpp-policy	Matched child policy in the dynamic port policy.	string	Maximum length: 63							
max-bundle	Maximum size of LAG bundle (1 - 24, default = 24).	integer	Minimum value: 1 Maximum value: 24	24						
mcast-snooping-flood-traffic	Enable/disable flooding of IGMP snooping traffic to this interface.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable flooding of IGMP snooping traffic to this interface.</td></tr><tr><td>disable</td><td>Disable flooding of IGMP snooping traffic to this interface.</td></tr></table>				Option	Description	enable	Enable flooding of IGMP snooping traffic to this interface.	disable	Disable flooding of IGMP snooping traffic to this interface.
Option	Description									
enable	Enable flooding of IGMP snooping traffic to this interface.									
disable	Disable flooding of IGMP snooping traffic to this interface.									
mclag	Enable/disable multi-chassis link aggregation (MCLAG).	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable MCLAG.</td></tr><tr><td>disable</td><td>Disable MCLAG.</td></tr></table>				Option	Description	enable	Enable MCLAG.	disable	Disable MCLAG.
Option	Description									
enable	Enable MCLAG.									
disable	Disable MCLAG.									
mclag-icl-port	MCLAG-ICL port. Read-only.	integer	Minimum value: 0 Maximum value: 1	0						
media-type	Media type. Read-only.	string	Maximum length: 31							
member-withdrawal-behavior	Port behavior after it withdraws because of loss of control packets.	option	-	block						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>forward</td><td>Forward traffic.</td></tr><tr><td>block</td><td>Block traffic.</td></tr></table>				Option	Description	forward	Forward traffic.	block	Block traffic.
Option	Description									
forward	Forward traffic.									
block	Block traffic.									

Parameter	Description	Type	Size	Default								
members <member-name>	Aggregated LAG bundle interfaces. Interface name from available options.	string	Maximum length: 79									
min-bundle	Minimum size of LAG bundle (1 - 24, default = 1).	integer	Minimum value: 1 Maximum value: 24									
mode	LACP mode: ignore and do not send control messages, or negotiate 802.3ad aggregation passively or actively.	option	-	static								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>static</td><td>Static aggregation, do not send and ignore any control messages.</td></tr><tr><td>lacp-passive</td><td>Passively use LACP to negotiate 802.3ad aggregation.</td></tr><tr><td>lacp-active</td><td>Actively use LACP to negotiate 802.3ad aggregation.</td></tr></table>				Option	Description	static	Static aggregation, do not send and ignore any control messages.	lacp-passive	Passively use LACP to negotiate 802.3ad aggregation.	lacp-active	Actively use LACP to negotiate 802.3ad aggregation.
Option	Description											
static	Static aggregation, do not send and ignore any control messages.											
lacp-passive	Passively use LACP to negotiate 802.3ad aggregation.											
lacp-active	Actively use LACP to negotiate 802.3ad aggregation.											
p2p-port	General peer to peer tunnel port. Read-only.	integer	Minimum value: 0 Maximum value: 1									
packet-sample-rate	Packet sampling rate (0 - 99999 p/sec).	integer	Minimum value: 512 Maximum value: 99999									
packet-sampler	Enable/disable packet sampling on this interface.	option	-	disabled								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enabled</td><td>Enable packet sampling on this interface.</td></tr><tr><td>disabled</td><td>Disable packet sampling on this interface.</td></tr></table>				Option	Description	enabled	Enable packet sampling on this interface.	disabled	Disable packet sampling on this interface.		
Option	Description											
enabled	Enable packet sampling on this interface.											
disabled	Disable packet sampling on this interface.											
pause-meter	Configure ingress pause metering rate, in kbps (default = 0, disabled).	integer	Minimum value: 128 Maximum value: 2147483647									
pause-meter-resume	Resume threshold for resuming traffic on ingress port.	option	-	50%								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>75%</td><td>Back pressure state won't be cleared until bucket count falls below 75% of pause threshold.</td></tr></table>				Option	Description	75%	Back pressure state won't be cleared until bucket count falls below 75% of pause threshold.				
Option	Description											
75%	Back pressure state won't be cleared until bucket count falls below 75% of pause threshold.											

Parameter	Description	Type	Size	Default										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>50%</td><td>Back pressure state won't be cleared until bucket count falls below 50% of pause threshold.</td></tr><tr><td>25%</td><td>Back pressure state won't be cleared until bucket count falls below 25% of pause threshold.</td></tr></table>	Option	Description	50%	Back pressure state won't be cleared until bucket count falls below 50% of pause threshold.	25%	Back pressure state won't be cleared until bucket count falls below 25% of pause threshold.							
	Option	Description												
	50%	Back pressure state won't be cleared until bucket count falls below 50% of pause threshold.												
25%	Back pressure state won't be cleared until bucket count falls below 25% of pause threshold.													
poe-capable	PoE capable.	integer	Minimum value: 0 0 Maximum value: 1											
poe-max-power	PoE maximum power. Read-only.	string	Maximum length: 35											
poe-mode-bt-capable	PoE mode IEEE 802.3BT capable.	integer	Minimum value: 0 0 Maximum value: 1											
poe-port-mode	Configure PoE port mode.	option	-	ieee802-3at										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>ieee802-3af</td><td>IEEE802.3 AF.</td></tr><tr><td>ieee802-3at</td><td>IEEE802.3 AT.</td></tr><tr><td>ieee802-3bt</td><td>IEEE802.3 BT.</td></tr></table>	Option	Description	ieee802-3af	IEEE802.3 AF.	ieee802-3at	IEEE802.3 AT.	ieee802-3bt	IEEE802.3 BT.					
	Option	Description												
	ieee802-3af	IEEE802.3 AF.												
	ieee802-3at	IEEE802.3 AT.												
ieee802-3bt	IEEE802.3 BT.													
poe-port-power	Configure PoE port power.	option	-	normal										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>normal</td><td>Power not delivered during boot.</td></tr><tr><td>perpetual</td><td>Power delivered during soft reboot.</td></tr><tr><td>perpetual-fast</td><td>Early power delivered during cold boot.</td></tr></table>	Option	Description	normal	Power not delivered during boot.	perpetual	Power delivered during soft reboot.	perpetual-fast	Early power delivered during cold boot.					
	Option	Description												
	normal	Power not delivered during boot.												
	perpetual	Power delivered during soft reboot.												
perpetual-fast	Early power delivered during cold boot.													
poe-port-priority	Configure PoE port priority.	option	-	low-priority										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>critical-priority</td><td>Critical Priority.</td></tr><tr><td>high-priority</td><td>High Priority.</td></tr><tr><td>low-priority</td><td>Low Priority.</td></tr><tr><td>medium-priority</td><td>Medium Priority.</td></tr></table>	Option	Description	critical-priority	Critical Priority.	high-priority	High Priority.	low-priority	Low Priority.	medium-priority	Medium Priority.			
	Option	Description												
	critical-priority	Critical Priority.												
	high-priority	High Priority.												
	low-priority	Low Priority.												
medium-priority	Medium Priority.													

Parameter	Description	Type	Size	Default
poe-pre-standard-detection	Enable/disable PoE pre-standard detection.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable PoE pre-standard detection.		
	<i>disable</i>	Disable PoE pre-standard detection.		
poe-standard	PoE standard supported. Read-only.	string	Maximum length: 63	
poe-status	Enable/disable PoE status.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable PoE status.		
	<i>disable</i>	Disable PoE status.		
port-name	Switch port name.	string	Maximum length: 15	
port-number	Port number. Read-only.	integer	Minimum value: 0 1 Maximum value: 64	
port-owner	Switch port name.	string	Maximum length: 15	
port-policy	Switch controller dynamic port policy from available options.	string	Maximum length: 63	
port-prefix-type	Port prefix type. Read-only.	integer	Minimum value: 0 0 Maximum value: 1	
port-security-policy	Switch controller authentication policy to apply to this managed switch from available options.	string	Maximum length: 31	
port-selection-criteria	Algorithm for aggregate port selection.	option	-	src-dst-ip
	Option	Description		
	<i>src-mac</i>	Source MAC address.		
	<i>dst-mac</i>	Destination MAC address.		

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>src-dst-mac</i>	Source and destination MAC address.		
	<i>src-ip</i>	Source IP address.		
	<i>dst-ip</i>	Destination IP address.		
	<i>src-dst-ip</i>	Source and destination IP address.		
ptp-policy	PTP policy configuration.	string	Maximum length: 63	default
qos-policy	Switch controller QoS policy from available options.	string	Maximum length: 63	default
rpvst-port	Enable/disable inter-operability with rapid PVST on this interface.	option	-	disabled
	Option	Description		
	<i>disabled</i>	Disable inter-operability with rapid PVST on this interface.		
	<i>enabled</i>	Enable inter-operability with rapid PVST on this interface.		
sample-direction	Packet sampling direction.	option	-	both
	Option	Description		
	<i>tx</i>	Monitor transmitted traffic.		
	<i>rx</i>	Monitor received traffic.		
	<i>both</i>	Monitor transmitted and received traffic.		
sflow-counter-interval	sFlow sampling counter polling interval in seconds (0 - 255).	integer	Minimum value: 0 0 Maximum value: 255	
speed	Switch port speed; default and available settings depend on hardware.	option	-	auto
	Option	Description		
	<i>10half</i>	10M half-duplex.		
	<i>10full</i>	10M full-duplex.		
	<i>100half</i>	100M half-duplex.		
	<i>100full</i>	100M full-duplex.		

Parameter	Description	Type	Size	Default																																																						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>1000full</td><td>1G full-duplex</td></tr><tr><td>10000full</td><td>10G full-duplex</td></tr><tr><td>auto</td><td>Auto-negotiation.</td></tr><tr><td>1000auto</td><td>Auto-negotiation (1G full-duplex only).</td></tr><tr><td>1000full-fiber</td><td>1G full-duplex (fiber SFPs only)</td></tr><tr><td>40000full</td><td>40G full-duplex</td></tr><tr><td>auto-module</td><td>Auto Module.</td></tr><tr><td>100FX-half</td><td>100Mbps half-duplex.100Base-FX.</td></tr><tr><td>100FX-full</td><td>100Mbps full-duplex.100Base-FX.</td></tr><tr><td>100000full</td><td>100Gbps full-duplex.</td></tr><tr><td>2500auto</td><td>Auto-Negotiation (2.5Gbps Only).</td></tr><tr><td>2500full</td><td>2.5Gbps full-duplex.</td></tr><tr><td>25000full</td><td>25Gbps full-duplex.</td></tr><tr><td>50000full</td><td>50Gbps full-duplex.</td></tr><tr><td>10000cr</td><td>10Gbps copper interface.</td></tr><tr><td>10000sr</td><td>10Gbps SFI interface.</td></tr><tr><td>100000sr4</td><td>100Gbps SFI interface.</td></tr><tr><td>100000cr4</td><td>100Gbps copper interface.</td></tr><tr><td>40000sr4</td><td>40Gbps SFI interface.</td></tr><tr><td>40000cr4</td><td>40Gbps copper interface.</td></tr><tr><td>40000auto</td><td>Auto-Negotiation (40Gbps Only).</td></tr><tr><td>25000cr</td><td>25Gbps copper interface.</td></tr><tr><td>25000sr</td><td>25Gbps SFI interface.</td></tr><tr><td>50000cr</td><td>50Gbps copper interface.</td></tr><tr><td>50000sr</td><td>50Gbps SFI interface.</td></tr><tr><td>5000auto</td><td>5Gbps full-duplex.</td></tr></table>	Option	Description	1000full	1G full-duplex	10000full	10G full-duplex	auto	Auto-negotiation.	1000auto	Auto-negotiation (1G full-duplex only).	1000full-fiber	1G full-duplex (fiber SFPs only)	40000full	40G full-duplex	auto-module	Auto Module.	100FX-half	100Mbps half-duplex.100Base-FX.	100FX-full	100Mbps full-duplex.100Base-FX.	100000full	100Gbps full-duplex.	2500auto	Auto-Negotiation (2.5Gbps Only).	2500full	2.5Gbps full-duplex.	25000full	25Gbps full-duplex.	50000full	50Gbps full-duplex.	10000cr	10Gbps copper interface.	10000sr	10Gbps SFI interface.	100000sr4	100Gbps SFI interface.	100000cr4	100Gbps copper interface.	40000sr4	40Gbps SFI interface.	40000cr4	40Gbps copper interface.	40000auto	Auto-Negotiation (40Gbps Only).	25000cr	25Gbps copper interface.	25000sr	25Gbps SFI interface.	50000cr	50Gbps copper interface.	50000sr	50Gbps SFI interface.	5000auto	5Gbps full-duplex.			
	Option	Description																																																								
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	50000sr	50Gbps SFI interface.																																																								
	5000auto	5Gbps full-duplex.																																																								
	stacking-port	Stacking port. Read-only.	integer	Minimum value: 0 0 Maximum value: 1																																																						

Parameter	Description	Type	Size	Default
status	Switch port admin status: up or down.	option	-	up
	Option Description			
	<i>up</i>	Set admin status up.		
	<i>down</i>	Set admin status down.		
sticky-mac	Enable or disable sticky-mac on the interface.	option	-	disable
	Option Description			
	<i>enable</i>	Enable sticky mac on the interface.		
	<i>disable</i>	Disable sticky mac on the interface.		
storm-control-policy	Switch controller storm control policy from available options.	string	Maximum length: 63	default
stp-bpdu-guard	Enable/disable STP BPDU guard on this interface.	option	-	disabled
	Option Description			
	<i>enabled</i>	Enable STP BPDU guard on this interface.		
	<i>disabled</i>	Disable STP BPDU guard on this interface.		
stp-bpdu-guard-timeout	BPDU Guard disabling protection (0 - 120 min).	integer	Minimum value: 5 0 Maximum value: 120	
stp-root-guard	Enable/disable STP root guard on this interface.	option	-	disabled
	Option Description			
	<i>enabled</i>	Enable STP root-guard on this interface.		
	<i>disabled</i>	Disable STP root-guard on this interface.		
stp-state	Enable/disable Spanning Tree Protocol (STP) on this interface.	option	-	enabled
	Option Description			
	<i>enabled</i>	Enable STP on this interface.		
	<i>disabled</i>	Disable STP on this interface.		

Parameter	Description	Type	Size	Default						
switch-id	Switch id. Read-only.	string	Maximum length: 16							
type	Interface type: physical or trunk port.	option	-	physical						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>physical</i></td><td>Physical port.</td></tr><tr><td><i>trunk</i></td><td>Trunk port.</td></tr></table>				Option	Description	<i>physical</i>	Physical port.	<i>trunk</i>	Trunk port.
	Option	Description								
	<i>physical</i>	Physical port.								
<i>trunk</i>	Trunk port.									
untagged-vlans <vlan-name>	Configure switch port untagged VLANs. VLAN name.	string	Maximum length: 79							
vlan	Assign switch ports to a VLAN.	string	Maximum length: 15							

config remote-log

Parameter	Description	Type	Size	Default																						
csv	Enable/disable comma-separated value (CSV) strings.	option	-	disable																						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable comma-separated value (CSV) strings.</td></tr><tr><td><i>disable</i></td><td>Disable comma-separated value (CSV) strings.</td></tr></table>	Option	Description	<i>enable</i>	Enable comma-separated value (CSV) strings.	<i>disable</i>	Disable comma-separated value (CSV) strings.																			
Option	Description																									
<i>enable</i>	Enable comma-separated value (CSV) strings.																									
<i>disable</i>	Disable comma-separated value (CSV) strings.																									
facility	Facility to log to remote syslog server.	option	-	local7																						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>kernel</i></td><td>Kernel messages.</td></tr><tr><td><i>user</i></td><td>Random user-level messages.</td></tr><tr><td><i>mail</i></td><td>Mail system.</td></tr><tr><td><i>daemon</i></td><td>System daemons.</td></tr><tr><td><i>auth</i></td><td>Security/authorization messages.</td></tr><tr><td><i>syslog</i></td><td>Messages generated internally by syslogd.</td></tr><tr><td><i>lpr</i></td><td>Line printer subsystem.</td></tr><tr><td><i>news</i></td><td>Network news subsystem.</td></tr><tr><td><i>uucp</i></td><td>UUCP server messages.</td></tr><tr><td><i>cron</i></td><td>Clock daemon.</td></tr></table>	Option	Description	<i>kernel</i>	Kernel messages.	<i>user</i>	Random user-level messages.	<i>mail</i>	Mail system.	<i>daemon</i>	System daemons.	<i>auth</i>	Security/authorization messages.	<i>syslog</i>	Messages generated internally by syslogd.	<i>lpr</i>	Line printer subsystem.	<i>news</i>	Network news subsystem.	<i>uucp</i>	UUCP server messages.	<i>cron</i>	Clock daemon.			
Option	Description																									
<i>kernel</i>	Kernel messages.																									
<i>user</i>	Random user-level messages.																									
<i>mail</i>	Mail system.																									
<i>daemon</i>	System daemons.																									
<i>auth</i>	Security/authorization messages.																									
<i>syslog</i>	Messages generated internally by syslogd.																									
<i>lpr</i>	Line printer subsystem.																									
<i>news</i>	Network news subsystem.																									
<i>uucp</i>	UUCP server messages.																									
<i>cron</i>	Clock daemon.																									

Parameter	Description	Type	Size	Default																														
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>authpriv</i></td><td>Security/authorization messages (private).</td></tr><tr><td><i>ftp</i></td><td>FTP daemon.</td></tr><tr><td><i>ntp</i></td><td>NTP daemon.</td></tr><tr><td><i>audit</i></td><td>Log audit.</td></tr><tr><td><i>alert</i></td><td>Log alert.</td></tr><tr><td><i>clock</i></td><td>Clock daemon.</td></tr><tr><td><i>local0</i></td><td>Reserved for local use.</td></tr><tr><td><i>local1</i></td><td>Reserved for local use.</td></tr><tr><td><i>local2</i></td><td>Reserved for local use.</td></tr><tr><td><i>local3</i></td><td>Reserved for local use.</td></tr><tr><td><i>local4</i></td><td>Reserved for local use.</td></tr><tr><td><i>local5</i></td><td>Reserved for local use.</td></tr><tr><td><i>local6</i></td><td>Reserved for local use.</td></tr><tr><td><i>local7</i></td><td>Reserved for local use.</td></tr></table>	Option	Description	<i>authpriv</i>	Security/authorization messages (private).	<i>ftp</i>	FTP daemon.	<i>ntp</i>	NTP daemon.	<i>audit</i>	Log audit.	<i>alert</i>	Log alert.	<i>clock</i>	Clock daemon.	<i>local0</i>	Reserved for local use.	<i>local1</i>	Reserved for local use.	<i>local2</i>	Reserved for local use.	<i>local3</i>	Reserved for local use.	<i>local4</i>	Reserved for local use.	<i>local5</i>	Reserved for local use.	<i>local6</i>	Reserved for local use.	<i>local7</i>	Reserved for local use.			
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	<i>local6</i>	Reserved for local use.																																
<i>local7</i>	Reserved for local use.																																	
name	Remote log name.	string	Maximum length: 35																															
port	Remote syslog server listening port.	integer	Minimum value: 0 Maximum value: 65535	514																														
server	IPv4 address of the remote syslog server.	string	Maximum length: 63																															
severity	Severity of logs to be transferred to remote log server.	option	-	information																														
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>emergency</i></td><td>Emergency level.</td></tr><tr><td><i>alert</i></td><td>Alert level.</td></tr><tr><td><i>critical</i></td><td>Critical level.</td></tr><tr><td><i>error</i></td><td>Error level.</td></tr><tr><td><i>warning</i></td><td>Warning level.</td></tr></table>	Option	Description	<i>emergency</i>	Emergency level.	<i>alert</i>	Alert level.	<i>critical</i>	Critical level.	<i>error</i>	Error level.	<i>warning</i>	Warning level.																					
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<i>warning</i>	Warning level.																																	

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>notification</i>	Notification level.		
	<i>information</i>	Information level.		
	<i>debug</i>	Debug level.		
status	Enable/disable logging by FortiSwitch device to a remote syslog server.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable logging by FortiSwitch device to a remote syslog server.		
	<i>disable</i>	Disable logging by FortiSwitch device to a remote syslog server.		

config snmp-community

Parameter	Description	Type	Size	Default
events	SNMP notifications (traps) to send.	option	-	cpu-high mem-low log-full intf-ip ent- conf- change
	Option	Description		
	<i>cpu-high</i>	Send a trap when CPU usage too high.		
	<i>mem-low</i>	Send a trap when available memory is low.		
	<i>log-full</i>	Send a trap when log disk space becomes low.		
	<i>intf-ip</i>	Send a trap when an interface IP address is changed.		
	<i>ent-conf-change</i>	Send a trap when an entity MIB change occurs (RFC4133).		
id	SNMP community ID.	integer	Minimum value: 0 Maximum value: 4294967295	
name	SNMP community name.	string	Maximum length: 35	
query-v1-port	SNMP v1 query port (default = 161).	integer	Minimum value: 0 Maximum value: 65535	

Parameter	Description	Type	Size	Default						
query-v1-status	Enable/disable SNMP v1 queries.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Disable SNMP v1 queries.</td></tr><tr><td>enable</td><td>Enable SNMP v1 queries.</td></tr></table>	Option	Description	disable	Disable SNMP v1 queries.	enable	Enable SNMP v1 queries.			
Option	Description									
disable	Disable SNMP v1 queries.									
enable	Enable SNMP v1 queries.									
query-v2c-port	SNMP v2c query port (default = 161).	integer	Minimum value: 0 Maximum value: 65535	161						
query-v2c-status	Enable/disable SNMP v2c queries.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Disable SNMP v2c queries.</td></tr><tr><td>enable</td><td>Enable SNMP v2c queries.</td></tr></table>	Option	Description	disable	Disable SNMP v2c queries.	enable	Enable SNMP v2c queries.			
Option	Description									
disable	Disable SNMP v2c queries.									
enable	Enable SNMP v2c queries.									
status	Enable/disable this SNMP community.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Disable SNMP community.</td></tr><tr><td>enable</td><td>Enable SNMP community.</td></tr></table>	Option	Description	disable	Disable SNMP community.	enable	Enable SNMP community.			
Option	Description									
disable	Disable SNMP community.									
enable	Enable SNMP community.									
trap-v1-lport	SNMP v2c trap local port (default = 162).	integer	Minimum value: 0 Maximum value: 65535	162						
trap-v1-rport	SNMP v2c trap remote port (default = 162).	integer	Minimum value: 0 Maximum value: 65535	162						
trap-v1-status	Enable/disable SNMP v1 traps.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Disable SNMP v1 traps.</td></tr><tr><td>enable</td><td>Enable SNMP v1 traps.</td></tr></table>	Option	Description	disable	Disable SNMP v1 traps.	enable	Enable SNMP v1 traps.			
Option	Description									
disable	Disable SNMP v1 traps.									
enable	Enable SNMP v1 traps.									
trap-v2c-lport	SNMP v2c trap local port (default = 162).	integer	Minimum value: 0 Maximum value: 65535	162						

Parameter	Description	Type	Size	Default
trap-v2c-rport	SNMP v2c trap remote port (default = 162).	integer	Minimum value: 0 Maximum value: 65535	162
trap-v2c-status	Enable/disable SNMP v2c traps.	option	-	enable
		Option	Description	
		<i>disable</i>	Disable SNMP v2c traps.	
		<i>enable</i>	Enable SNMP v2c traps.	

config hosts

Parameter	Description	Type	Size	Default
id	Host entry ID.	integer	Minimum value: 0 Maximum value: 4294967295	0
ip	IPv4 address of the SNMP manager (host).	user	Not Specified	

config snmp-sysinfo

Parameter	Description	Type	Size	Default
contact-info	Contact information.	string	Maximum length: 35	
description	System description.	string	Maximum length: 35	
engine-id	Local SNMP engine ID string (max 24 char).	string	Maximum length: 24	
location	System location.	string	Maximum length: 35	
status	Enable/disable SNMP.	option	-	disable
		Option	Description	
		<i>disable</i>	Disable SNMP.	
		<i>enable</i>	Enable SNMP.	

config snmp-trap-threshold

Parameter	Description	Type	Size	Default
trap-high-cpu-threshold	CPU usage when trap is sent.	integer	Minimum value: 0 Maximum value: 4294967295	80
trap-log-full-threshold	Log disk usage when trap is sent.	integer	Minimum value: 0 Maximum value: 4294967295	90
trap-low-memory-threshold	Memory usage when trap is sent.	integer	Minimum value: 0 Maximum value: 4294967295	80

config snmp-user

Parameter	Description	Type	Size	Default
auth-proto	Authentication protocol.	option	-	sha256
	Option	Description		
	md5	HMAC-MD5-96 authentication protocol.		
	sha1	HMAC-SHA-1 authentication protocol.		
	sha224	HMAC-SHA-224 authentication protocol.		
	sha256	HMAC-SHA-256 authentication protocol.		
	sha384	HMAC-SHA-384 authentication protocol.		
	sha512	HMAC-SHA-512 authentication protocol.		
auth-pwd	Password for authentication protocol.	password	Not Specified	
name	SNMP user name.	string	Maximum length: 32	
priv-proto	Privacy (encryption) protocol.	option	-	aes128
	Option	Description		
	aes128	CFB128-AES-128 symmetric encryption protocol.		
	aes192	CFB128-AES-192 symmetric encryption protocol.		
	aes192c	CFB128-AES-192-C symmetric encryption protocol.		

Parameter	Description	Type	Size	Default								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>aes256</i></td><td>CFB128-AES-256 symmetric encryption protocol.</td></tr><tr><td><i>aes256c</i></td><td>CFB128-AES-256-C symmetric encryption protocol.</td></tr><tr><td><i>des</i></td><td>CBC-DES symmetric encryption protocol.</td></tr></table>	Option	Description	<i>aes256</i>	CFB128-AES-256 symmetric encryption protocol.	<i>aes256c</i>	CFB128-AES-256-C symmetric encryption protocol.	<i>des</i>	CBC-DES symmetric encryption protocol.			
	Option	Description										
	<i>aes256</i>	CFB128-AES-256 symmetric encryption protocol.										
	<i>aes256c</i>	CFB128-AES-256-C symmetric encryption protocol.										
<i>des</i>	CBC-DES symmetric encryption protocol.											
priv-pwd	Password for privacy (encryption) protocol.	password	Not Specified									
queries	Enable/disable SNMP queries for this user.	option	-	enable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>disable</i></td><td>Disable SNMP queries for this user.</td></tr><tr><td><i>enable</i></td><td>Enable SNMP queries for this user.</td></tr></table>	Option	Description	<i>disable</i>	Disable SNMP queries for this user.	<i>enable</i>	Enable SNMP queries for this user.					
	Option	Description										
	<i>disable</i>	Disable SNMP queries for this user.										
<i>enable</i>	Enable SNMP queries for this user.											
query-port	SNMPv3 query port (default = 161).	integer	Minimum value: 0 Maximum value: 65535	161								
security-level	Security level for message authentication and encryption.	option	-	no-auth-no-priv								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>no-auth-no-priv</i></td><td>Message with no authentication and no privacy (encryption).</td></tr><tr><td><i>auth-no-priv</i></td><td>Message with authentication but no privacy (encryption).</td></tr><tr><td><i>auth-priv</i></td><td>Message with authentication and privacy (encryption).</td></tr></table>	Option	Description	<i>no-auth-no-priv</i>	Message with no authentication and no privacy (encryption).	<i>auth-no-priv</i>	Message with authentication but no privacy (encryption).	<i>auth-priv</i>	Message with authentication and privacy (encryption).			
	Option	Description										
	<i>no-auth-no-priv</i>	Message with no authentication and no privacy (encryption).										
	<i>auth-no-priv</i>	Message with authentication but no privacy (encryption).										
<i>auth-priv</i>	Message with authentication and privacy (encryption).											

config static-mac

Parameter	Description	Type	Size	Default
description	Description.	string	Maximum length: 63	
id	ID.	integer	Minimum value: 0 Maximum value: 4294967295	
interface	Interface name.	string	Maximum length: 35	

Parameter	Description	Type	Size	Default						
mac	MAC address.	mac-address	Not Specified	00:00:00:00:00:00						
type	Type.	option	-	static						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>static</i></td><td>Static MAC.</td></tr><tr><td><i>sticky</i></td><td>Sticky MAC.</td></tr></table>				Option	Description	<i>static</i>	Static MAC.	<i>sticky</i>	Sticky MAC.
	Option	Description								
	<i>static</i>	Static MAC.								
<i>sticky</i>	Sticky MAC.									
vlan	Vlan.	string	Maximum length: 15							

config storm-control

Parameter	Description	Type	Size	Default						
broadcast	Enable/disable storm control to drop broadcast traffic.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Drop broadcast traffic.</td></tr><tr><td><i>disable</i></td><td>Allow broadcast traffic.</td></tr></table>	Option	Description	<i>enable</i>	Drop broadcast traffic.	<i>disable</i>	Allow broadcast traffic.			
Option	Description									
<i>enable</i>	Drop broadcast traffic.									
<i>disable</i>	Allow broadcast traffic.									
local-override	Enable to override global FortiSwitch storm control settings for this FortiSwitch.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Override global storm control settings.</td></tr><tr><td><i>disable</i></td><td>Use global storm control settings.</td></tr></table>	Option	Description	<i>enable</i>	Override global storm control settings.	<i>disable</i>	Use global storm control settings.			
Option	Description									
<i>enable</i>	Override global storm control settings.									
<i>disable</i>	Use global storm control settings.									
rate	Rate in packets per second at which storm traffic is controlled (1 - 10000000, default = 500). Storm control drops excess traffic data rates beyond this threshold.	integer	Minimum value: 1 Maximum value: 10000000	500						
unknown-multicast	Enable/disable storm control to drop unknown multicast traffic.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Drop unknown multicast traffic.</td></tr><tr><td><i>disable</i></td><td>Allow unknown multicast traffic.</td></tr></table>	Option	Description	<i>enable</i>	Drop unknown multicast traffic.	<i>disable</i>	Allow unknown multicast traffic.			
Option	Description									
<i>enable</i>	Drop unknown multicast traffic.									
<i>disable</i>	Allow unknown multicast traffic.									

Parameter	Description	Type	Size	Default
unknown-unicast	Enable/disable storm control to drop unknown unicast traffic.	option	-	disable
	Option	Description		
	<i>enable</i>	Drop unknown unicast traffic.		
	<i>disable</i>	Allow unknown unicast traffic.		

config stp-instance

Parameter	Description	Type	Size	Default
id	Instance ID.	string	Maximum length: 2	
priority	Priority.	option	-	32768
	Option	Description		
	<i>0</i>	0.		
	<i>4096</i>	4096.		
	<i>8192</i>	8192.		
	<i>12288</i>	12288.		
	<i>16384</i>	16384.		
	<i>20480</i>	20480.		
	<i>24576</i>	24576.		
	<i>28672</i>	28672.		
	<i>32768</i>	32768.		
	<i>36864</i>	36864.		
	<i>40960</i>	40960.		
	<i>45056</i>	45056.		
	<i>49152</i>	49152.		
	<i>53248</i>	53248.		
	<i>57344</i>	57344.		
	<i>61440</i>	61440.		

config stp-settings

Parameter	Description	Type	Size	Default
forward-time	Period of time a port is in listening and learning state (4 - 30 sec, default = 15).	integer	Minimum value: 4 Maximum value: 30	15
hello-time	Period of time between successive STP frame Bridge Protocol Data Units (BPDUs) sent on a port (1 - 10 sec, default = 2).	integer	Minimum value: 1 Maximum value: 10	2
local-override	Enable to configure local STP settings that override global STP settings.	option	-	disable
	Option	Description		
	enable	Override global STP settings.		
	disable	Use global STP settings.		
max-age	Maximum time before a bridge port saves its configuration BPDU information (6 - 40 sec, default = 20).	integer	Minimum value: 6 Maximum value: 40	20
max-hops	Maximum number of hops between the root bridge and the furthest bridge (1- 40, default = 20).	integer	Minimum value: 1 Maximum value: 40	20
name	Name of local STP settings configuration.	string	Maximum length: 31	
pending-timer	Pending time (1 - 15 sec, default = 4).	integer	Minimum value: 1 Maximum value: 15	4
revision	STP revision number (0 - 65535).	integer	Minimum value: 0 Maximum value: 65535	0

config switch-log

Parameter	Description	Type	Size	Default																		
local-override	Enable to configure local logging settings that override global logging settings.	option	-	disable																		
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Override global logging settings.</td></tr><tr><td>disable</td><td>Use global logging settings.</td></tr></table>	Option	Description	enable	Override global logging settings.	disable	Use global logging settings.															
Option	Description																					
enable	Override global logging settings.																					
disable	Use global logging settings.																					
severity	Severity of FortiSwitch logs that are added to the FortiGate event log.	option	-	notification																		
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>emergency</td><td>Emergency level.</td></tr><tr><td>alert</td><td>Alert level.</td></tr><tr><td>critical</td><td>Critical level.</td></tr><tr><td>error</td><td>Error level.</td></tr><tr><td>warning</td><td>Warning level.</td></tr><tr><td>notification</td><td>Notification level.</td></tr><tr><td>information</td><td>Information level.</td></tr><tr><td>debug</td><td>Debug level.</td></tr></table>	Option	Description	emergency	Emergency level.	alert	Alert level.	critical	Critical level.	error	Error level.	warning	Warning level.	notification	Notification level.	information	Information level.	debug	Debug level.			
Option	Description																					
emergency	Emergency level.																					
alert	Alert level.																					
critical	Critical level.																					
error	Error level.																					
warning	Warning level.																					
notification	Notification level.																					
information	Information level.																					
debug	Debug level.																					
status	Enable/disable adding FortiSwitch logs to the FortiGate event log.	option	-	enable																		
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Add FortiSwitch logs to the FortiGate event log.</td></tr><tr><td>disable</td><td>Do not add FortiSwitch logs to the FortiGate event log.</td></tr></table>	Option	Description	enable	Add FortiSwitch logs to the FortiGate event log.	disable	Do not add FortiSwitch logs to the FortiGate event log.															
Option	Description																					
enable	Add FortiSwitch logs to the FortiGate event log.																					
disable	Do not add FortiSwitch logs to the FortiGate event log.																					

config switch-controller network-monitor-settings



This command is available for model(s): FortiGate 1000D, FortiGate 1000F, FortiGate 1001F, FortiGate 100EF, FortiGate 100E, FortiGate 100F, FortiGate 101F, FortiGate 1100E, FortiGate 1101E, FortiGate 140E-POE, FortiGate 140E, FortiGate 1500DT, FortiGate 1500D, FortiGate 1800F, FortiGate 1801F, FortiGate 2000E, FortiGate 200E, FortiGate 200F, FortiGate 201E, FortiGate 201F, FortiGate 2201E, FortiGate 2500E, FortiGate 2600F, FortiGate 2601F, FortiGate 3000D, FortiGate 3000F, FortiGate 3001F, FortiGate 300E, FortiGate 301E, FortiGate 3100D, FortiGate 3200D, FortiGate 3200F, FortiGate 3201F, FortiGate 3300E, FortiGate 3301E, FortiGate 3400E, FortiGate 3401E, FortiGate 3501F, FortiGate 3600E, FortiGate 3601E, FortiGate 3700D, FortiGate 3700F, FortiGate 3701F, FortiGate 3960E, FortiGate 3980E, FortiGate 400E Bypass, FortiGate 400E, FortiGate 400F, FortiGate 401E, FortiGate 401F, FortiGate 40F 3G4G, FortiGate 4200F, FortiGate 4201F, FortiGate 4400F, FortiGate 4401F, FortiGate 500E, FortiGate 501E, FortiGate 600E, FortiGate 601E, FortiGate 60E-POE, FortiGate 60E, FortiGate 60F, FortiGate 61E, FortiGate 70F, FortiGate 71F, FortiGate 800D, FortiGate 80E-POE, FortiGate 80E, FortiGate 80F Bypass, FortiGate 80F DSL, FortiGate 80F-POE, FortiGate 80F, FortiGate 81E-POE, FortiGate 81E, FortiGate 81F-POE, FortiGate 81F, FortiGate 900D, FortiGate 90E, FortiGate 91E, FortiGate-VM64 Aliyun, FortiGate-VM64 AWS, FortiGate-VM64 Azure, FortiGate-VM64 GCP, FortiGate-VM64 OPC, FortiGate-VM64, FortiGateRugged 60F 3G4G, FortiGateRugged 60F, FortiGateRugged 70F 3G4G, FortiGateRugged 70F, FortiWiFi 40F 3G4G, FortiWiFi 40F, FortiWiFi 60E, FortiWiFi 60F, FortiWiFi 61E, FortiWiFi 61F, FortiWiFi 80F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G-POE, FortiWiFi 81F 2R-POE, FortiWiFi 81F 2R.

It is not available for: FortiGate 5001E1, FortiGate 5001E.

Configure network monitor settings.

```
config switch-controller network-monitor-settings
    Description: Configure network monitor settings.
    set network-monitoring [enable|disable]
end
```

config switch-controller network-monitor-settings

Parameter	Description	Type	Size	Default
network-monitoring	Enable/disable passive gathering of information by FortiSwitch units concerning other network devices.	option	-	disable
Option	Description			
<i>enable</i>	Enable network monitoring on FortiSwitch.			
<i>disable</i>	Disable network monitoring on FortiSwitch.			

config switch-controller ptp policy



This command is available for model(s): FortiGate 1000D, FortiGate 1000F, FortiGate 1001F, FortiGate 100EF, FortiGate 100E, FortiGate 100F, FortiGate 101F, FortiGate 1100E, FortiGate 1101E, FortiGate 140E-POE, FortiGate 140E, FortiGate 1500DT, FortiGate 1500D, FortiGate 1800F, FortiGate 1801F, FortiGate 2000E, FortiGate 200E, FortiGate 200F, FortiGate 201E, FortiGate 201F, FortiGate 2201E, FortiGate 2500E, FortiGate 2600F, FortiGate 2601F, FortiGate 3000D, FortiGate 3000F, FortiGate 3001F, FortiGate 300E, FortiGate 301E, FortiGate 3100D, FortiGate 3200D, FortiGate 3200F, FortiGate 3201F, FortiGate 3300E, FortiGate 3301E, FortiGate 3400E, FortiGate 3401E, FortiGate 3501F, FortiGate 3600E, FortiGate 3601E, FortiGate 3700D, FortiGate 3700F, FortiGate 3701F, FortiGate 3960E, FortiGate 3980E, FortiGate 400E Bypass, FortiGate 400E, FortiGate 400F, FortiGate 401E, FortiGate 401F, FortiGate 40F 3G4G, FortiGate 4200F, FortiGate 4201F, FortiGate 4400F, FortiGate 4401F, FortiGate 500E, FortiGate 501E, FortiGate 600E, FortiGate 601E, FortiGate 60E-POE, FortiGate 60E, FortiGate 60F, FortiGate 61E, FortiGate 70F, FortiGate 71F, FortiGate 800D, FortiGate 80E-POE, FortiGate 80E, FortiGate 80F Bypass, FortiGate 80F DSL, FortiGate 80F-POE, FortiGate 80F, FortiGate 81E-POE, FortiGate 81E, FortiGate 81F-POE, FortiGate 81F, FortiGate 900D, FortiGate 90E, FortiGate 91E, FortiGate-VM64 Aliyun, FortiGate-VM64 AWS, FortiGate-VM64 Azure, FortiGate-VM64 GCP, FortiGate-VM64 OPC, FortiGate-VM64, FortiGateRugged 60F 3G4G, FortiGateRugged 60F, FortiGateRugged 70F 3G4G, FortiGateRugged 70F, FortiWiFi 40F 3G4G, FortiWiFi 40F, FortiWiFi 60E, FortiWiFi 60F, FortiWiFi 61E, FortiWiFi 61F, FortiWiFi 80F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G-POE, FortiWiFi 81F 2R-POE, FortiWiFi 81F 2R.

It is not available for: FortiGate 5001E1, FortiGate 5001E.

PTP policy configuration.

```
config switch-controller ptp policy
  Description: PTP policy configuration.
  edit <name>
    set status [disable|enable]
  next
end
```

config switch-controller ptp policy

Parameter	Description	Type	Size	Default
name	Policy name.	string	Maximum length: 63	
status	Enable/disable PTP policy.	option	-	enable
	Option	Description		
	disable	Disable PTP policy.		
	enable	Enable PTP policy.		

config switch-controller ptp settings



This command is available for model(s): FortiGate 1000D, FortiGate 1000F, FortiGate 1001F, FortiGate 100EF, FortiGate 100E, FortiGate 100F, FortiGate 101F, FortiGate 1100E, FortiGate 1101E, FortiGate 140E-POE, FortiGate 140E, FortiGate 1500DT, FortiGate 1500D, FortiGate 1800F, FortiGate 1801F, FortiGate 2000E, FortiGate 200E, FortiGate 200F, FortiGate 201E, FortiGate 201F, FortiGate 2201E, FortiGate 2500E, FortiGate 2600F, FortiGate 2601F, FortiGate 3000D, FortiGate 3000F, FortiGate 3001F, FortiGate 300E, FortiGate 301E, FortiGate 3100D, FortiGate 3200D, FortiGate 3200F, FortiGate 3201F, FortiGate 3300E, FortiGate 3301E, FortiGate 3400E, FortiGate 3401E, FortiGate 3501F, FortiGate 3600E, FortiGate 3601E, FortiGate 3700D, FortiGate 3700F, FortiGate 3701F, FortiGate 3960E, FortiGate 3980E, FortiGate 400E Bypass, FortiGate 400E, FortiGate 400F, FortiGate 401E, FortiGate 401F, FortiGate 40F 3G4G, FortiGate 4200F, FortiGate 4201F, FortiGate 4400F, FortiGate 4401F, FortiGate 500E, FortiGate 501E, FortiGate 600E, FortiGate 601E, FortiGate 60E-POE, FortiGate 60E, FortiGate 60F, FortiGate 61E, FortiGate 70F, FortiGate 71F, FortiGate 800D, FortiGate 80E-POE, FortiGate 80E, FortiGate 80F Bypass, FortiGate 80F DSL, FortiGate 80F-POE, FortiGate 80F, FortiGate 81E-POE, FortiGate 81E, FortiGate 81F-POE, FortiGate 81F, FortiGate 900D, FortiGate 90E, FortiGate 91E, FortiGate-VM64 Aliyun, FortiGate-VM64 AWS, FortiGate-VM64 Azure, FortiGate-VM64 GCP, FortiGate-VM64 OPC, FortiGate-VM64, FortiGateRugged 60F 3G4G, FortiGateRugged 60F, FortiGateRugged 70F 3G4G, FortiGateRugged 70F, FortiWiFi 40F 3G4G, FortiWiFi 40F, FortiWiFi 60E, FortiWiFi 60F, FortiWiFi 61E, FortiWiFi 61F, FortiWiFi 80F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G-POE, FortiWiFi 81F 2R-POE, FortiWiFi 81F 2R.

It is not available for: FortiGate 5001E1, FortiGate 5001E.

Global PTP settings.

```
config switch-controller ptp settings
  Description: Global PTP settings.
  set mode [disable|transparent-e2e|...]
end
```

config switch-controller ptp settings

Parameter	Description	Type	Size	Default
mode	Enable/disable PTP mode.	option	-	disable
	Option	Description		
	<i>disable</i>	Disable PTP function. Packets are forwarded with no action.		
	<i>transparent-e2e</i>	Enable end-to-end transparent clock.		
	<i>transparent-p2p</i>	Enable peer-to-peer transparent clock.		

config switch-controller qos dot1p-map



This command is available for model(s): FortiGate 1000D, FortiGate 1000F, FortiGate 1001F, FortiGate 100EF, FortiGate 100E, FortiGate 100F, FortiGate 101F, FortiGate 1100E, FortiGate 1101E, FortiGate 140E-POE, FortiGate 140E, FortiGate 1500DT, FortiGate 1500D, FortiGate 1800F, FortiGate 1801F, FortiGate 2000E, FortiGate 200E, FortiGate 200F, FortiGate 201E, FortiGate 201F, FortiGate 2201E, FortiGate 2500E, FortiGate 2600F, FortiGate 2601F, FortiGate 3000D, FortiGate 3000F, FortiGate 3001F, FortiGate 300E, FortiGate 301E, FortiGate 3100D, FortiGate 3200D, FortiGate 3200F, FortiGate 3201F, FortiGate 3300E, FortiGate 3301E, FortiGate 3400E, FortiGate 3401E, FortiGate 3501F, FortiGate 3600E, FortiGate 3601E, FortiGate 3700D, FortiGate 3700F, FortiGate 3701F, FortiGate 3960E, FortiGate 3980E, FortiGate 400E Bypass, FortiGate 400E, FortiGate 400F, FortiGate 401E, FortiGate 401F, FortiGate 40F 3G4G, FortiGate 4200F, FortiGate 4201F, FortiGate 4400F, FortiGate 4401F, FortiGate 500E, FortiGate 501E, FortiGate 600E, FortiGate 601E, FortiGate 60E-POE, FortiGate 60E, FortiGate 60F, FortiGate 61E, FortiGate 70F, FortiGate 71F, FortiGate 800D, FortiGate 80E-POE, FortiGate 80E, FortiGate 80F Bypass, FortiGate 80F DSL, FortiGate 80F-POE, FortiGate 80F, FortiGate 81E-POE, FortiGate 81E, FortiGate 81F-POE, FortiGate 81F, FortiGate 900D, FortiGate 90E, FortiGate 91E, FortiGate-VM64 Aliyun, FortiGate-VM64 AWS, FortiGate-VM64 Azure, FortiGate-VM64 GCP, FortiGate-VM64 OPC, FortiGate-VM64, FortiGateRugged 60F 3G4G, FortiGateRugged 60F, FortiGateRugged 70F 3G4G, FortiGateRugged 70F, FortiWiFi 40F 3G4G, FortiWiFi 40F, FortiWiFi 60E, FortiWiFi 60F, FortiWiFi 61E, FortiWiFi 61F, FortiWiFi 80F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G-POE, FortiWiFi 81F 2R-POE, FortiWiFi 81F 2R.

It is not available for: FortiGate 5001E1, FortiGate 5001E.

Configure FortiSwitch QoS 802.1p.

```
config switch-controller qos dot1p-map
  Description: Configure FortiSwitch QoS 802.1p.
  edit <name>
    set description {string}
    set egress-pri-tagging [disable|enable]
    set priority-0 [queue-0|queue-1|...]
    set priority-1 [queue-0|queue-1|...]
    set priority-2 [queue-0|queue-1|...]
    set priority-3 [queue-0|queue-1|...]
    set priority-4 [queue-0|queue-1|...]
    set priority-5 [queue-0|queue-1|...]
    set priority-6 [queue-0|queue-1|...]
    set priority-7 [queue-0|queue-1|...]
  next
end
```

config switch-controller qos dot1p-map

Parameter	Description	Type	Size	Default
description	Description of the 802.1p name.	string	Maximum length: 63	
egress-pri-tagging	Enable/disable egress priority-tag frame.	option	-	disable
	Option	Description		
	disable	Disable egress priority tagging.		
	enable	Enable egress priority tagging.		
name	Dot1p map name.	string	Maximum length: 63	
priority-0	COS queue mapped to dot1p priority number.	option	-	queue-0
	Option	Description		
	queue-0	COS queue 0 (lowest priority).		
	queue-1	COS queue 1.		
	queue-2	COS queue 2.		
	queue-3	COS queue 3.		
	queue-4	COS queue 4.		
	queue-5	COS queue 5.		
	queue-6	COS queue 6.		
	queue-7	COS queue 7 (highest priority).		
priority-1	COS queue mapped to dot1p priority number.	option	-	queue-0
	Option	Description		
	queue-0	COS queue 0 (lowest priority).		
	queue-1	COS queue 1.		
	queue-2	COS queue 2.		
	queue-3	COS queue 3.		
	queue-4	COS queue 4.		
	queue-5	COS queue 5.		
	queue-6	COS queue 6.		
	queue-7	COS queue 7 (highest priority).		

Parameter	Description	Type	Size	Default
priority-2	COS queue mapped to dot1p priority number.	option	-	queue-0
	Option	Description		
	<i>queue-0</i>	COS queue 0 (lowest priority).		
	<i>queue-1</i>	COS queue 1.		
	<i>queue-2</i>	COS queue 2.		
	<i>queue-3</i>	COS queue 3.		
	<i>queue-4</i>	COS queue 4.		
	<i>queue-5</i>	COS queue 5.		
	<i>queue-6</i>	COS queue 6.		
	<i>queue-7</i>	COS queue 7 (highest priority).		
priority-3	COS queue mapped to dot1p priority number.	option	-	queue-0
	Option	Description		
	<i>queue-0</i>	COS queue 0 (lowest priority).		
	<i>queue-1</i>	COS queue 1.		
	<i>queue-2</i>	COS queue 2.		
	<i>queue-3</i>	COS queue 3.		
	<i>queue-4</i>	COS queue 4.		
	<i>queue-5</i>	COS queue 5.		
	<i>queue-6</i>	COS queue 6.		
	<i>queue-7</i>	COS queue 7 (highest priority).		
priority-4	COS queue mapped to dot1p priority number.	option	-	queue-0
	Option	Description		
	<i>queue-0</i>	COS queue 0 (lowest priority).		
	<i>queue-1</i>	COS queue 1.		
	<i>queue-2</i>	COS queue 2.		
	<i>queue-3</i>	COS queue 3.		
	<i>queue-4</i>	COS queue 4.		
	<i>queue-5</i>	COS queue 5.		
	<i>queue-6</i>	COS queue 6.		

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>queue-7</i>	COS queue 7 (highest priority).		
priority-5	COS queue mapped to dot1p priority number.	option	-	queue-0
	Option	Description		
	<i>queue-0</i>	COS queue 0 (lowest priority).		
	<i>queue-1</i>	COS queue 1.		
	<i>queue-2</i>	COS queue 2.		
	<i>queue-3</i>	COS queue 3.		
	<i>queue-4</i>	COS queue 4.		
	<i>queue-5</i>	COS queue 5.		
	<i>queue-6</i>	COS queue 6.		
	<i>queue-7</i>	COS queue 7 (highest priority).		
priority-6	COS queue mapped to dot1p priority number.	option	-	queue-0
	Option	Description		
	<i>queue-0</i>	COS queue 0 (lowest priority).		
	<i>queue-1</i>	COS queue 1.		
	<i>queue-2</i>	COS queue 2.		
	<i>queue-3</i>	COS queue 3.		
	<i>queue-4</i>	COS queue 4.		
	<i>queue-5</i>	COS queue 5.		
	<i>queue-6</i>	COS queue 6.		
	<i>queue-7</i>	COS queue 7 (highest priority).		
priority-7	COS queue mapped to dot1p priority number.	option	-	queue-0
	Option	Description		
	<i>queue-0</i>	COS queue 0 (lowest priority).		
	<i>queue-1</i>	COS queue 1.		
	<i>queue-2</i>	COS queue 2.		
	<i>queue-3</i>	COS queue 3.		

Parameter	Description	Type	Size	Default
	Option	Description		
	queue-4	COS queue 4.		
	queue-5	COS queue 5.		
	queue-6	COS queue 6.		
	queue-7	COS queue 7 (highest priority).		

config switch-controller qos ip-dscp-map



This command is available for model(s): FortiGate 1000D, FortiGate 1000F, FortiGate 1001F, FortiGate 100EF, FortiGate 100E, FortiGate 100F, FortiGate 101F, FortiGate 1100E, FortiGate 1101E, FortiGate 140E-POE, FortiGate 140E, FortiGate 1500DT, FortiGate 1500D, FortiGate 1800F, FortiGate 1801F, FortiGate 2000E, FortiGate 200E, FortiGate 200F, FortiGate 201E, FortiGate 201F, FortiGate 2201E, FortiGate 2500E, FortiGate 2600F, FortiGate 2601F, FortiGate 3000D, FortiGate 3000F, FortiGate 3001F, FortiGate 300E, FortiGate 301E, FortiGate 3100D, FortiGate 3200D, FortiGate 3200F, FortiGate 3201F, FortiGate 3300E, FortiGate 3301E, FortiGate 3400E, FortiGate 3401E, FortiGate 3501F, FortiGate 3600E, FortiGate 3601E, FortiGate 3700D, FortiGate 3700F, FortiGate 3701F, FortiGate 3960E, FortiGate 3980E, FortiGate 400E Bypass, FortiGate 400E, FortiGate 400F, FortiGate 401E, FortiGate 401F, FortiGate 40F 3G4G, FortiGate 4200F, FortiGate 4201F, FortiGate 4400F, FortiGate 4401F, FortiGate 500E, FortiGate 501E, FortiGate 600E, FortiGate 601E, FortiGate 60E-POE, FortiGate 60E, FortiGate 60F, FortiGate 61E, FortiGate 70F, FortiGate 71F, FortiGate 800D, FortiGate 80E-POE, FortiGate 80E, FortiGate 80F Bypass, FortiGate 80F DSL, FortiGate 80F-POE, FortiGate 80F, FortiGate 81E-POE, FortiGate 81E, FortiGate 81F-POE, FortiGate 81F, FortiGate 900D, FortiGate 90E, FortiGate 91E, FortiGate-VM64 Aliyun, FortiGate-VM64 AWS, FortiGate-VM64 Azure, FortiGate-VM64 GCP, FortiGate-VM64 OPC, FortiGate-VM64, FortiGateRugged 60F 3G4G, FortiGateRugged 60F, FortiGateRugged 70F 3G4G, FortiGateRugged 70F, FortiWiFi 40F 3G4G, FortiWiFi 40F, FortiWiFi 60E, FortiWiFi 60F, FortiWiFi 61E, FortiWiFi 61F, FortiWiFi 80F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G-POE, FortiWiFi 81F 2R-POE, FortiWiFi 81F 2R.

It is not available for: FortiGate 5001E1, FortiGate 5001E.

Configure FortiSwitch QoS IP precedence/DSCP.

```
config switch-controller qos ip-dscp-map
  Description: Configure FortiSwitch QoS IP precedence/DSCP.
  edit <name>
    set description {string}
    config map
      Description: Maps between IP-DSCP value to COS queue.
      edit <name>
        set cos-queue {integer}
        set diffserv {option1}, {option2}, ...
```



```

        set ip-precedence {option1}, {option2}, ...
        set value {user}
    next
end
next
end

```

config switch-controller qos ip-dscp-map

Parameter	Description	Type	Size	Default
description	Description of the ip-dscp map name.	string	Maximum length: 63	
name	Dscp map name.	string	Maximum length: 63	

config map

Parameter	Description	Type	Size	Default
cos-queue	COS queue number.	integer	Minimum value: 0 Maximum value: 7	0
diffserv	Differentiated service.	option	-	
	Option		Description	
	CS0		DSCP CS0.	
	CS1		DSCP CS1.	
	AF11		DSCP AF11.	
	AF12		DSCP AF12.	
	AF13		DSCP AF13.	
	CS2		DSCP CS2.	
	AF21		DSCP AF21.	
	AF22		DSCP AF22.	
	AF23		DSCP AF23.	
	CS3		DSCP CS3.	
	AF31		DSCP AF31.	
	AF32		DSCP AF32.	

Parameter	Description	Type	Size	Default																				
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>AF33</td><td>DSCP AF33.</td></tr><tr><td>CS4</td><td>DSCP CS4.</td></tr><tr><td>AF41</td><td>DSCP AF41.</td></tr><tr><td>AF42</td><td>DSCP AF42.</td></tr><tr><td>AF43</td><td>DSCP AF43.</td></tr><tr><td>CS5</td><td>DSCP CS5.</td></tr><tr><td>EF</td><td>DSCP EF.</td></tr><tr><td>CS6</td><td>DSCP CS6.</td></tr><tr><td>CS7</td><td>DSCP CS7.</td></tr></table>	Option	Description	AF33	DSCP AF33.	CS4	DSCP CS4.	AF41	DSCP AF41.	AF42	DSCP AF42.	AF43	DSCP AF43.	CS5	DSCP CS5.	EF	DSCP EF.	CS6	DSCP CS6.	CS7	DSCP CS7.			
	Option	Description																						
	AF33	DSCP AF33.																						
	CS4	DSCP CS4.																						
	AF41	DSCP AF41.																						
	AF42	DSCP AF42.																						
	AF43	DSCP AF43.																						
	CS5	DSCP CS5.																						
	EF	DSCP EF.																						
	CS6	DSCP CS6.																						
CS7	DSCP CS7.																							
ip-precedence	IP Precedence.	option	-																					
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>network-control</td><td>Network control.</td></tr><tr><td>internetwork-control</td><td>Internetwork control.</td></tr><tr><td>critic-ecp</td><td>Critic ECP.</td></tr><tr><td>flashoverride</td><td>Flash override.</td></tr><tr><td>flash</td><td>Flash.</td></tr><tr><td>immediate</td><td>Immediate.</td></tr><tr><td>priority</td><td>Priority.</td></tr><tr><td>routine</td><td>Routine.</td></tr></table>	Option	Description	network-control	Network control.	internetwork-control	Internetwork control.	critic-ecp	Critic ECP.	flashoverride	Flash override.	flash	Flash.	immediate	Immediate.	priority	Priority.	routine	Routine.					
	Option	Description																						
	network-control	Network control.																						
	internetwork-control	Internetwork control.																						
	critic-ecp	Critic ECP.																						
	flashoverride	Flash override.																						
	flash	Flash.																						
	immediate	Immediate.																						
	priority	Priority.																						
routine	Routine.																							
name	Dscp mapping entry name.	string	Maximum length: 63																					
value	Raw values of DSCP (0 - 63).	user	Not Specified																					

config switch-controller qos qos-policy



This command is available for model(s): FortiGate 1000D, FortiGate 1000F, FortiGate 1001F, FortiGate 100EF, FortiGate 100E, FortiGate 100F, FortiGate 101F, FortiGate 1100E, FortiGate 1101E, FortiGate 140E-POE, FortiGate 140E, FortiGate 1500DT, FortiGate 1500D, FortiGate 1800F, FortiGate 1801F, FortiGate 2000E, FortiGate 200E, FortiGate 200F, FortiGate 201E, FortiGate 201F, FortiGate 2201E, FortiGate 2500E, FortiGate 2600F, FortiGate 2601F, FortiGate 3000D, FortiGate 3000F, FortiGate 3001F, FortiGate 300E, FortiGate 301E, FortiGate 3100D, FortiGate 3200D, FortiGate 3200F, FortiGate 3201F, FortiGate 3300E, FortiGate 3301E, FortiGate 3400E, FortiGate 3401E, FortiGate 3501F, FortiGate 3600E, FortiGate 3601E, FortiGate 3700D, FortiGate 3700F, FortiGate 3701F, FortiGate 3960E, FortiGate 3980E, FortiGate 400E Bypass, FortiGate 400E, FortiGate 400F, FortiGate 401E, FortiGate 401F, FortiGate 40F 3G4G, FortiGate 4200F, FortiGate 4201F, FortiGate 4400F, FortiGate 4401F, FortiGate 500E, FortiGate 501E, FortiGate 600E, FortiGate 601E, FortiGate 60E-POE, FortiGate 60E, FortiGate 60F, FortiGate 61E, FortiGate 70F, FortiGate 71F, FortiGate 800D, FortiGate 80E-POE, FortiGate 80E, FortiGate 80F Bypass, FortiGate 80F DSL, FortiGate 80F-POE, FortiGate 80F, FortiGate 81E-POE, FortiGate 81E, FortiGate 81F-POE, FortiGate 81F, FortiGate 900D, FortiGate 90E, FortiGate 91E, FortiGate-VM64 Aliyun, FortiGate-VM64 AWS, FortiGate-VM64 Azure, FortiGate-VM64 GCP, FortiGate-VM64 OPC, FortiGate-VM64, FortiGateRugged 60F 3G4G, FortiGateRugged 60F, FortiGateRugged 70F 3G4G, FortiGateRugged 70F, FortiWiFi 40F 3G4G, FortiWiFi 40F, FortiWiFi 60E, FortiWiFi 60F, FortiWiFi 61E, FortiWiFi 61F, FortiWiFi 80F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G-POE, FortiWiFi 81F 2R-POE, FortiWiFi 81F 2R.

It is not available for: FortiGate 5001E1, FortiGate 5001E.

Configure FortiSwitch QoS policy.

```
config switch-controller qos qos-policy
  Description: Configure FortiSwitch QoS policy.
  edit <name>
    set default-cos {integer}
    set queue-policy {string}
    set trust-dot1p-map {string}
    set trust-ip-dscp-map {string}
  next
end
```

config switch-controller qos qos-policy

Parameter	Description	Type	Size	Default
default-cos	Default cos queue for untagged packets.	integer	Minimum value: 0 Maximum value: 7	0

Parameter	Description	Type	Size	Default
name	QoS policy name.	string	Maximum length: 63	
queue-policy	QoS egress queue policy.	string	Maximum length: 63	default
trust-dot1p-map	QoS trust 802.1p map.	string	Maximum length: 63	
trust-ip-dscp-map	QoS trust ip dscp map.	string	Maximum length: 63	

config switch-controller qos queue-policy



This command is available for model(s): FortiGate 1000D, FortiGate 1000F, FortiGate 1001F, FortiGate 100EF, FortiGate 100E, FortiGate 100F, FortiGate 101F, FortiGate 1100E, FortiGate 1101E, FortiGate 140E-POE, FortiGate 140E, FortiGate 1500DT, FortiGate 1500D, FortiGate 1800F, FortiGate 1801F, FortiGate 2000E, FortiGate 200E, FortiGate 200F, FortiGate 201E, FortiGate 201F, FortiGate 2201E, FortiGate 2500E, FortiGate 2600F, FortiGate 2601F, FortiGate 3000D, FortiGate 3000F, FortiGate 3001F, FortiGate 300E, FortiGate 301E, FortiGate 3100D, FortiGate 3200D, FortiGate 3200F, FortiGate 3201F, FortiGate 3300E, FortiGate 3301E, FortiGate 3400E, FortiGate 3401E, FortiGate 3501F, FortiGate 3600E, FortiGate 3601E, FortiGate 3700D, FortiGate 3700F, FortiGate 3701F, FortiGate 3960E, FortiGate 3980E, FortiGate 400E Bypass, FortiGate 400E, FortiGate 400F, FortiGate 401E, FortiGate 401F, FortiGate 40F 3G4G, FortiGate 4200F, FortiGate 4201F, FortiGate 4400F, FortiGate 4401F, FortiGate 500E, FortiGate 501E, FortiGate 600E, FortiGate 601E, FortiGate 60E-POE, FortiGate 60E, FortiGate 60F, FortiGate 61E, FortiGate 70F, FortiGate 71F, FortiGate 800D, FortiGate 80E-POE, FortiGate 80E, FortiGate 80F Bypass, FortiGate 80F DSL, FortiGate 80F-POE, FortiGate 80F, FortiGate 81E-POE, FortiGate 81E, FortiGate 81F-POE, FortiGate 81F, FortiGate 900D, FortiGate 90E, FortiGate 91E, FortiGate-VM64 Aliyun, FortiGate-VM64 AWS, FortiGate-VM64 Azure, FortiGate-VM64 GCP, FortiGate-VM64 OPC, FortiGate-VM64, FortiGateRugged 60F 3G4G, FortiGateRugged 60F, FortiGateRugged 70F 3G4G, FortiGateRugged 70F, FortiWiFi 40F 3G4G, FortiWiFi 40F, FortiWiFi 60E, FortiWiFi 60F, FortiWiFi 61E, FortiWiFi 61F, FortiWiFi 80F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G-POE, FortiWiFi 81F 2R-POE, FortiWiFi 81F 2R.

It is not available for: FortiGate 5001E1, FortiGate 5001E.

Configure FortiSwitch QoS egress queue policy.

```
config switch-controller qos queue-policy
  Description: Configure FortiSwitch QoS egress queue policy.
  edit <name>
    config cos-queue
      Description: COS queue configuration.
      edit <name>
        set description {string}
```

```

        set drop-policy [taildrop|weighted-random-early-detection]
        set ecn [disable|enable]
        set max-rate {integer}
        set max-rate-percent {integer}
        set min-rate {integer}
        set min-rate-percent {integer}
        set weight {integer}
    next
end
set rate-by [kbps|percent]
set schedule [strict|round-robin|...]
next
end

```

config switch-controller qos queue-policy

Parameter	Description	Type	Size	Default								
name	QoS policy name.	string	Maximum length: 63									
rate-by	COS queue rate by kbps or percent.	option	-	kbps								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>kbps</i></td><td>Rate by kbps.</td></tr><tr><td><i>percent</i></td><td>Rate by percent.</td></tr></table>				Option	Description	<i>kbps</i>	Rate by kbps.	<i>percent</i>	Rate by percent.		
	Option	Description										
	<i>kbps</i>	Rate by kbps.										
<i>percent</i>	Rate by percent.											
schedule	COS queue scheduling.	option	-	round-robin								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>strict</i></td><td>Strict scheduling (queue7: highest priority, queue0: lowest priority).</td></tr><tr><td><i>round-robin</i></td><td>Round robin scheduling.</td></tr><tr><td><i>weighted</i></td><td>Weighted round robin scheduling.</td></tr></table>				Option	Description	<i>strict</i>	Strict scheduling (queue7: highest priority, queue0: lowest priority).	<i>round-robin</i>	Round robin scheduling.	<i>weighted</i>	Weighted round robin scheduling.
	Option	Description										
	<i>strict</i>	Strict scheduling (queue7: highest priority, queue0: lowest priority).										
<i>round-robin</i>	Round robin scheduling.											
<i>weighted</i>	Weighted round robin scheduling.											

config cos-queue

Parameter	Description	Type	Size	Default
description	Description of the COS queue.	string	Maximum length: 63	
drop-policy	COS queue drop policy.	option	-	taildrop

Parameter	Description	Type	Size	Default						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>taildrop</i></td><td>Taildrop policy.</td></tr><tr><td><i>weighted-random-early-detection</i></td><td>Weighted random early detection drop policy.</td></tr></table>	Option	Description	<i>taildrop</i>	Taildrop policy.	<i>weighted-random-early-detection</i>	Weighted random early detection drop policy.			
	Option	Description								
	<i>taildrop</i>	Taildrop policy.								
<i>weighted-random-early-detection</i>	Weighted random early detection drop policy.									
ecn	Enable/disable ECN packet marking to drop eligible packets.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>disable</i></td><td>Disable ECN packet marking to drop eligible packets.</td></tr><tr><td><i>enable</i></td><td>Enable ECN packet marking to drop eligible packets.</td></tr></table>	Option	Description	<i>disable</i>	Disable ECN packet marking to drop eligible packets.	<i>enable</i>	Enable ECN packet marking to drop eligible packets.			
	Option	Description								
	<i>disable</i>	Disable ECN packet marking to drop eligible packets.								
<i>enable</i>	Enable ECN packet marking to drop eligible packets.									
max-rate	Maximum rate (0 - 4294967295 kbps, 0 to disable).	integer	Minimum value: 0 0 Maximum value: 4294967295							
max-rate-percent	Maximum rate (% of link speed).	integer	Minimum value: 0 0 Maximum value: 4294967295							
min-rate	Minimum rate (0 - 4294967295 kbps, 0 to disable).	integer	Minimum value: 0 0 Maximum value: 4294967295							
min-rate-percent	Minimum rate (% of link speed).	integer	Minimum value: 0 0 Maximum value: 4294967295							
name	Cos queue ID.	string	Maximum length: 63							
weight	Weight of weighted round robin scheduling.	integer	Minimum value: 1 0 Maximum value: 4294967295							

config switch-controller quarantine



This command is available for model(s): FortiGate 1000D, FortiGate 1000F, FortiGate 1001F, FortiGate 100EF, FortiGate 100E, FortiGate 100F, FortiGate 101F, FortiGate 1100E, FortiGate 1101E, FortiGate 140E-POE, FortiGate 140E, FortiGate 1500DT, FortiGate 1500D, FortiGate 1800F, FortiGate 1801F, FortiGate 2000E, FortiGate 200E, FortiGate 200F, FortiGate 201E, FortiGate 201F, FortiGate 2201E, FortiGate 2500E, FortiGate 2600F, FortiGate 2601F, FortiGate 3000D, FortiGate 3000F, FortiGate 3001F, FortiGate 300E, FortiGate 301E, FortiGate 3100D, FortiGate 3200D, FortiGate 3200F, FortiGate 3201F, FortiGate 3300E, FortiGate 3301E, FortiGate 3400E, FortiGate 3401E, FortiGate 3501F, FortiGate 3600E, FortiGate 3601E, FortiGate 3700D, FortiGate 3700F, FortiGate 3701F, FortiGate 3960E, FortiGate 3980E, FortiGate 400E Bypass, FortiGate 400E, FortiGate 400F, FortiGate 401E, FortiGate 401F, FortiGate 40F 3G4G, FortiGate 4200F, FortiGate 4201F, FortiGate 4400F, FortiGate 4401F, FortiGate 500E, FortiGate 501E, FortiGate 600E, FortiGate 601E, FortiGate 60E-POE, FortiGate 60E, FortiGate 60F, FortiGate 61E, FortiGate 70F, FortiGate 71F, FortiGate 800D, FortiGate 80E-POE, FortiGate 80E, FortiGate 80F Bypass, FortiGate 80F DSL, FortiGate 80F-POE, FortiGate 80F, FortiGate 81E-POE, FortiGate 81E, FortiGate 81F-POE, FortiGate 81F, FortiGate 900D, FortiGate 90E, FortiGate 91E, FortiGate-VM64 Aliyun, FortiGate-VM64 AWS, FortiGate-VM64 Azure, FortiGate-VM64 GCP, FortiGate-VM64 OPC, FortiGate-VM64, FortiGateRugged 60F 3G4G, FortiGateRugged 60F, FortiGateRugged 70F 3G4G, FortiGateRugged 70F, FortiWiFi 40F 3G4G, FortiWiFi 40F, FortiWiFi 60E, FortiWiFi 60F, FortiWiFi 61E, FortiWiFi 61F, FortiWiFi 80F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G-POE, FortiWiFi 81F 2R-POE, FortiWiFi 81F 2R.

It is not available for: FortiGate 5001E1, FortiGate 5001E.

Configure FortiSwitch quarantine support.

```
config switch-controller quarantine
  Description: Configure FortiSwitch quarantine support.
  set quarantine [enable|disable]
  config targets
    Description: Quarantine MACs.
    edit <mac>
      set description {string}
      set tag <tags1>, <tags2>, ...
    next
  end
end
```

config switch-controller quarantine

Parameter	Description	Type	Size	Default
quarantine	Enable/disable quarantine.	option	-	disable

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>enable</i>	Enable quarantine.		
	<i>disable</i>	Disable quarantine.		

config targets

Parameter	Description	Type	Size	Default
description	Description for the quarantine MAC.	string	Maximum length: 63	
mac	Quarantine MAC.	mac-address	Not Specified	00:00:00:00:00:00
tag <tags>	Tags for the quarantine MAC. Tag string. For example, string1 string2 string3.	string	Maximum length: 63	

config switch-controller remote-log



This command is available for model(s): FortiGate 1000D, FortiGate 1000F, FortiGate 1001F, FortiGate 100EF, FortiGate 100E, FortiGate 100F, FortiGate 101F, FortiGate 1100E, FortiGate 1101E, FortiGate 140E-POE, FortiGate 140E, FortiGate 1500DT, FortiGate 1500D, FortiGate 1800F, FortiGate 1801F, FortiGate 2000E, FortiGate 200E, FortiGate 200F, FortiGate 201E, FortiGate 201F, FortiGate 2201E, FortiGate 2500E, FortiGate 2600F, FortiGate 2601F, FortiGate 3000D, FortiGate 3000F, FortiGate 3001F, FortiGate 300E, FortiGate 301E, FortiGate 3100D, FortiGate 3200D, FortiGate 3200F, FortiGate 3201F, FortiGate 3300E, FortiGate 3301E, FortiGate 3400E, FortiGate 3401E, FortiGate 3501F, FortiGate 3600E, FortiGate 3601E, FortiGate 3700D, FortiGate 3700F, FortiGate 3701F, FortiGate 3960E, FortiGate 3980E, FortiGate 400E Bypass, FortiGate 400E, FortiGate 400F, FortiGate 401E, FortiGate 401F, FortiGate 40F 3G4G, FortiGate 4200F, FortiGate 4201F, FortiGate 4400F, FortiGate 4401F, FortiGate 500E, FortiGate 501E, FortiGate 600E, FortiGate 601E, FortiGate 60E-POE, FortiGate 60E, FortiGate 60F, FortiGate 61E, FortiGate 70F, FortiGate 71F, FortiGate 800D, FortiGate 80E-POE, FortiGate 80E, FortiGate 80F Bypass, FortiGate 80F DSL, FortiGate 80F-POE, FortiGate 80F, FortiGate 81E-POE, FortiGate 81E, FortiGate 81F-POE, FortiGate 81F, FortiGate 900D, FortiGate 90E, FortiGate 91E, FortiGate-VM64 Aliyun, FortiGate-VM64 AWS, FortiGate-VM64 Azure, FortiGate-VM64 GCP, FortiGate-VM64 OPC, FortiGate-VM64, FortiGateRugged 60F 3G4G, FortiGateRugged 60F, FortiGateRugged 70F 3G4G, FortiGateRugged 70F, FortiWiFi 40F 3G4G, FortiWiFi 40F, FortiWiFi 60E, FortiWiFi 60F, FortiWiFi 61E, FortiWiFi 61F, FortiWiFi 80F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G-POE, FortiWiFi 81F 2R-POE, FortiWiFi 81F 2R.

It is not available for: FortiGate 5001E1, FortiGate 5001E.

Configure logging by FortiSwitch device to a remote syslog server.

```
config switch-controller remote-log
  Description: Configure logging by FortiSwitch device to a remote syslog server.
  edit <name>
    set csv [enable|disable]
    set facility [kernel|user|...]
    set port {integer}
    set server {string}
    set severity [emergency|alert|...]
    set status [enable|disable]
  next
end
```

config switch-controller remote-log

Parameter	Description	Type	Size	Default
csv	Enable/disable comma-separated value (CSV) strings.	option	-	disable
	Option			
	enable			
	disable			
facility	Facility to log to remote syslog server.	option	-	local7
	Option			
	kernel			
	user			
	mail			
	daemon			
	auth			
	syslog			
	lpr			
	news			
	uucp			
	cron			
	authpriv			
	ftp			

Parameter	Description	Type	Size	Default																										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>ntp</i></td><td>NTP daemon.</td></tr><tr><td><i>audit</i></td><td>Log audit.</td></tr><tr><td><i>alert</i></td><td>Log alert.</td></tr><tr><td><i>clock</i></td><td>Clock daemon.</td></tr><tr><td><i>local0</i></td><td>Reserved for local use.</td></tr><tr><td><i>local1</i></td><td>Reserved for local use.</td></tr><tr><td><i>local2</i></td><td>Reserved for local use.</td></tr><tr><td><i>local3</i></td><td>Reserved for local use.</td></tr><tr><td><i>local4</i></td><td>Reserved for local use.</td></tr><tr><td><i>local5</i></td><td>Reserved for local use.</td></tr><tr><td><i>local6</i></td><td>Reserved for local use.</td></tr><tr><td><i>local7</i></td><td>Reserved for local use.</td></tr></table>	Option	Description	<i>ntp</i>	NTP daemon.	<i>audit</i>	Log audit.	<i>alert</i>	Log alert.	<i>clock</i>	Clock daemon.	<i>local0</i>	Reserved for local use.	<i>local1</i>	Reserved for local use.	<i>local2</i>	Reserved for local use.	<i>local3</i>	Reserved for local use.	<i>local4</i>	Reserved for local use.	<i>local5</i>	Reserved for local use.	<i>local6</i>	Reserved for local use.	<i>local7</i>	Reserved for local use.			
	Option	Description																												
	<i>ntp</i>	NTP daemon.																												
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	<i>local3</i>	Reserved for local use.																												
	<i>local4</i>	Reserved for local use.																												
	<i>local5</i>	Reserved for local use.																												
	<i>local6</i>	Reserved for local use.																												
	<i>local7</i>	Reserved for local use.																												
name	Remote log name.	string	Maximum length: 35																											
port	Remote syslog server listening port.	integer	Minimum value: 0 Maximum value: 65535	514																										
server	IPv4 address of the remote syslog server.	string	Maximum length: 63																											
severity	Severity of logs to be transferred to remote log server.	option	-	information																										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>emergency</i></td><td>Emergency level.</td></tr><tr><td><i>alert</i></td><td>Alert level.</td></tr><tr><td><i>critical</i></td><td>Critical level.</td></tr><tr><td><i>error</i></td><td>Error level.</td></tr><tr><td><i>warning</i></td><td>Warning level.</td></tr><tr><td><i>notification</i></td><td>Notification level.</td></tr><tr><td><i>information</i></td><td>Information level.</td></tr></table>	Option	Description	<i>emergency</i>	Emergency level.	<i>alert</i>	Alert level.	<i>critical</i>	Critical level.	<i>error</i>	Error level.	<i>warning</i>	Warning level.	<i>notification</i>	Notification level.	<i>information</i>	Information level.													
	Option	Description																												
	<i>emergency</i>	Emergency level.																												
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	<i>error</i>	Error level.																												
	<i>warning</i>	Warning level.																												
	<i>notification</i>	Notification level.																												
<i>information</i>	Information level.																													

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>debug</i>	Debug level.		
status	Enable/disable logging by FortiSwitch device to a remote syslog server.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable logging by FortiSwitch device to a remote syslog server.		
	<i>disable</i>	Disable logging by FortiSwitch device to a remote syslog server.		

config switch-controller security-policy 802-1X



This command is available for model(s): FortiGate 1000D, FortiGate 1000F, FortiGate 1001F, FortiGate 100EF, FortiGate 100E, FortiGate 100F, FortiGate 101F, FortiGate 1100E, FortiGate 1101E, FortiGate 140E-POE, FortiGate 140E, FortiGate 1500DT, FortiGate 1500D, FortiGate 1800F, FortiGate 1801F, FortiGate 2000E, FortiGate 200E, FortiGate 200F, FortiGate 201E, FortiGate 201F, FortiGate 2201E, FortiGate 2500E, FortiGate 2600F, FortiGate 2601F, FortiGate 3000D, FortiGate 3000F, FortiGate 3001F, FortiGate 300E, FortiGate 301E, FortiGate 3100D, FortiGate 3200D, FortiGate 3200F, FortiGate 3201F, FortiGate 3300E, FortiGate 3301E, FortiGate 3400E, FortiGate 3401E, FortiGate 3501F, FortiGate 3600E, FortiGate 3601E, FortiGate 3700D, FortiGate 3700F, FortiGate 3701F, FortiGate 3960E, FortiGate 3980E, FortiGate 400E Bypass, FortiGate 400E, FortiGate 400F, FortiGate 401E, FortiGate 401F, FortiGate 40F 3G4G, FortiGate 4200F, FortiGate 4201F, FortiGate 4400F, FortiGate 4401F, FortiGate 500E, FortiGate 501E, FortiGate 600E, FortiGate 601E, FortiGate 60E-POE, FortiGate 60E, FortiGate 60F, FortiGate 61E, FortiGate 70F, FortiGate 71F, FortiGate 800D, FortiGate 80E-POE, FortiGate 80E, FortiGate 80F Bypass, FortiGate 80F DSL, FortiGate 80F-POE, FortiGate 80F, FortiGate 81E-POE, FortiGate 81E, FortiGate 81F-POE, FortiGate 81F, FortiGate 900D, FortiGate 90E, FortiGate 91E, FortiGate-VM64 Aliyun, FortiGate-VM64 AWS, FortiGate-VM64 Azure, FortiGate-VM64 GCP, FortiGate-VM64 OPC, FortiGate-VM64, FortiGateRugged 60F 3G4G, FortiGateRugged 60F, FortiGateRugged 70F 3G4G, FortiGateRugged 70F, FortiWiFi 40F 3G4G, FortiWiFi 40F, FortiWiFi 60E, FortiWiFi 60F, FortiWiFi 61E, FortiWiFi 61F, FortiWiFi 80F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G-POE, FortiWiFi 81F 2R-POE, FortiWiFi 81F 2R.

It is not available for: FortiGate 5001E1, FortiGate 5001E.

Configure 802.1x MAC Authentication Bypass (MAB) policies.

```
config switch-controller security-policy 802-1X
  Description: Configure 802.1x MAC Authentication Bypass (MAB) policies.
  edit <name>
    set auth-fail-vlan [disable|enable]
    set auth-fail-vlan-id {string}
```

```

set authserver-timeout-period {integer}
set authserver-timeout-tagged [disable|lldp-voice|...]
set authserver-timeout-tagged-vlanid {string}
set authserver-timeout-vlan [disable|enable]
set authserver-timeout-vlanid {string}
set eap-auto-untagged-vlans [disable|enable]
set eap-passthru [disable|enable]
set framevid-apply [disable|enable]
set guest-auth-delay {integer}
set guest-vlan [disable|enable]
set guest-vlan-id {string}
set mac-auth-bypass [disable|enable]
set open-auth [disable|enable]
set policy-type {option}
set radius-timeout-overwrite [disable|enable]
set security-mode [802.1X|802.1X-mac-based]
set user-group <name1>, <name2>, ...
next
end

```

config switch-controller security-policy 802-1X

Parameter	Description	Type	Size	Default								
auth-fail-vlan	Enable to allow limited access to clients that cannot authenticate.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Disable authentication fail VLAN on this interface.</td></tr><tr><td>enable</td><td>Enable authentication fail VLAN on this interface.</td></tr></table>	Option	Description	disable	Disable authentication fail VLAN on this interface.	enable	Enable authentication fail VLAN on this interface.					
Option	Description											
disable	Disable authentication fail VLAN on this interface.											
enable	Enable authentication fail VLAN on this interface.											
auth-fail-vlan-id	VLAN ID on which authentication failed.	string	Maximum length: 15									
authserver-timeout-period	Authentication server timeout period (3 - 15 sec, default = 3).	integer	Minimum value: 3 Maximum value: 15	3								
authserver-timeout-tagged	Configure timeout option for the tagged VLAN which allows limited access when the authentication server is unavailable.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Disable authentication server timeout on this interface.</td></tr><tr><td>lldp-voice</td><td>LLDP voice timeout for the tagged VLAN on this interface.</td></tr><tr><td>static</td><td>Static timeout for the tagged VLAN on this interface.</td></tr></table>	Option	Description	disable	Disable authentication server timeout on this interface.	lldp-voice	LLDP voice timeout for the tagged VLAN on this interface.	static	Static timeout for the tagged VLAN on this interface.			
Option	Description											
disable	Disable authentication server timeout on this interface.											
lldp-voice	LLDP voice timeout for the tagged VLAN on this interface.											
static	Static timeout for the tagged VLAN on this interface.											

Parameter	Description	Type	Size	Default						
authserver-timeout-tagged-vlanid	Tagged VLAN name for which the timeout option is applied to (only one VLAN ID).	string	Maximum length: 15							
authserver-timeout-vlan	Enable/disable the authentication server timeout VLAN to allow limited access when RADIUS is unavailable.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Disable authentication server timeout VLAN on this interface.</td></tr><tr><td>enable</td><td>Enable authentication server timeout VLAN on this interface.</td></tr></table>	Option	Description	disable	Disable authentication server timeout VLAN on this interface.	enable	Enable authentication server timeout VLAN on this interface.			
Option	Description									
disable	Disable authentication server timeout VLAN on this interface.									
enable	Enable authentication server timeout VLAN on this interface.									
authserver-timeout-vlanid	Authentication server timeout VLAN name.	string	Maximum length: 15							
eap-auto-untagged-vlans	Enable/disable automatic inclusion of untagged VLANs.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Disable automatic inclusion of untagged VLANs.</td></tr><tr><td>enable</td><td>Enable automatic inclusion of untagged VLANs.</td></tr></table>	Option	Description	disable	Disable automatic inclusion of untagged VLANs.	enable	Enable automatic inclusion of untagged VLANs.			
Option	Description									
disable	Disable automatic inclusion of untagged VLANs.									
enable	Enable automatic inclusion of untagged VLANs.									
eap-passthru	Enable/disable EAP pass-through mode, allowing protocols (such as LLDP) to pass through ports for more flexible authentication.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Disable EAP pass-through mode on this interface.</td></tr><tr><td>enable</td><td>Enable EAP pass-through mode on this interface.</td></tr></table>	Option	Description	disable	Disable EAP pass-through mode on this interface.	enable	Enable EAP pass-through mode on this interface.			
Option	Description									
disable	Disable EAP pass-through mode on this interface.									
enable	Enable EAP pass-through mode on this interface.									
framevid-apply	Enable/disable the capability to apply the EAP/MAB frame VLAN to the port native VLAN.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Disable the capability to apply the EAP/MAB frame VLAN to the port native VLAN.</td></tr><tr><td>enable</td><td>Enable the capability to apply the EAP/MAB frame VLAN to the port native VLAN.</td></tr></table>	Option	Description	disable	Disable the capability to apply the EAP/MAB frame VLAN to the port native VLAN.	enable	Enable the capability to apply the EAP/MAB frame VLAN to the port native VLAN.			
Option	Description									
disable	Disable the capability to apply the EAP/MAB frame VLAN to the port native VLAN.									
enable	Enable the capability to apply the EAP/MAB frame VLAN to the port native VLAN.									

Parameter	Description	Type	Size	Default						
guest-auth-delay	Guest authentication delay (1 - 900 sec, default = 30).	integer	Minimum value: 1 Maximum value: 900	30						
guest-vlan	Enable the guest VLAN feature to allow limited access to non-802.1X-compliant clients.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Disable guest VLAN on this interface.</td></tr><tr><td>enable</td><td>Enable guest VLAN on this interface.</td></tr></table>	Option	Description	disable	Disable guest VLAN on this interface.	enable	Enable guest VLAN on this interface.			
Option	Description									
disable	Disable guest VLAN on this interface.									
enable	Enable guest VLAN on this interface.									
guest-vlan-id	Guest VLAN name.	string	Maximum length: 15							
mac-auth-bypass	Enable/disable MAB for this policy.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Disable MAB.</td></tr><tr><td>enable</td><td>Enable MAB.</td></tr></table>	Option	Description	disable	Disable MAB.	enable	Enable MAB.			
Option	Description									
disable	Disable MAB.									
enable	Enable MAB.									
name	Policy name.	string	Maximum length: 31							
open-auth	Enable/disable open authentication for this policy.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Disable open authentication.</td></tr><tr><td>enable</td><td>Enable open authentication.</td></tr></table>	Option	Description	disable	Disable open authentication.	enable	Enable open authentication.			
Option	Description									
disable	Disable open authentication.									
enable	Enable open authentication.									
policy-type	Policy type.	option	-	802.1X						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>802.1X</td><td>802.1X security policy.</td></tr></table>	Option	Description	802.1X	802.1X security policy.					
Option	Description									
802.1X	802.1X security policy.									
radius-timeout-overwrite	Enable to override the global RADIUS session timeout.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Override the global RADIUS session timeout.</td></tr><tr><td>enable</td><td>Use the global RADIUS session timeout.</td></tr></table>	Option	Description	disable	Override the global RADIUS session timeout.	enable	Use the global RADIUS session timeout.			
Option	Description									
disable	Override the global RADIUS session timeout.									
enable	Use the global RADIUS session timeout.									

Parameter	Description	Type	Size	Default
security-mode	Port or MAC based 802.1X security mode.	option	-	802.1X
	Option	Description		
	802.1X	802.1X port based authentication.		
	802.1X-mac-based	802.1X MAC based authentication.		
user-group <name>	Name of user-group to assign to this MAC Authentication Bypass (MAB) policy. Group name.	string	Maximum length: 79	

config switch-controller security-policy local-access



This command is available for model(s): FortiGate 1000D, FortiGate 1000F, FortiGate 1001F, FortiGate 100EF, FortiGate 100E, FortiGate 100F, FortiGate 101F, FortiGate 1100E, FortiGate 1101E, FortiGate 140E-POE, FortiGate 140E, FortiGate 1500DT, FortiGate 1500D, FortiGate 1800F, FortiGate 1801F, FortiGate 2000E, FortiGate 200E, FortiGate 200F, FortiGate 201E, FortiGate 201F, FortiGate 2201E, FortiGate 2500E, FortiGate 2600F, FortiGate 2601F, FortiGate 3000D, FortiGate 3000F, FortiGate 3001F, FortiGate 300E, FortiGate 301E, FortiGate 3100D, FortiGate 3200D, FortiGate 3200F, FortiGate 3201F, FortiGate 3300E, FortiGate 3301E, FortiGate 3400E, FortiGate 3401E, FortiGate 3501F, FortiGate 3600E, FortiGate 3601E, FortiGate 3700D, FortiGate 3700F, FortiGate 3701F, FortiGate 3960E, FortiGate 3980E, FortiGate 400E Bypass, FortiGate 400E, FortiGate 400F, FortiGate 401E, FortiGate 401F, FortiGate 40F 3G4G, FortiGate 4200F, FortiGate 4201F, FortiGate 4400F, FortiGate 4401F, FortiGate 500E, FortiGate 501E, FortiGate 600E, FortiGate 601E, FortiGate 60E-POE, FortiGate 60E, FortiGate 60F, FortiGate 61E, FortiGate 70F, FortiGate 71F, FortiGate 800D, FortiGate 80E-POE, FortiGate 80E, FortiGate 80F Bypass, FortiGate 80F DSL, FortiGate 80F-POE, FortiGate 80F, FortiGate 81E-POE, FortiGate 81E, FortiGate 81F-POE, FortiGate 81F, FortiGate 900D, FortiGate 90E, FortiGate 91E, FortiGate-VM64 Aliyun, FortiGate-VM64 AWS, FortiGate-VM64 Azure, FortiGate-VM64 GCP, FortiGate-VM64 OPC, FortiGate-VM64, FortiGateRugged 60F 3G4G, FortiGateRugged 60F, FortiGateRugged 70F 3G4G, FortiGateRugged 70F, FortiWiFi 40F 3G4G, FortiWiFi 40F, FortiWiFi 60E, FortiWiFi 60F, FortiWiFi 61E, FortiWiFi 61F, FortiWiFi 80F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G-POE, FortiWiFi 81F 2R-POE, FortiWiFi 81F 2R.

It is not available for: FortiGate 5001E1, FortiGate 5001E.

Configure allowaccess list for mgmt and internal interfaces on managed FortiSwitch units.

```
config switch-controller security-policy local-access
    Description: Configure allowaccess list for mgmt and internal interfaces on managed
    FortiSwitch units.
    edit <name>
```

```

    set internal-allowaccess {option1}, {option2}, ...
    set mgmt-allowaccess {option1}, {option2}, ...
next
end

```

config switch-controller security-policy local-access

Parameter	Description	Type	Size	Default
internal-allowaccess	Allowed access on the switch internal interface.	option	-	https ping ssh
	Option	Description		
	https	HTTPS access.		
	ping	PING access.		
	ssh	SSH access.		
	snmp	SNMP access.		
	http	HTTP access.		
	telnet	TELNET access.		
	radius-acct	RADIUS accounting access.		
mgmt-allowaccess	Allowed access on the switch management interface.	option	-	https ping ssh
	Option	Description		
	https	HTTPS access.		
	ping	PING access.		
	ssh	SSH access.		
	snmp	SNMP access.		
	http	HTTP access.		
	telnet	TELNET access.		
	radius-acct	RADIUS accounting access.		
name	Policy name.	string	Maximum length: 31	

config switch-controller sflow



This command is available for model(s): FortiGate 1000D, FortiGate 1000F, FortiGate 1001F, FortiGate 100EF, FortiGate 100E, FortiGate 100F, FortiGate 101F, FortiGate 1100E, FortiGate 1101E, FortiGate 140E-POE, FortiGate 140E, FortiGate 1500DT, FortiGate 1500D, FortiGate 1800F, FortiGate 1801F, FortiGate 2000E, FortiGate 200E, FortiGate 200F, FortiGate 201E, FortiGate 201F, FortiGate 2201E, FortiGate 2500E, FortiGate 2600F, FortiGate 2601F, FortiGate 3000D, FortiGate 3000F, FortiGate 3001F, FortiGate 300E, FortiGate 301E, FortiGate 3100D, FortiGate 3200D, FortiGate 3200F, FortiGate 3201F, FortiGate 3300E, FortiGate 3301E, FortiGate 3400E, FortiGate 3401E, FortiGate 3501F, FortiGate 3600E, FortiGate 3601E, FortiGate 3700D, FortiGate 3700F, FortiGate 3701F, FortiGate 3960E, FortiGate 3980E, FortiGate 400E Bypass, FortiGate 400E, FortiGate 400F, FortiGate 401E, FortiGate 401F, FortiGate 40F 3G4G, FortiGate 4200F, FortiGate 4201F, FortiGate 4400F, FortiGate 4401F, FortiGate 500E, FortiGate 501E, FortiGate 600E, FortiGate 601E, FortiGate 60E-POE, FortiGate 60E, FortiGate 60F, FortiGate 61E, FortiGate 70F, FortiGate 71F, FortiGate 800D, FortiGate 80E-POE, FortiGate 80E, FortiGate 80F Bypass, FortiGate 80F DSL, FortiGate 80F-POE, FortiGate 80F, FortiGate 81E-POE, FortiGate 81E, FortiGate 81F-POE, FortiGate 81F, FortiGate 900D, FortiGate 90E, FortiGate 91E, FortiGate-VM64 Aliyun, FortiGate-VM64 AWS, FortiGate-VM64 Azure, FortiGate-VM64 GCP, FortiGate-VM64 OPC, FortiGate-VM64, FortiGateRugged 60F 3G4G, FortiGateRugged 60F, FortiGateRugged 70F 3G4G, FortiGateRugged 70F, FortiWiFi 40F 3G4G, FortiWiFi 40F, FortiWiFi 60E, FortiWiFi 60F, FortiWiFi 61E, FortiWiFi 61F, FortiWiFi 80F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G-POE, FortiWiFi 81F 2R-POE, FortiWiFi 81F 2R.

It is not available for: FortiGate 5001E1, FortiGate 5001E.

Configure FortiSwitch sFlow.

```
config switch-controller sflow
    Description: Configure FortiSwitch sFlow.
    set collector-ip {ipv4-address}
    set collector-port {integer}
end
```

config switch-controller sflow

Parameter	Description	Type	Size	Default
collector-ip	Collector IP.	ipv4-address	Not Specified	0.0.0.0
collector-port	SFlow collector port (0 - 65535).	integer	Minimum value: 0 Maximum value: 65535	6343

config switch-controller snmp-community



This command is available for model(s): FortiGate 1000D, FortiGate 1000F, FortiGate 1001F, FortiGate 100EF, FortiGate 100E, FortiGate 100F, FortiGate 101F, FortiGate 1100E, FortiGate 1101E, FortiGate 140E-POE, FortiGate 140E, FortiGate 1500DT, FortiGate 1500D, FortiGate 1800F, FortiGate 1801F, FortiGate 2000E, FortiGate 200E, FortiGate 200F, FortiGate 201E, FortiGate 201F, FortiGate 2201E, FortiGate 2500E, FortiGate 2600F, FortiGate 2601F, FortiGate 3000D, FortiGate 3000F, FortiGate 3001F, FortiGate 300E, FortiGate 301E, FortiGate 3100D, FortiGate 3200D, FortiGate 3200F, FortiGate 3201F, FortiGate 3300E, FortiGate 3301E, FortiGate 3400E, FortiGate 3401E, FortiGate 3501F, FortiGate 3600E, FortiGate 3601E, FortiGate 3700D, FortiGate 3700F, FortiGate 3701F, FortiGate 3960E, FortiGate 3980E, FortiGate 400E Bypass, FortiGate 400E, FortiGate 400F, FortiGate 401E, FortiGate 401F, FortiGate 40F 3G4G, FortiGate 4200F, FortiGate 4201F, FortiGate 4400F, FortiGate 4401F, FortiGate 500E, FortiGate 501E, FortiGate 600E, FortiGate 601E, FortiGate 60E-POE, FortiGate 60E, FortiGate 60F, FortiGate 61E, FortiGate 70F, FortiGate 71F, FortiGate 800D, FortiGate 80E-POE, FortiGate 80E, FortiGate 80F Bypass, FortiGate 80F DSL, FortiGate 80F-POE, FortiGate 80F, FortiGate 81E-POE, FortiGate 81E, FortiGate 81F-POE, FortiGate 81F, FortiGate 900D, FortiGate 90E, FortiGate 91E, FortiGate-VM64 Aliyun, FortiGate-VM64 AWS, FortiGate-VM64 Azure, FortiGate-VM64 GCP, FortiGate-VM64 OPC, FortiGate-VM64, FortiGateRugged 60F 3G4G, FortiGateRugged 60F, FortiGateRugged 70F 3G4G, FortiGateRugged 70F, FortiWiFi 40F 3G4G, FortiWiFi 40F, FortiWiFi 60E, FortiWiFi 60F, FortiWiFi 61E, FortiWiFi 61F, FortiWiFi 80F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G-POE, FortiWiFi 81F 2R-POE, FortiWiFi 81F 2R.

It is not available for: FortiGate 5001E1, FortiGate 5001E.

Configure FortiSwitch SNMP v1/v2c communities globally.

```
config switch-controller snmp-community
  Description: Configure FortiSwitch SNMP v1/v2c communities globally.
  edit <id>
    set events {option1}, {option2}, ...
    config hosts
      Description: Configure IPv4 SNMP managers (hosts).
      edit <id>
        set ip {user}
      next
    end
    set name {string}
    set query-v1-port {integer}
    set query-v1-status [disable|enable]
    set query-v2c-port {integer}
    set query-v2c-status [disable|enable]
    set status [disable|enable]
    set trap-v1-lport {integer}
    set trap-v1-rport {integer}
    set trap-v1-status [disable|enable]
    set trap-v2c-lport {integer}
    set trap-v2c-rport {integer}
```

```

        set trap-v2c-status [disable|enable]
    next
end

```

config switch-controller snmp-community

Parameter	Description	Type	Size	Default
events	SNMP notifications (traps) to send.	option	-	cpu-high mem-low log-full intf-ip ent- conf- change
	Option	Description		
	cpu-high	Send a trap when CPU usage too high.		
	mem-low	Send a trap when available memory is low.		
	log-full	Send a trap when log disk space becomes low.		
	intf-ip	Send a trap when an interface IP address is changed.		
	ent-conf-change	Send a trap when an entity MIB change occurs (RFC4133).		
id	SNMP community ID.	integer	Minimum value: 0 0 Maximum value: 4294967295	
name	SNMP community name.	string	Maximum length: 35	
query-v1-port	SNMP v1 query port (default = 161).	integer	Minimum value: 0 0 Maximum value: 65535	161
query-v1-status	Enable/disable SNMP v1 queries.	option	-	enable
	Option	Description		
	disable	Disable SNMP v1 queries.		
	enable	Enable SNMP v1 queries.		
query-v2c-port	SNMP v2c query port (default = 161).	integer	Minimum value: 0 0 Maximum value: 65535	161

Parameter	Description	Type	Size	Default
query-v2c-status	Enable/disable SNMP v2c queries.	option	-	enable
	Option	Description		
	<i>disable</i>	Disable SNMP v2c queries.		
	<i>enable</i>	Enable SNMP v2c queries.		
status	Enable/disable this SNMP community.	option	-	enable
	Option	Description		
	<i>disable</i>	Disable SNMP community.		
	<i>enable</i>	Enable SNMP community.		
trap-v1-lport	SNMP v2c trap local port (default = 162).	integer	Minimum value: 162 0 Maximum value: 65535	
trap-v1-rport	SNMP v2c trap remote port (default = 162).	integer	Minimum value: 162 0 Maximum value: 65535	
trap-v1-status	Enable/disable SNMP v1 traps.	option	-	enable
	Option	Description		
	<i>disable</i>	Disable SNMP v1 traps.		
	<i>enable</i>	Enable SNMP v1 traps.		
trap-v2c-lport	SNMP v2c trap local port (default = 162).	integer	Minimum value: 162 0 Maximum value: 65535	
trap-v2c-rport	SNMP v2c trap remote port (default = 162).	integer	Minimum value: 162 0 Maximum value: 65535	
trap-v2c-status	Enable/disable SNMP v2c traps.	option	-	enable
	Option	Description		
	<i>disable</i>	Disable SNMP v2c traps.		
	<i>enable</i>	Enable SNMP v2c traps.		

config hosts

Parameter	Description	Type	Size	Default
id	Host entry ID.	integer	Minimum value: 0 Maximum value: 4294967295	0
ip	IPv4 address of the SNMP manager (host).	user	Not Specified	

config switch-controller snmp-sysinfo



This command is available for model(s): FortiGate 1000D, FortiGate 1000F, FortiGate 1001F, FortiGate 100EF, FortiGate 100E, FortiGate 100F, FortiGate 101F, FortiGate 1100E, FortiGate 1101E, FortiGate 140E-POE, FortiGate 140E, FortiGate 1500DT, FortiGate 1500D, FortiGate 1800F, FortiGate 1801F, FortiGate 2000E, FortiGate 200E, FortiGate 200F, FortiGate 201E, FortiGate 201F, FortiGate 2201E, FortiGate 2500E, FortiGate 2600F, FortiGate 2601F, FortiGate 3000D, FortiGate 3000F, FortiGate 3001F, FortiGate 300E, FortiGate 301E, FortiGate 3100D, FortiGate 3200D, FortiGate 3200F, FortiGate 3201F, FortiGate 3300E, FortiGate 3301E, FortiGate 3400E, FortiGate 3401E, FortiGate 3501F, FortiGate 3600E, FortiGate 3601E, FortiGate 3700D, FortiGate 3700F, FortiGate 3701F, FortiGate 3960E, FortiGate 3980E, FortiGate 400E Bypass, FortiGate 400E, FortiGate 400F, FortiGate 401E, FortiGate 401F, FortiGate 40F 3G4G, FortiGate 4200F, FortiGate 4201F, FortiGate 4400F, FortiGate 4401F, FortiGate 500E, FortiGate 501E, FortiGate 600E, FortiGate 601E, FortiGate 60E-POE, FortiGate 60E, FortiGate 60F, FortiGate 61E, FortiGate 70F, FortiGate 71F, FortiGate 800D, FortiGate 80E-POE, FortiGate 80E, FortiGate 80F Bypass, FortiGate 80F DSL, FortiGate 80F-POE, FortiGate 80F, FortiGate 81E-POE, FortiGate 81E, FortiGate 81F-POE, FortiGate 81F, FortiGate 900D, FortiGate 90E, FortiGate 91E, FortiGate-VM64 Aliyun, FortiGate-VM64 AWS, FortiGate-VM64 Azure, FortiGate-VM64 GCP, FortiGate-VM64 OPC, FortiGate-VM64, FortiGateRugged 60F 3G4G, FortiGateRugged 60F, FortiGateRugged 70F 3G4G, FortiGateRugged 70F, FortiWiFi 40F 3G4G, FortiWiFi 40F, FortiWiFi 60E, FortiWiFi 60F, FortiWiFi 61E, FortiWiFi 61F, FortiWiFi 80F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G-POE, FortiWiFi 81F 2R-POE, FortiWiFi 81F 2R.

It is not available for: FortiGate 5001E1, FortiGate 5001E.

Configure FortiSwitch SNMP system information globally.

```
config switch-controller snmp-sysinfo
  Description: Configure FortiSwitch SNMP system information globally.
  set contact-info {string}
  set description {string}
  set engine-id {string}
  set location {string}
  set status [disable|enable]
end
```

config switch-controller snmp-sysinfo

Parameter	Description	Type	Size	Default
contact-info	Contact information.	string	Maximum length: 35	
description	System description.	string	Maximum length: 35	
engine-id	Local SNMP engine ID string (max 24 char).	string	Maximum length: 24	
location	System location.	string	Maximum length: 35	
status	Enable/disable SNMP.	option	-	disable
		Option	Description	
		disable	Disable SNMP.	
		enable	Enable SNMP.	

config switch-controller snmp-trap-threshold



This command is available for model(s): FortiGate 1000D, FortiGate 1000F, FortiGate 1001F, FortiGate 100EF, FortiGate 100E, FortiGate 100F, FortiGate 101F, FortiGate 1100E, FortiGate 1101E, FortiGate 140E-POE, FortiGate 140E, FortiGate 1500DT, FortiGate 1500D, FortiGate 1800F, FortiGate 1801F, FortiGate 2000E, FortiGate 200E, FortiGate 200F, FortiGate 201E, FortiGate 201F, FortiGate 2201E, FortiGate 2500E, FortiGate 2600F, FortiGate 2601F, FortiGate 3000D, FortiGate 3000F, FortiGate 3001F, FortiGate 300E, FortiGate 301E, FortiGate 3100D, FortiGate 3200D, FortiGate 3200F, FortiGate 3201F, FortiGate 3300E, FortiGate 3301E, FortiGate 3400E, FortiGate 3401E, FortiGate 3501F, FortiGate 3600E, FortiGate 3601E, FortiGate 3700D, FortiGate 3700F, FortiGate 3701F, FortiGate 3960E, FortiGate 3980E, FortiGate 400E Bypass, FortiGate 400E, FortiGate 400F, FortiGate 401E, FortiGate 401F, FortiGate 40F 3G4G, FortiGate 4200F, FortiGate 4201F, FortiGate 4400F, FortiGate 4401F, FortiGate 500E, FortiGate 501E, FortiGate 600E, FortiGate 601E, FortiGate 60E-POE, FortiGate 60E, FortiGate 60F, FortiGate 61E, FortiGate 70F, FortiGate 71F, FortiGate 800D, FortiGate 80E-POE, FortiGate 80E, FortiGate 80F Bypass, FortiGate 80F DSL, FortiGate 80F-POE, FortiGate 80F, FortiGate 81E-POE, FortiGate 81E, FortiGate 81F-POE, FortiGate 81F, FortiGate 900D, FortiGate 90E, FortiGate 91E, FortiGate-VM64 Aliyun, FortiGate-VM64 AWS, FortiGate-VM64 Azure, FortiGate-VM64 GCP, FortiGate-VM64 OPC, FortiGate-VM64, FortiGateRugged 60F 3G4G, FortiGateRugged 60F, FortiGateRugged 70F 3G4G, FortiGateRugged 70F, FortiWiFi 40F 3G4G, FortiWiFi 40F, FortiWiFi 60E, FortiWiFi 60F, FortiWiFi 61E, FortiWiFi 61F, FortiWiFi 80F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G-POE, FortiWiFi 81F 2R-POE, FortiWiFi 81F 2R.

It is not available for: FortiGate 5001E1, FortiGate 5001E.

Configure FortiSwitch SNMP trap threshold values globally.

```
config switch-controller snmp-trap-threshold
  Description: Configure FortiSwitch SNMP trap threshold values globally.
  set trap-high-cpu-threshold {integer}
  set trap-log-full-threshold {integer}
  set trap-low-memory-threshold {integer}
end
```

config switch-controller snmp-trap-threshold

Parameter	Description	Type	Size	Default
trap-high-cpu-threshold	CPU usage when trap is sent.	integer	Minimum value: 0 Maximum value: 4294967295	80
trap-log-full-threshold	Log disk usage when trap is sent.	integer	Minimum value: 0 Maximum value: 4294967295	90
trap-low-memory-threshold	Memory usage when trap is sent.	integer	Minimum value: 0 Maximum value: 4294967295	80

config switch-controller snmp-user



This command is available for model(s): FortiGate 1000D, FortiGate 1000F, FortiGate 1001F, FortiGate 100EF, FortiGate 100E, FortiGate 100F, FortiGate 101F, FortiGate 1100E, FortiGate 1101E, FortiGate 140E-POE, FortiGate 140E, FortiGate 1500DT, FortiGate 1500D, FortiGate 1800F, FortiGate 1801F, FortiGate 2000E, FortiGate 200E, FortiGate 200F, FortiGate 201E, FortiGate 201F, FortiGate 2201E, FortiGate 2500E, FortiGate 2600F, FortiGate 2601F, FortiGate 3000D, FortiGate 3000F, FortiGate 3001F, FortiGate 300E, FortiGate 301E, FortiGate 3100D, FortiGate 3200D, FortiGate 3200F, FortiGate 3201F, FortiGate 3300E, FortiGate 3301E, FortiGate 3400E, FortiGate 3401E, FortiGate 3501F, FortiGate 3600E, FortiGate 3601E, FortiGate 3700D, FortiGate 3700F, FortiGate 3701F, FortiGate 3960E, FortiGate 3980E, FortiGate 400E Bypass, FortiGate 400E, FortiGate 400F, FortiGate 401E, FortiGate 401F, FortiGate 40F 3G4G, FortiGate 4200F, FortiGate 4201F, FortiGate 4400F, FortiGate 4401F, FortiGate 500E, FortiGate 501E, FortiGate 600E, FortiGate 601E, FortiGate 60E-POE, FortiGate 60E, FortiGate 60F, FortiGate 61E, FortiGate 70F, FortiGate 71F, FortiGate 800D, FortiGate 80E-POE, FortiGate 80E, FortiGate 80F Bypass, FortiGate 80F DSL, FortiGate 80F-POE, FortiGate 80F, FortiGate 81E-POE, FortiGate 81E, FortiGate 81F-POE, FortiGate 81F, FortiGate 900D, FortiGate 90E, FortiGate 91E, FortiGate-VM64 Aliyun, FortiGate-VM64 AWS, FortiGate-VM64 Azure, FortiGate-VM64 GCP, FortiGate-VM64 OPC, FortiGate-VM64, FortiGateRugged 60F 3G4G, FortiGateRugged 60F, FortiGateRugged 70F 3G4G, FortiGateRugged 70F, FortiWiFi 40F 3G4G, FortiWiFi 40F, FortiWiFi 60E, FortiWiFi 60F, FortiWiFi 61E, FortiWiFi 61F, FortiWiFi 80F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G-POE, FortiWiFi 81F 2R-POE, FortiWiFi 81F 2R.

It is not available for: FortiGate 5001E1, FortiGate 5001E.

Configure FortiSwitch SNMP v3 users globally.

```
config switch-controller snmp-user
  Description: Configure FortiSwitch SNMP v3 users globally.
  edit <name>
    set auth-proto [md5|sha1|...]
    set auth-pwd {password}
    set priv-proto [aes128|aes192|...]
    set priv-pwd {password}
    set queries [disable|enable]
    set query-port {integer}
    set security-level [no-auth-no-priv|auth-no-priv|...]
  next
end
```

config switch-controller snmp-user

Parameter	Description	Type	Size	Default
auth-proto	Authentication protocol.	option	-	sha256

Parameter	Description	Type	Size	Default														
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>md5</td><td>HMAC-MD5-96 authentication protocol.</td></tr><tr><td>sha1</td><td>HMAC-SHA-1 authentication protocol.</td></tr><tr><td>sha224</td><td>HMAC-SHA-224 authentication protocol.</td></tr><tr><td>sha256</td><td>HMAC-SHA-256 authentication protocol.</td></tr><tr><td>sha384</td><td>HMAC-SHA-384 authentication protocol.</td></tr><tr><td>sha512</td><td>HMAC-SHA-512 authentication protocol.</td></tr></table>	Option	Description	md5	HMAC-MD5-96 authentication protocol.	sha1	HMAC-SHA-1 authentication protocol.	sha224	HMAC-SHA-224 authentication protocol.	sha256	HMAC-SHA-256 authentication protocol.	sha384	HMAC-SHA-384 authentication protocol.	sha512	HMAC-SHA-512 authentication protocol.			
	Option	Description																
	md5	HMAC-MD5-96 authentication protocol.																
	sha1	HMAC-SHA-1 authentication protocol.																
	sha224	HMAC-SHA-224 authentication protocol.																
	sha256	HMAC-SHA-256 authentication protocol.																
	sha384	HMAC-SHA-384 authentication protocol.																
sha512	HMAC-SHA-512 authentication protocol.																	
auth-pwd	Password for authentication protocol.	password	Not Specified															
name	SNMP user name.	string	Maximum length: 32															
priv-proto	Privacy (encryption) protocol.	option	-	aes128														
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>aes128</td><td>CFB128-AES-128 symmetric encryption protocol.</td></tr><tr><td>aes192</td><td>CFB128-AES-192 symmetric encryption protocol.</td></tr><tr><td>aes192c</td><td>CFB128-AES-192-C symmetric encryption protocol.</td></tr><tr><td>aes256</td><td>CFB128-AES-256 symmetric encryption protocol.</td></tr><tr><td>aes256c</td><td>CFB128-AES-256-C symmetric encryption protocol.</td></tr><tr><td>des</td><td>CBC-DES symmetric encryption protocol.</td></tr></table>	Option	Description	aes128	CFB128-AES-128 symmetric encryption protocol.	aes192	CFB128-AES-192 symmetric encryption protocol.	aes192c	CFB128-AES-192-C symmetric encryption protocol.	aes256	CFB128-AES-256 symmetric encryption protocol.	aes256c	CFB128-AES-256-C symmetric encryption protocol.	des	CBC-DES symmetric encryption protocol.			
	Option	Description																
	aes128	CFB128-AES-128 symmetric encryption protocol.																
	aes192	CFB128-AES-192 symmetric encryption protocol.																
	aes192c	CFB128-AES-192-C symmetric encryption protocol.																
	aes256	CFB128-AES-256 symmetric encryption protocol.																
	aes256c	CFB128-AES-256-C symmetric encryption protocol.																
des	CBC-DES symmetric encryption protocol.																	
priv-pwd	Password for privacy (encryption) protocol.	password	Not Specified															
queries	Enable/disable SNMP queries for this user.	option	-	enable														
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Disable SNMP queries for this user.</td></tr><tr><td>enable</td><td>Enable SNMP queries for this user.</td></tr></table>	Option	Description	disable	Disable SNMP queries for this user.	enable	Enable SNMP queries for this user.											
	Option	Description																
	disable	Disable SNMP queries for this user.																
enable	Enable SNMP queries for this user.																	
query-port	SNMPv3 query port (default = 161).	integer	Minimum value: 0 Maximum value: 65535	161														
security-level	Security level for message authentication and encryption.	option	-	no-auth-no-priv														

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>no-auth-no-priv</i>	Message with no authentication and no privacy (encryption).		
	<i>auth-no-priv</i>	Message with authentication but no privacy (encryption).		
	<i>auth-priv</i>	Message with authentication and privacy (encryption).		

config switch-controller storm-control



This command is available for model(s): FortiGate 1000D, FortiGate 1000F, FortiGate 1001F, FortiGate 100EF, FortiGate 100E, FortiGate 100F, FortiGate 101F, FortiGate 1100E, FortiGate 1101E, FortiGate 140E-POE, FortiGate 140E, FortiGate 1500DT, FortiGate 1500D, FortiGate 1800F, FortiGate 1801F, FortiGate 2000E, FortiGate 200E, FortiGate 200F, FortiGate 201E, FortiGate 201F, FortiGate 2201E, FortiGate 2500E, FortiGate 2600F, FortiGate 2601F, FortiGate 3000D, FortiGate 3000F, FortiGate 3001F, FortiGate 300E, FortiGate 301E, FortiGate 3100D, FortiGate 3200D, FortiGate 3200F, FortiGate 3201F, FortiGate 3300E, FortiGate 3301E, FortiGate 3400E, FortiGate 3401E, FortiGate 3501F, FortiGate 3600E, FortiGate 3601E, FortiGate 3700D, FortiGate 3700F, FortiGate 3701F, FortiGate 3960E, FortiGate 3980E, FortiGate 400E Bypass, FortiGate 400E, FortiGate 400F, FortiGate 401E, FortiGate 401F, FortiGate 40F 3G4G, FortiGate 4200F, FortiGate 4201F, FortiGate 4400F, FortiGate 4401F, FortiGate 500E, FortiGate 501E, FortiGate 600E, FortiGate 601E, FortiGate 60E-POE, FortiGate 60E, FortiGate 60F, FortiGate 61E, FortiGate 70F, FortiGate 71F, FortiGate 800D, FortiGate 80E-POE, FortiGate 80E, FortiGate 80F Bypass, FortiGate 80F DSL, FortiGate 80F-POE, FortiGate 80F, FortiGate 81E-POE, FortiGate 81E, FortiGate 81F-POE, FortiGate 81F, FortiGate 900D, FortiGate 90E, FortiGate 91E, FortiGate-VM64 Aliyun, FortiGate-VM64 AWS, FortiGate-VM64 Azure, FortiGate-VM64 GCP, FortiGate-VM64 OPC, FortiGate-VM64, FortiGateRugged 60F 3G4G, FortiGateRugged 60F, FortiGateRugged 70F 3G4G, FortiGateRugged 70F, FortiWiFi 40F 3G4G, FortiWiFi 40F, FortiWiFi 60E, FortiWiFi 60F, FortiWiFi 61E, FortiWiFi 61F, FortiWiFi 80F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G-POE, FortiWiFi 81F 2R-POE, FortiWiFi 81F 2R.

It is not available for: FortiGate 5001E1, FortiGate 5001E.

Configure FortiSwitch storm control.

```
config switch-controller storm-control
    Description: Configure FortiSwitch storm control.
    set broadcast [enable|disable]
    set rate {integer}
    set unknown-multicast [enable|disable]
    set unknown-unicast [enable|disable]
end
```

config switch-controller storm-control

Parameter	Description	Type	Size	Default						
broadcast	Enable/disable storm control to drop broadcast traffic.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable broadcast storm control.</td></tr><tr><td><i>disable</i></td><td>Disable broadcast storm control.</td></tr></table>	Option	Description	<i>enable</i>	Enable broadcast storm control.	<i>disable</i>	Disable broadcast storm control.			
Option	Description									
<i>enable</i>	Enable broadcast storm control.									
<i>disable</i>	Disable broadcast storm control.									
rate	Rate in packets per second at which storm traffic is controlled (1 - 10000000, default = 500). Storm control drops excess traffic data rates beyond this threshold.	integer	Minimum value: 1 Maximum value: 10000000	500						
unknown-multicast	Enable/disable storm control to drop unknown multicast traffic.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable unknown multicast storm control.</td></tr><tr><td><i>disable</i></td><td>Disable unknown multicast storm control.</td></tr></table>	Option	Description	<i>enable</i>	Enable unknown multicast storm control.	<i>disable</i>	Disable unknown multicast storm control.			
Option	Description									
<i>enable</i>	Enable unknown multicast storm control.									
<i>disable</i>	Disable unknown multicast storm control.									
unknown-unicast	Enable/disable storm control to drop unknown unicast traffic.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable unknown unicast storm control.</td></tr><tr><td><i>disable</i></td><td>Disable unknown unicast storm control.</td></tr></table>	Option	Description	<i>enable</i>	Enable unknown unicast storm control.	<i>disable</i>	Disable unknown unicast storm control.			
Option	Description									
<i>enable</i>	Enable unknown unicast storm control.									
<i>disable</i>	Disable unknown unicast storm control.									

config switch-controller storm-control-policy



This command is available for model(s): FortiGate 1000D, FortiGate 1000F, FortiGate 1001F, FortiGate 100EF, FortiGate 100E, FortiGate 100F, FortiGate 101F, FortiGate 1100E, FortiGate 1101E, FortiGate 140E-POE, FortiGate 140E, FortiGate 1500DT, FortiGate 1500D, FortiGate 1800F, FortiGate 1801F, FortiGate 2000E, FortiGate 200E, FortiGate 200F, FortiGate 201E, FortiGate 201F, FortiGate 2201E, FortiGate 2500E, FortiGate 2600F, FortiGate 2601F, FortiGate 3000D, FortiGate 3000F, FortiGate 3001F, FortiGate 300E, FortiGate 301E, FortiGate 3100D, FortiGate 3200D, FortiGate 3200F, FortiGate 3201F, FortiGate 3300E, FortiGate 3301E, FortiGate 3400E, FortiGate 3401E, FortiGate 3501F, FortiGate 3600E, FortiGate 3601E, FortiGate 3700D, FortiGate 3700F, FortiGate 3701F, FortiGate 3960E, FortiGate 3980E, FortiGate 400E Bypass, FortiGate 400E, FortiGate 400F, FortiGate 401E, FortiGate 401F, FortiGate 40F 3G4G, FortiGate 4200F, FortiGate 4201F, FortiGate 4400F, FortiGate 4401F, FortiGate 500E, FortiGate 501E, FortiGate 600E, FortiGate 601E, FortiGate 60E-POE, FortiGate 60E, FortiGate 60F, FortiGate 61E, FortiGate 70F, FortiGate 71F, FortiGate 800D, FortiGate 80E-POE, FortiGate 80E, FortiGate 80F Bypass, FortiGate 80F DSL, FortiGate 80F-POE, FortiGate 80F, FortiGate 81E-POE, FortiGate 81E, FortiGate 81F-POE, FortiGate 81F, FortiGate 900D, FortiGate 90E, FortiGate 91E, FortiGate-VM64 Aliyun, FortiGate-VM64 AWS, FortiGate-VM64 Azure, FortiGate-VM64 GCP, FortiGate-VM64 OPC, FortiGate-VM64, FortiGateRugged 60F 3G4G, FortiGateRugged 60F, FortiGateRugged 70F 3G4G, FortiGateRugged 70F, FortiWiFi 40F 3G4G, FortiWiFi 40F, FortiWiFi 60E, FortiWiFi 60F, FortiWiFi 61E, FortiWiFi 61F, FortiWiFi 80F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G-POE, FortiWiFi 81F 2R-POE, FortiWiFi 81F 2R.

It is not available for: FortiGate 5001E1, FortiGate 5001E.

Configure FortiSwitch storm control policy to be applied on managed-switch ports.

```
config switch-controller storm-control-policy
  Description: Configure FortiSwitch storm control policy to be applied on managed-switch ports.
  edit <name>
    set broadcast [enable|disable]
    set description {string}
    set rate {integer}
    set storm-control-mode [global|override|...]
    set unknown-multicast [enable|disable]
    set unknown-unicast [enable|disable]
  next
end
```

config switch-controller storm-control-policy

Parameter	Description	Type	Size	Default
broadcast	Enable/disable storm control to drop/allow broadcast traffic in override mode.	option	-	disable

Parameter	Description	Type	Size	Default								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable storm control for broadcast traffic to drop packets which exceed configured rate limits.</td></tr><tr><td><i>disable</i></td><td>Disable storm control for broadcast traffic to allow all packets.</td></tr></table>	Option	Description	<i>enable</i>	Enable storm control for broadcast traffic to drop packets which exceed configured rate limits.	<i>disable</i>	Disable storm control for broadcast traffic to allow all packets.					
Option	Description											
<i>enable</i>	Enable storm control for broadcast traffic to drop packets which exceed configured rate limits.											
<i>disable</i>	Disable storm control for broadcast traffic to allow all packets.											
description	Description of the storm control policy.	string	Maximum length: 63									
name	Storm control policy name.	string	Maximum length: 63									
rate	Threshold rate in packets per second at which storm traffic is controlled in override mode (default=500, 0 to drop all).	integer	Minimum value: 0 Maximum value: 10000000	500								
storm-control-mode	Set Storm control mode.	option	-	global								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>global</i></td><td>Apply Global or switch level storm control configuration.</td></tr><tr><td><i>override</i></td><td>Override global and switch level storm control to use port level configuration.</td></tr><tr><td><i>disabled</i></td><td>Disable storm control on the port entirely overriding global and switch level storm control.</td></tr></table>	Option	Description	<i>global</i>	Apply Global or switch level storm control configuration.	<i>override</i>	Override global and switch level storm control to use port level configuration.	<i>disabled</i>	Disable storm control on the port entirely overriding global and switch level storm control.			
Option	Description											
<i>global</i>	Apply Global or switch level storm control configuration.											
<i>override</i>	Override global and switch level storm control to use port level configuration.											
<i>disabled</i>	Disable storm control on the port entirely overriding global and switch level storm control.											
unknown-multicast	Enable/disable storm control to drop/allow unknown multicast traffic in override mode.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable storm control for unknown multicast traffic to drop packets which exceed configured rate limits.</td></tr><tr><td><i>disable</i></td><td>Disable storm control for unknown multicast traffic to allow all packets.</td></tr></table>	Option	Description	<i>enable</i>	Enable storm control for unknown multicast traffic to drop packets which exceed configured rate limits.	<i>disable</i>	Disable storm control for unknown multicast traffic to allow all packets.					
Option	Description											
<i>enable</i>	Enable storm control for unknown multicast traffic to drop packets which exceed configured rate limits.											
<i>disable</i>	Disable storm control for unknown multicast traffic to allow all packets.											
unknown-unicast	Enable/disable storm control to drop/allow unknown unicast traffic in override mode.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable storm control for unknown unicast traffic to drop packets which exceed configured rate limits.</td></tr><tr><td><i>disable</i></td><td>Disable storm control for unknown unicast traffic to allow all packets.</td></tr></table>	Option	Description	<i>enable</i>	Enable storm control for unknown unicast traffic to drop packets which exceed configured rate limits.	<i>disable</i>	Disable storm control for unknown unicast traffic to allow all packets.					
Option	Description											
<i>enable</i>	Enable storm control for unknown unicast traffic to drop packets which exceed configured rate limits.											
<i>disable</i>	Disable storm control for unknown unicast traffic to allow all packets.											

config switch-controller stp-instance



This command is available for model(s): FortiGate 1000D, FortiGate 1000F, FortiGate 1001F, FortiGate 100EF, FortiGate 100E, FortiGate 100F, FortiGate 101F, FortiGate 1100E, FortiGate 1101E, FortiGate 140E-POE, FortiGate 140E, FortiGate 1500DT, FortiGate 1500D, FortiGate 1800F, FortiGate 1801F, FortiGate 2000E, FortiGate 200E, FortiGate 200F, FortiGate 201E, FortiGate 201F, FortiGate 2201E, FortiGate 2500E, FortiGate 2600F, FortiGate 2601F, FortiGate 3000D, FortiGate 3000F, FortiGate 3001F, FortiGate 300E, FortiGate 301E, FortiGate 3100D, FortiGate 3200D, FortiGate 3200F, FortiGate 3201F, FortiGate 3300E, FortiGate 3301E, FortiGate 3400E, FortiGate 3401E, FortiGate 3501F, FortiGate 3600E, FortiGate 3601E, FortiGate 3700D, FortiGate 3700F, FortiGate 3701F, FortiGate 3960E, FortiGate 3980E, FortiGate 400E Bypass, FortiGate 400E, FortiGate 400F, FortiGate 401E, FortiGate 401F, FortiGate 40F 3G4G, FortiGate 4200F, FortiGate 4201F, FortiGate 4400F, FortiGate 4401F, FortiGate 500E, FortiGate 501E, FortiGate 600E, FortiGate 601E, FortiGate 60E-POE, FortiGate 60E, FortiGate 60F, FortiGate 61E, FortiGate 70F, FortiGate 71F, FortiGate 800D, FortiGate 80E-POE, FortiGate 80E, FortiGate 80F Bypass, FortiGate 80F DSL, FortiGate 80F-POE, FortiGate 80F, FortiGate 81E-POE, FortiGate 81E, FortiGate 81F-POE, FortiGate 81F, FortiGate 900D, FortiGate 90E, FortiGate 91E, FortiGate-VM64 Aliyun, FortiGate-VM64 AWS, FortiGate-VM64 Azure, FortiGate-VM64 GCP, FortiGate-VM64 OPC, FortiGate-VM64, FortiGateRugged 60F 3G4G, FortiGateRugged 60F, FortiGateRugged 70F 3G4G, FortiGateRugged 70F, FortiWiFi 40F 3G4G, FortiWiFi 40F, FortiWiFi 60E, FortiWiFi 60F, FortiWiFi 61E, FortiWiFi 61F, FortiWiFi 80F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G-POE, FortiWiFi 81F 2R-POE, FortiWiFi 81F 2R.

It is not available for: FortiGate 5001E1, FortiGate 5001E.

Configure FortiSwitch multiple spanning tree protocol (MSTP) instances.

```
config switch-controller stp-instance
    Description: Configure FortiSwitch multiple spanning tree protocol (MSTP) instances.
    edit <id>
        set vlan-range <vlan-name1>, <vlan-name2>, ...
    next
end
```

config switch-controller stp-instance

Parameter	Description	Type	Size	Default
id	Instance ID.	string	Maximum length: 2	
vlan-range <vlan-name>	Configure VLAN range for STP instance. VLAN name.	string	Maximum length: 79	

config switch-controller stp-settings



This command is available for model(s): FortiGate 1000D, FortiGate 1000F, FortiGate 1001F, FortiGate 100EF, FortiGate 100E, FortiGate 100F, FortiGate 101F, FortiGate 1100E, FortiGate 1101E, FortiGate 140E-POE, FortiGate 140E, FortiGate 1500DT, FortiGate 1500D, FortiGate 1800F, FortiGate 1801F, FortiGate 2000E, FortiGate 200E, FortiGate 200F, FortiGate 201E, FortiGate 201F, FortiGate 2201E, FortiGate 2500E, FortiGate 2600F, FortiGate 2601F, FortiGate 3000D, FortiGate 3000F, FortiGate 3001F, FortiGate 300E, FortiGate 301E, FortiGate 3100D, FortiGate 3200D, FortiGate 3200F, FortiGate 3201F, FortiGate 3300E, FortiGate 3301E, FortiGate 3400E, FortiGate 3401E, FortiGate 3501F, FortiGate 3600E, FortiGate 3601E, FortiGate 3700D, FortiGate 3700F, FortiGate 3701F, FortiGate 3960E, FortiGate 3980E, FortiGate 400E Bypass, FortiGate 400E, FortiGate 400F, FortiGate 401E, FortiGate 401F, FortiGate 40F 3G4G, FortiGate 4200F, FortiGate 4201F, FortiGate 4400F, FortiGate 4401F, FortiGate 500E, FortiGate 501E, FortiGate 600E, FortiGate 601E, FortiGate 60E-POE, FortiGate 60E, FortiGate 60F, FortiGate 61E, FortiGate 70F, FortiGate 71F, FortiGate 800D, FortiGate 80E-POE, FortiGate 80E, FortiGate 80F Bypass, FortiGate 80F DSL, FortiGate 80F-POE, FortiGate 80F, FortiGate 81E-POE, FortiGate 81E, FortiGate 81F-POE, FortiGate 81F, FortiGate 900D, FortiGate 90E, FortiGate 91E, FortiGate-VM64 Aliyun, FortiGate-VM64 AWS, FortiGate-VM64 Azure, FortiGate-VM64 GCP, FortiGate-VM64 OPC, FortiGate-VM64, FortiGateRugged 60F 3G4G, FortiGateRugged 60F, FortiGateRugged 70F 3G4G, FortiGateRugged 70F, FortiWiFi 40F 3G4G, FortiWiFi 40F, FortiWiFi 60E, FortiWiFi 60F, FortiWiFi 61E, FortiWiFi 61F, FortiWiFi 80F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G-POE, FortiWiFi 81F 2R-POE, FortiWiFi 81F 2R.

It is not available for: FortiGate 5001E1, FortiGate 5001E.

Configure FortiSwitch spanning tree protocol (STP).

```
config switch-controller stp-settings
  Description: Configure FortiSwitch spanning tree protocol (STP).
  set forward-time {integer}
  set hello-time {integer}
  set max-age {integer}
  set max-hops {integer}
  set name {string}
  set pending-timer {integer}
  set revision {integer}
end
```

config switch-controller stp-settings

Parameter	Description	Type	Size	Default
forward-time	Period of time a port is in listening and learning state (4 - 30 sec, default = 15).	integer	Minimum value: 4 Maximum value: 30	15
hello-time	Period of time between successive STP frame Bridge Protocol Data Units (BPDUs) sent on a port (1 - 10 sec, default = 2).	integer	Minimum value: 1 Maximum value: 10	2
max-age	Maximum time before a bridge port expires its configuration BPDU information (6 - 40 sec, default = 20).	integer	Minimum value: 6 Maximum value: 40	20
max-hops	Maximum number of hops between the root bridge and the furthest bridge (1- 40, default = 20).	integer	Minimum value: 1 Maximum value: 40	20
name	Name of global STP settings configuration.	string	Maximum length: 31	
pending-timer	Pending time (1 - 15 sec, default = 4).	integer	Minimum value: 1 Maximum value: 15	4
revision	STP revision number (0 - 65535).	integer	Minimum value: 0 Maximum value: 65535	0

config switch-controller switch-group



This command is available for model(s): FortiGate 1000D, FortiGate 1000F, FortiGate 1001F, FortiGate 100EF, FortiGate 100E, FortiGate 100F, FortiGate 101F, FortiGate 1100E, FortiGate 1101E, FortiGate 140E-POE, FortiGate 140E, FortiGate 1500DT, FortiGate 1500D, FortiGate 1800F, FortiGate 1801F, FortiGate 2000E, FortiGate 200E, FortiGate 200F, FortiGate 201E, FortiGate 201F, FortiGate 2201E, FortiGate 2500E, FortiGate 2600F, FortiGate 2601F, FortiGate 3000D, FortiGate 3000F, FortiGate 3001F, FortiGate 300E, FortiGate 301E, FortiGate 3100D, FortiGate 3200D, FortiGate 3200F, FortiGate 3201F, FortiGate 3300E, FortiGate 3301E, FortiGate 3400E, FortiGate 3401E, FortiGate 3501F, FortiGate 3600E, FortiGate 3601E, FortiGate 3700D, FortiGate 3700F, FortiGate 3701F, FortiGate 3960E, FortiGate 3980E, FortiGate 400E Bypass, FortiGate 400E, FortiGate 400F, FortiGate 401E, FortiGate 401F, FortiGate 40F 3G4G, FortiGate 4200F, FortiGate 4201F, FortiGate 4400F, FortiGate 4401F, FortiGate 500E, FortiGate 501E, FortiGate 600E, FortiGate 601E, FortiGate 60E-POE, FortiGate 60E, FortiGate 60F, FortiGate 61E, FortiGate 70F, FortiGate 71F, FortiGate 800D, FortiGate 80E-POE, FortiGate 80E, FortiGate 80F Bypass, FortiGate 80F DSL, FortiGate 80F-POE, FortiGate 80F, FortiGate 81E-POE, FortiGate 81E, FortiGate 81F-POE, FortiGate 81F, FortiGate 900D, FortiGate 90E, FortiGate 91E, FortiGate-VM64 Aliyun, FortiGate-VM64 AWS, FortiGate-VM64 Azure, FortiGate-VM64 GCP, FortiGate-VM64 OPC, FortiGate-VM64, FortiGateRugged 60F 3G4G, FortiGateRugged 60F, FortiGateRugged 70F 3G4G, FortiGateRugged 70F, FortiWiFi 40F 3G4G, FortiWiFi 40F, FortiWiFi 60E, FortiWiFi 60F, FortiWiFi 61E, FortiWiFi 61F, FortiWiFi 80F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G-POE, FortiWiFi 81F 2R-POE, FortiWiFi 81F 2R.

It is not available for: FortiGate 5001E1, FortiGate 5001E.

Configure FortiSwitch switch groups.

```
config switch-controller switch-group
  Description: Configure FortiSwitch switch groups.
  edit <name>
    set description {string}
    set fortilink {string}
    set members <switch-id1>, <switch-id2>, ...
  next
end
```

config switch-controller switch-group

Parameter	Description	Type	Size	Default
description	Optional switch group description.	string	Maximum length: 63	
fortilink	FortiLink interface to which switch group members belong.	string	Maximum length: 15	

Parameter	Description	Type	Size	Default
members <switch-id>	FortiSwitch members belonging to this switch group. Managed device ID.	string	Maximum length: 79	
name	Switch group name.	string	Maximum length: 35	

config switch-controller switch-interface-tag



This command is available for model(s): FortiGate 1000D, FortiGate 1000F, FortiGate 1001F, FortiGate 100EF, FortiGate 100E, FortiGate 100F, FortiGate 101F, FortiGate 1100E, FortiGate 1101E, FortiGate 140E-POE, FortiGate 140E, FortiGate 1500DT, FortiGate 1500D, FortiGate 1800F, FortiGate 1801F, FortiGate 2000E, FortiGate 200E, FortiGate 200F, FortiGate 201E, FortiGate 201F, FortiGate 2201E, FortiGate 2500E, FortiGate 2600F, FortiGate 2601F, FortiGate 3000D, FortiGate 3000F, FortiGate 3001F, FortiGate 300E, FortiGate 301E, FortiGate 3100D, FortiGate 3200D, FortiGate 3200F, FortiGate 3201F, FortiGate 3300E, FortiGate 3301E, FortiGate 3400E, FortiGate 3401E, FortiGate 3501F, FortiGate 3600E, FortiGate 3601E, FortiGate 3700D, FortiGate 3700F, FortiGate 3701F, FortiGate 3960E, FortiGate 3980E, FortiGate 400E Bypass, FortiGate 400E, FortiGate 400F, FortiGate 401E, FortiGate 401F, FortiGate 40F 3G4G, FortiGate 4200F, FortiGate 4201F, FortiGate 4400F, FortiGate 4401F, FortiGate 500E, FortiGate 501E, FortiGate 600E, FortiGate 601E, FortiGate 60E-POE, FortiGate 60E, FortiGate 60F, FortiGate 61E, FortiGate 70F, FortiGate 71F, FortiGate 800D, FortiGate 80E-POE, FortiGate 80E, FortiGate 80F Bypass, FortiGate 80F DSL, FortiGate 80F-POE, FortiGate 80F, FortiGate 81E-POE, FortiGate 81E, FortiGate 81F-POE, FortiGate 81F, FortiGate 900D, FortiGate 90E, FortiGate 91E, FortiGate-VM64 Aliyun, FortiGate-VM64 AWS, FortiGate-VM64 Azure, FortiGate-VM64 GCP, FortiGate-VM64 OPC, FortiGate-VM64, FortiGateRugged 60F 3G4G, FortiGateRugged 60F, FortiGateRugged 70F 3G4G, FortiGateRugged 70F, FortiWiFi 40F 3G4G, FortiWiFi 40F, FortiWiFi 60E, FortiWiFi 60F, FortiWiFi 61E, FortiWiFi 61F, FortiWiFi 80F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G-POE, FortiWiFi 81F 2R-POE, FortiWiFi 81F 2R.

It is not available for: FortiGate 5001E1, FortiGate 5001E.

Configure switch object tags.

```
config switch-controller switch-interface-tag
    Description: Configure switch object tags.
    edit <name>
        next
    end
```

config switch-controller switch-interface-tag

Parameter	Description	Type	Size	Default
name	Tag name.	string	Maximum length: 63	

config switch-controller switch-log



This command is available for model(s): FortiGate 1000D, FortiGate 1000F, FortiGate 1001F, FortiGate 100EF, FortiGate 100E, FortiGate 100F, FortiGate 101F, FortiGate 1100E, FortiGate 1101E, FortiGate 140E-POE, FortiGate 140E, FortiGate 1500DT, FortiGate 1500D, FortiGate 1800F, FortiGate 1801F, FortiGate 2000E, FortiGate 200E, FortiGate 200F, FortiGate 201E, FortiGate 201F, FortiGate 2201E, FortiGate 2500E, FortiGate 2600F, FortiGate 2601F, FortiGate 3000D, FortiGate 3000F, FortiGate 3001F, FortiGate 300E, FortiGate 301E, FortiGate 3100D, FortiGate 3200D, FortiGate 3200F, FortiGate 3201F, FortiGate 3300E, FortiGate 3301E, FortiGate 3400E, FortiGate 3401E, FortiGate 3501F, FortiGate 3600E, FortiGate 3601E, FortiGate 3700D, FortiGate 3700F, FortiGate 3701F, FortiGate 3960E, FortiGate 3980E, FortiGate 400E Bypass, FortiGate 400E, FortiGate 400F, FortiGate 401E, FortiGate 401F, FortiGate 40F 3G4G, FortiGate 4200F, FortiGate 4201F, FortiGate 4400F, FortiGate 4401F, FortiGate 500E, FortiGate 501E, FortiGate 600E, FortiGate 601E, FortiGate 60E-POE, FortiGate 60E, FortiGate 60F, FortiGate 61E, FortiGate 70F, FortiGate 71F, FortiGate 800D, FortiGate 80E-POE, FortiGate 80E, FortiGate 80F Bypass, FortiGate 80F DSL, FortiGate 80F-POE, FortiGate 80F, FortiGate 81E-POE, FortiGate 81E, FortiGate 81F-POE, FortiGate 81F, FortiGate 900D, FortiGate 90E, FortiGate 91E, FortiGate-VM64 Aliyun, FortiGate-VM64 AWS, FortiGate-VM64 Azure, FortiGate-VM64 GCP, FortiGate-VM64 OPC, FortiGate-VM64, FortiGateRugged 60F 3G4G, FortiGateRugged 60F, FortiGateRugged 70F 3G4G, FortiGateRugged 70F, FortiWiFi 40F 3G4G, FortiWiFi 40F, FortiWiFi 60E, FortiWiFi 60F, FortiWiFi 61E, FortiWiFi 61F, FortiWiFi 80F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G-POE, FortiWiFi 81F 2R-POE, FortiWiFi 81F 2R.

It is not available for: FortiGate 5001E1, FortiGate 5001E.

Configure FortiSwitch logging (logs are transferred to and inserted into FortiGate event log).

```
config switch-controller switch-log
    Description: Configure FortiSwitch logging (logs are transferred to and inserted into
FortiGate event log).
    set severity [emergency|alert|...]
    set status [enable|disable]
end
```

config switch-controller switch-log

Parameter	Description	Type	Size	Default
severity	Severity of FortiSwitch logs that are added to the FortiGate event log.	option	-	notification
		Option	Description	
		<i>emergency</i>	Emergency level.	
		<i>alert</i>	Alert level.	
		<i>critical</i>	Critical level.	
		<i>error</i>	Error level.	
		<i>warning</i>	Warning level.	
		<i>notification</i>	Notification level.	
		<i>information</i>	Information level.	
		<i>debug</i>	Debug level.	
status	Enable/disable adding FortiSwitch logs to FortiGate event log.	option	-	enable
		Option	Description	
		<i>enable</i>	Add FortiSwitch logs to FortiGate event log.	
		<i>disable</i>	Do not add FortiSwitch logs to FortiGate event log.	

config switch-controller switch-profile



This command is available for model(s): FortiGate 1000D, FortiGate 1000F, FortiGate 1001F, FortiGate 100EF, FortiGate 100E, FortiGate 100F, FortiGate 101F, FortiGate 1100E, FortiGate 1101E, FortiGate 140E-POE, FortiGate 140E, FortiGate 1500DT, FortiGate 1500D, FortiGate 1800F, FortiGate 1801F, FortiGate 2000E, FortiGate 200E, FortiGate 200F, FortiGate 201E, FortiGate 201F, FortiGate 2201E, FortiGate 2500E, FortiGate 2600F, FortiGate 2601F, FortiGate 3000D, FortiGate 3000F, FortiGate 3001F, FortiGate 300E, FortiGate 301E, FortiGate 3100D, FortiGate 3200D, FortiGate 3200F, FortiGate 3201F, FortiGate 3300E, FortiGate 3301E, FortiGate 3400E, FortiGate 3401E, FortiGate 3501F, FortiGate 3600E, FortiGate 3601E, FortiGate 3700D, FortiGate 3700F, FortiGate 3701F, FortiGate 3960E, FortiGate 3980E, FortiGate 400E Bypass, FortiGate 400E, FortiGate 400F, FortiGate 401E, FortiGate 401F, FortiGate 40F 3G4G, FortiGate 4200F, FortiGate 4201F, FortiGate 4400F, FortiGate 4401F, FortiGate 500E, FortiGate 501E, FortiGate 600E, FortiGate 601E, FortiGate 60E-POE, FortiGate 60E, FortiGate 60F, FortiGate 61E, FortiGate 70F, FortiGate 71F, FortiGate 800D, FortiGate 80E-POE, FortiGate 80E, FortiGate 80F Bypass, FortiGate 80F DSL, FortiGate 80F-POE, FortiGate 80F, FortiGate 81E-POE, FortiGate 81E, FortiGate 81F-POE, FortiGate 81F, FortiGate 900D, FortiGate 90E, FortiGate 91E, FortiGate-VM64 Aliyun, FortiGate-VM64 AWS, FortiGate-VM64 Azure, FortiGate-VM64 GCP, FortiGate-VM64 OPC, FortiGate-VM64, FortiGateRugged 60F 3G4G, FortiGateRugged 60F, FortiGateRugged 70F 3G4G, FortiGateRugged 70F, FortiWiFi 40F 3G4G, FortiWiFi 40F, FortiWiFi 60E, FortiWiFi 60F, FortiWiFi 61E, FortiWiFi 61F, FortiWiFi 80F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G-POE, FortiWiFi 81F 2R-POE, FortiWiFi 81F 2R.

It is not available for: FortiGate 5001E1, FortiGate 5001E.

Configure FortiSwitch switch profile.

```
config switch-controller switch-profile
  Description: Configure FortiSwitch switch profile.
  edit <name>
    set login [enable|disable]
    set login-passwd {password}
    set login-passwd-override [enable|disable]
    set revision-backup-on-logout [enable|disable]
    set revision-backup-on-upgrade [enable|disable]
  next
end
```

config switch-controller switch-profile

Parameter	Description	Type	Size	Default
login	Enable/disable FortiSwitch serial console.	option	-	enable

Parameter	Description	Type	Size	Default
	Option Description			
	<i>enable</i>	Enable FortiSwitch serial console.		
	<i>disable</i>	Disable FortiSwitch serial console.		
login-passwd	Login password of managed FortiSwitch.	password	Not Specified	
login-passwd-override	Enable/disable overriding the admin administrator password for a managed FortiSwitch with the FortiGate admin administrator account password.	option	-	disable
	Option Description			
	<i>enable</i>	Override a managed FortiSwitch's admin administrator password.		
	<i>disable</i>	Use the managed FortiSwitch admin administrator account password.		
name	FortiSwitch Profile name.	string	Maximum length: 35	
revision-backup-on-logout	Enable/disable automatic revision backup upon logout from FortiSwitch.	option	-	disable
	Option Description			
	<i>enable</i>	Enable automatic revision backup upon logout from FortiSwitch.		
	<i>disable</i>	Disable automatic revision backup upon logout from FortiSwitch.		
revision-backup-on-upgrade	Enable/disable automatic revision backup upon FortiSwitch image upgrade.	option	-	disable
	Option Description			
	<i>enable</i>	Enable automatic revision backup upon FortiSwitch image upgrade.		
	<i>disable</i>	Disable automatic revision backup upon FortiSwitch image upgrade.		

config switch-controller system



This command is available for model(s): FortiGate 1000D, FortiGate 1000F, FortiGate 1001F, FortiGate 100EF, FortiGate 100E, FortiGate 100F, FortiGate 101F, FortiGate 1100E, FortiGate 1101E, FortiGate 140E-POE, FortiGate 140E, FortiGate 1500DT, FortiGate 1500D, FortiGate 1800F, FortiGate 1801F, FortiGate 2000E, FortiGate 200E, FortiGate 200F, FortiGate 201E, FortiGate 201F, FortiGate 2201E, FortiGate 2500E, FortiGate 2600F, FortiGate 2601F, FortiGate 3000D, FortiGate 3000F, FortiGate 3001F, FortiGate 300E, FortiGate 301E, FortiGate 3100D, FortiGate 3200D, FortiGate 3200F, FortiGate 3201F, FortiGate 3300E, FortiGate 3301E, FortiGate 3400E, FortiGate 3401E, FortiGate 3501F, FortiGate 3600E, FortiGate 3601E, FortiGate 3700D, FortiGate 3700F, FortiGate 3701F, FortiGate 3960E, FortiGate 3980E, FortiGate 400E Bypass, FortiGate 400E, FortiGate 400F, FortiGate 401E, FortiGate 401F, FortiGate 40F 3G4G, FortiGate 4200F, FortiGate 4201F, FortiGate 4400F, FortiGate 4401F, FortiGate 500E, FortiGate 501E, FortiGate 600E, FortiGate 601E, FortiGate 60E-POE, FortiGate 60E, FortiGate 60F, FortiGate 61E, FortiGate 70F, FortiGate 71F, FortiGate 800D, FortiGate 80E-POE, FortiGate 80E, FortiGate 80F Bypass, FortiGate 80F DSL, FortiGate 80F-POE, FortiGate 80F, FortiGate 81E-POE, FortiGate 81E, FortiGate 81F-POE, FortiGate 81F, FortiGate 900D, FortiGate 90E, FortiGate 91E, FortiGate-VM64 Aliyun, FortiGate-VM64 AWS, FortiGate-VM64 Azure, FortiGate-VM64 GCP, FortiGate-VM64 OPC, FortiGate-VM64, FortiGateRugged 60F 3G4G, FortiGateRugged 60F, FortiGateRugged 70F 3G4G, FortiGateRugged 70F, FortiWiFi 40F 3G4G, FortiWiFi 40F, FortiWiFi 60E, FortiWiFi 60F, FortiWiFi 61E, FortiWiFi 61F, FortiWiFi 80F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G-POE, FortiWiFi 81F 2R-POE, FortiWiFi 81F 2R.

It is not available for: FortiGate 5001E1, FortiGate 5001E.

Configure system-wide switch controller settings.

```
config switch-controller system
    Description: Configure system-wide switch controller settings.
    set data-sync-interval {integer}
    set dynamic-periodic-interval {integer}
    set iot-holdoff {integer}
    set iot-mac-idle {integer}
    set iot-scan-interval {integer}
    set iot-weight-threshold {integer}
    set nac-periodic-interval {integer}
    set parallel-process {integer}
    set parallel-process-override [disable|enable]
    set tunnel-mode [compatible|moderate|...]
end
```

config switch-controller system

Parameter	Description	Type	Size	Default
data-sync-interval	Time interval between collection of switch data (30 - 1800 sec, default = 60, 0 = disable).	integer	Minimum value: 30 Maximum value: 1800	60
dynamic-periodic-interval	Periodic time interval to run Dynamic port policy engine (5 - 60 sec, default = 15).	integer	Minimum value: 5 Maximum value: 180	60
iot-holdoff	MAC entry's creation time. Time must be greater than this value for an entry to be created (0 - 10080 mins, default = 5 mins).	integer	Minimum value: 0 Maximum value: 10080	5
iot-mac-idle	MAC entry's idle time. MAC entry is removed after this value (0 - 10080 mins, default = 1440 mins).	integer	Minimum value: 0 Maximum value: 10080	1440
iot-scan-interval	IoT scan interval (2 - 10080 mins, default = 60 mins, 0 = disable).	integer	Minimum value: 2 Maximum value: 10080	60
iot-weight-threshold	MAC entry's confidence value. Value is required when below this value (default = 1, 0 = disable).	integer	Minimum value: 0 Maximum value: 255	1
nac-periodic-interval	Periodic time interval to run NAC engine (5 - 60 sec, default = 15).	integer	Minimum value: 5 Maximum value: 180	60
parallel-process	Maximum number of parallel processes.	integer	Minimum value: 1 Maximum value: 128 **	1
parallel-process-override	Enable/disable parallel process override.	option	-	disable

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>disable</i>	Disable maximum parallel process override.		
	<i>enable</i>	Enable maximum parallel process override.		
tunnel-mode	Compatible/strict tunnel mode.	option	-	compatible
	Option	Description		
	<i>compatible</i>	Least restrictive. Supports the widest variety of hardware and software versions.		
	<i>moderate</i>	Moderate level of security. Supports recent generations of hardware and latest software versions.		
	<i>strict</i>	Highest level of security. Supports only the latest generation of hardware and latest software version.		

** Values may differ between models.

config switch-controller traffic-policy



This command is available for model(s): FortiGate 1000D, FortiGate 1000F, FortiGate 1001F, FortiGate 100EF, FortiGate 100E, FortiGate 100F, FortiGate 101F, FortiGate 1100E, FortiGate 1101E, FortiGate 140E-POE, FortiGate 140E, FortiGate 1500DT, FortiGate 1500D, FortiGate 1800F, FortiGate 1801F, FortiGate 2000E, FortiGate 200E, FortiGate 200F, FortiGate 201E, FortiGate 201F, FortiGate 2201E, FortiGate 2500E, FortiGate 2600F, FortiGate 2601F, FortiGate 3000D, FortiGate 3000F, FortiGate 3001F, FortiGate 300E, FortiGate 301E, FortiGate 3100D, FortiGate 3200D, FortiGate 3200F, FortiGate 3201F, FortiGate 3300E, FortiGate 3301E, FortiGate 3400E, FortiGate 3401E, FortiGate 3501F, FortiGate 3600E, FortiGate 3601E, FortiGate 3700D, FortiGate 3700F, FortiGate 3701F, FortiGate 3960E, FortiGate 3980E, FortiGate 400E Bypass, FortiGate 400E, FortiGate 400F, FortiGate 401E, FortiGate 401F, FortiGate 40F 3G4G, FortiGate 4200F, FortiGate 4201F, FortiGate 4400F, FortiGate 4401F, FortiGate 500E, FortiGate 501E, FortiGate 600E, FortiGate 601E, FortiGate 60E-POE, FortiGate 60E, FortiGate 60F, FortiGate 61E, FortiGate 70F, FortiGate 71F, FortiGate 800D, FortiGate 80E-POE, FortiGate 80E, FortiGate 80F Bypass, FortiGate 80F DSL, FortiGate 80F-POE, FortiGate 80F, FortiGate 81E-POE, FortiGate 81E, FortiGate 81F-POE, FortiGate 81F, FortiGate 900D, FortiGate 90E, FortiGate 91E, FortiGate-VM64 Aliyun, FortiGate-VM64 AWS, FortiGate-VM64 Azure, FortiGate-VM64 GCP, FortiGate-VM64 OPC, FortiGate-VM64, FortiGateRugged 60F 3G4G, FortiGateRugged 60F, FortiGateRugged 70F 3G4G, FortiGateRugged 70F, FortiWiFi 40F 3G4G, FortiWiFi 40F, FortiWiFi 60E, FortiWiFi 60F, FortiWiFi 61E, FortiWiFi 61F, FortiWiFi 80F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G-POE, FortiWiFi 81F 2R-POE, FortiWiFi 81F 2R.

It is not available for: FortiGate 5001E1, FortiGate 5001E.

Configure FortiSwitch traffic policy.

```

config switch-controller traffic-policy
  Description: Configure FortiSwitch traffic policy.
  edit <name>
    set cos-queue {integer}
    set description {string}
    set guaranteed-bandwidth {integer}
    set guaranteed-burst {integer}
    set maximum-burst {integer}
    set policer-status [enable|disable]
    set type [ingress|egress]
  next
end

```

config switch-controller traffic-policy

Parameter	Description	Type	Size	Default
cos-queue	COS queue(0 - 7), or unset to disable.	integer	Minimum value: 0 Maximum value: 7	
description	Description of the traffic policy.	string	Maximum length: 63	
guaranteed-bandwidth	Guaranteed bandwidth in kbps (max value = 524287000).	integer	Minimum value: 0 Maximum value: 524287000	10000
guaranteed-burst	Guaranteed burst size in bytes (max value = 4294967295).	integer	Minimum value: 0 Maximum value: 4294967295	45000
maximum-burst	Maximum burst size in bytes (max value = 4294967295).	integer	Minimum value: 0 Maximum value: 4294967295	67500
name	Traffic policy name.	string	Maximum length: 63	
policer-status	Enable/disable policer config on the traffic policy.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable policer config on the traffic policy.		
	<i>disable</i>	Disable policer config on the traffic policy.		
type	Configure type of policy(ingress/egress). Read-only.	option	-	ingress

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>ingress</i>	Ingress policy.		
	<i>egress</i>	Egress policy.		

config switch-controller traffic-sniffer



This command is available for model(s): FortiGate 1000D, FortiGate 1000F, FortiGate 1001F, FortiGate 100EF, FortiGate 100E, FortiGate 100F, FortiGate 101F, FortiGate 1100E, FortiGate 1101E, FortiGate 140E-POE, FortiGate 140E, FortiGate 1500DT, FortiGate 1500D, FortiGate 1800F, FortiGate 1801F, FortiGate 2000E, FortiGate 200E, FortiGate 200F, FortiGate 201E, FortiGate 201F, FortiGate 2201E, FortiGate 2500E, FortiGate 2600F, FortiGate 2601F, FortiGate 3000D, FortiGate 3000F, FortiGate 3001F, FortiGate 300E, FortiGate 301E, FortiGate 3100D, FortiGate 3200D, FortiGate 3200F, FortiGate 3201F, FortiGate 3300E, FortiGate 3301E, FortiGate 3400E, FortiGate 3401E, FortiGate 3501F, FortiGate 3600E, FortiGate 3601E, FortiGate 3700D, FortiGate 3700F, FortiGate 3701F, FortiGate 3960E, FortiGate 3980E, FortiGate 400E Bypass, FortiGate 400E, FortiGate 400F, FortiGate 401E, FortiGate 401F, FortiGate 40F 3G4G, FortiGate 4200F, FortiGate 4201F, FortiGate 4400F, FortiGate 4401F, FortiGate 500E, FortiGate 501E, FortiGate 600E, FortiGate 601E, FortiGate 60E-POE, FortiGate 60E, FortiGate 60F, FortiGate 61E, FortiGate 70F, FortiGate 71F, FortiGate 800D, FortiGate 80E-POE, FortiGate 80E, FortiGate 80F Bypass, FortiGate 80F DSL, FortiGate 80F-POE, FortiGate 80F, FortiGate 81E-POE, FortiGate 81E, FortiGate 81F-POE, FortiGate 81F, FortiGate 900D, FortiGate 90E, FortiGate 91E, FortiGate-VM64 Aliyun, FortiGate-VM64 AWS, FortiGate-VM64 Azure, FortiGate-VM64 GCP, FortiGate-VM64 OPC, FortiGate-VM64, FortiGateRugged 60F 3G4G, FortiGateRugged 60F, FortiGateRugged 70F 3G4G, FortiGateRugged 70F, FortiWiFi 40F 3G4G, FortiWiFi 40F, FortiWiFi 60E, FortiWiFi 60F, FortiWiFi 61E, FortiWiFi 61F, FortiWiFi 80F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G-POE, FortiWiFi 81F 2R-POE, FortiWiFi 81F 2R.

It is not available for: FortiGate 5001E1, FortiGate 5001E.

Configure FortiSwitch RSPAN/ERSPAN traffic sniffing parameters.

```
config switch-controller traffic-sniffer
  Description: Configure FortiSwitch RSPAN/ERSPAN traffic sniffing parameters.
  set erspan-ip {ipv4-address}
  set mode [erspan-auto|rspan|...]
  config target-ip
    Description: Sniffer IPs to filter.
    edit <ip>
      set description {string}
    next
  end
  config target-mac
    Description: Sniffer MACs to filter.
```

```

        edit <mac>
            set description {string}
        next
    end
    config target-port
        Description: Sniffer ports to filter.
        edit <switch-id>
            set description {string}
            set in-ports <name1>, <name2>, ...
            set out-ports <name1>, <name2>, ...
        next
    end
end
end

```

config switch-controller traffic-sniffer

Parameter	Description	Type	Size	Default
erspan-ip	Configure ERSPAN collector IP address.	ipv4-address	Not Specified	0.0.0.0
mode	Configure traffic sniffer mode.	option	-	erspan-auto
	Option	Description		
	<i>erspan-auto</i>	Mirror traffic using a GRE tunnel.		
	<i>rspan</i>	Mirror traffic on a layer2 VLAN.		
	<i>none</i>	Disable traffic mirroring (sniffer).		

config target-ip

Parameter	Description	Type	Size	Default
description	Description for the sniffer IP.	string	Maximum length: 63	
ip	Sniffer IP.	ipv4-address	Not Specified	0.0.0.0

config target-mac

Parameter	Description	Type	Size	Default
description	Description for the sniffer MAC.	string	Maximum length: 63	
mac	Sniffer MAC.	mac-address	Not Specified	00:00:00:00:00:00

config target-port

Parameter	Description	Type	Size	Default
description	Description for the sniffer port entry.	string	Maximum length: 63	
in-ports <name>	Configure source ingress port interfaces. Interface name.	string	Maximum length: 79	
out-ports <name>	Configure source egress port interfaces. Interface name.	string	Maximum length: 79	
switch-id	Managed-switch ID.	string	Maximum length: 16	

config switch-controller virtual-port-pool



This command is available for model(s): FortiGate 1000D, FortiGate 1000F, FortiGate 1001F, FortiGate 100EF, FortiGate 100E, FortiGate 100F, FortiGate 101F, FortiGate 1100E, FortiGate 1101E, FortiGate 140E-POE, FortiGate 140E, FortiGate 1500DT, FortiGate 1500D, FortiGate 1800F, FortiGate 1801F, FortiGate 2000E, FortiGate 200E, FortiGate 200F, FortiGate 201E, FortiGate 201F, FortiGate 2201E, FortiGate 2500E, FortiGate 2600F, FortiGate 2601F, FortiGate 3000D, FortiGate 3000F, FortiGate 3001F, FortiGate 300E, FortiGate 301E, FortiGate 3100D, FortiGate 3200D, FortiGate 3200F, FortiGate 3201F, FortiGate 3300E, FortiGate 3301E, FortiGate 3400E, FortiGate 3401E, FortiGate 3501F, FortiGate 3600E, FortiGate 3601E, FortiGate 3700D, FortiGate 3700F, FortiGate 3701F, FortiGate 3960E, FortiGate 3980E, FortiGate 400E Bypass, FortiGate 400E, FortiGate 400F, FortiGate 401E, FortiGate 401F, FortiGate 40F 3G4G, FortiGate 4200F, FortiGate 4201F, FortiGate 4400F, FortiGate 4401F, FortiGate 500E, FortiGate 501E, FortiGate 600E, FortiGate 601E, FortiGate 60E-POE, FortiGate 60E, FortiGate 60F, FortiGate 61E, FortiGate 70F, FortiGate 71F, FortiGate 800D, FortiGate 80E-POE, FortiGate 80E, FortiGate 80F Bypass, FortiGate 80F DSL, FortiGate 80F-POE, FortiGate 80F, FortiGate 81E-POE, FortiGate 81E, FortiGate 81F-POE, FortiGate 81F, FortiGate 900D, FortiGate 90E, FortiGate 91E, FortiGate-VM64 Aliyun, FortiGate-VM64 AWS, FortiGate-VM64 Azure, FortiGate-VM64 GCP, FortiGate-VM64 OPC, FortiGate-VM64, FortiGateRugged 60F 3G4G, FortiGateRugged 60F, FortiGateRugged 70F 3G4G, FortiGateRugged 70F, FortiWiFi 40F 3G4G, FortiWiFi 40F, FortiWiFi 60E, FortiWiFi 60F, FortiWiFi 61E, FortiWiFi 61F, FortiWiFi 80F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G-POE, FortiWiFi 81F 2R-POE, FortiWiFi 81F 2R.

It is not available for: FortiGate 5001E1, FortiGate 5001E.

Configure virtual pool.

```
config switch-controller virtual-port-pool
  Description: Configure virtual pool.
  edit <name>
    set description {string}
```

```
next
end
```

config switch-controller virtual-port-pool

Parameter	Description	Type	Size	Default
description	Virtual switch pool description.	string	Maximum length: 63	
name	Virtual switch pool name.	string	Maximum length: 35	

config switch-controller vlan-policy



This command is available for model(s): FortiGate 1000D, FortiGate 1000F, FortiGate 1001F, FortiGate 100EF, FortiGate 100E, FortiGate 100F, FortiGate 101F, FortiGate 1100E, FortiGate 1101E, FortiGate 140E-POE, FortiGate 140E, FortiGate 1500DT, FortiGate 1500D, FortiGate 1800F, FortiGate 1801F, FortiGate 2000E, FortiGate 200E, FortiGate 200F, FortiGate 201E, FortiGate 201F, FortiGate 2201E, FortiGate 2500E, FortiGate 2600F, FortiGate 2601F, FortiGate 3000D, FortiGate 3000F, FortiGate 3001F, FortiGate 300E, FortiGate 301E, FortiGate 3100D, FortiGate 3200D, FortiGate 3200F, FortiGate 3201F, FortiGate 3300E, FortiGate 3301E, FortiGate 3400E, FortiGate 3401E, FortiGate 3501F, FortiGate 3600E, FortiGate 3601E, FortiGate 3700D, FortiGate 3700F, FortiGate 3701F, FortiGate 3960E, FortiGate 3980E, FortiGate 400E Bypass, FortiGate 400E, FortiGate 400F, FortiGate 401E, FortiGate 401F, FortiGate 40F 3G4G, FortiGate 4200F, FortiGate 4201F, FortiGate 4400F, FortiGate 4401F, FortiGate 500E, FortiGate 501E, FortiGate 600E, FortiGate 601E, FortiGate 60E-POE, FortiGate 60E, FortiGate 60F, FortiGate 61E, FortiGate 70F, FortiGate 71F, FortiGate 800D, FortiGate 80E-POE, FortiGate 80E, FortiGate 80F Bypass, FortiGate 80F DSL, FortiGate 80F-POE, FortiGate 80F, FortiGate 81E-POE, FortiGate 81E, FortiGate 81F-POE, FortiGate 81F, FortiGate 900D, FortiGate 90E, FortiGate 91E, FortiGate-VM64 Aliyun, FortiGate-VM64 AWS, FortiGate-VM64 Azure, FortiGate-VM64 GCP, FortiGate-VM64 OPC, FortiGate-VM64, FortiGateRugged 60F 3G4G, FortiGateRugged 60F, FortiGateRugged 70F 3G4G, FortiGateRugged 70F, FortiWiFi 40F 3G4G, FortiWiFi 40F, FortiWiFi 60E, FortiWiFi 60F, FortiWiFi 61E, FortiWiFi 61F, FortiWiFi 80F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G-POE, FortiWiFi 81F 2R-POE, FortiWiFi 81F 2R.

It is not available for: FortiGate 5001E1, FortiGate 5001E.

Configure VLAN policy to be applied on the managed FortiSwitch ports through dynamic-port-policy.

```
config switch-controller vlan-policy
    Description: Configure VLAN policy to be applied on the managed FortiSwitch ports through
dynamic-port-policy.
    edit <name>
        set allowed-vlans <vlan-name1>, <vlan-name2>, ...
```

```

    set allowed-vlans-all [enable|disable]
    set description {string}
    set discard-mode [none|all-untagged|...]
    set fortilink {string}
    set untagged-vlans <vlan-name1>, <vlan-name2>, ...
    set vlan {string}
next
end

```

config switch-controller vlan-policy

Parameter	Description	Type	Size	Default								
allowed-vlans <vlan-name>	Allowed VLANs to be applied when using this VLAN policy. VLAN name.	string	Maximum length: 79									
allowed-vlans-all	Enable/disable all defined VLANs when using this VLAN policy.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable all defined VLANs.</td></tr><tr><td><i>disable</i></td><td>Disable all defined VLANs.</td></tr></table>	Option	Description	<i>enable</i>	Enable all defined VLANs.	<i>disable</i>	Disable all defined VLANs.					
Option	Description											
<i>enable</i>	Enable all defined VLANs.											
<i>disable</i>	Disable all defined VLANs.											
description	Description for the VLAN policy.	string	Maximum length: 63									
discard-mode	Discard mode to be applied when using this VLAN policy.	option	-	none								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>none</i></td><td>Discard disabled.</td></tr><tr><td><i>all-untagged</i></td><td>Discard all frames that are untagged.</td></tr><tr><td><i>all-tagged</i></td><td>Discard all frames that are tagged.</td></tr></table>	Option	Description	<i>none</i>	Discard disabled.	<i>all-untagged</i>	Discard all frames that are untagged.	<i>all-tagged</i>	Discard all frames that are tagged.			
Option	Description											
<i>none</i>	Discard disabled.											
<i>all-untagged</i>	Discard all frames that are untagged.											
<i>all-tagged</i>	Discard all frames that are tagged.											
fortilink	FortiLink interface for which this VLAN policy belongs to.	string	Maximum length: 15									
name	VLAN policy name.	string	Maximum length: 63									
untagged-vlans <vlan-name>	Untagged VLANs to be applied when using this VLAN policy. VLAN name.	string	Maximum length: 79									
vlan	Native VLAN to be applied when using this VLAN policy.	string	Maximum length: 15									

system

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- [config system acme on page 1177](#)
- [config system admin on page 1178](#)
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- [config system alarm on page 1188](#)
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- [config system api-user on page 1191](#)
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 - [config system fortisandbox on page 1286](#)
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 - [config system global on page 1293](#)
 - [config system gre-tunnel on page 1349](#)
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 - [config system vxlan on page 1739](#)
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config system 3g-modem custom



This command is available for model(s): FortiGate 1000D, FortiGate 1000F, FortiGate 1001F, FortiGate 100EF, FortiGate 100E, FortiGate 100F, FortiGate 101F, FortiGate 1100E, FortiGate 1101E, FortiGate 140E-POE, FortiGate 140E, FortiGate 1500DT, FortiGate 1500D, FortiGate 1800F, FortiGate 1801F, FortiGate 2000E, FortiGate 200E, FortiGate 200F, FortiGate 201E, FortiGate 201F, FortiGate 2201E, FortiGate 2500E, FortiGate 2600F, FortiGate 2601F, FortiGate 3000D, FortiGate 3000F, FortiGate 3001F, FortiGate 300E, FortiGate 301E, FortiGate 3100D, FortiGate 3200D, FortiGate 3200F, FortiGate 3201F, FortiGate 3300E, FortiGate 3301E, FortiGate 3400E, FortiGate 3401E, FortiGate 3501F, FortiGate 3600E, FortiGate 3601E, FortiGate 3700D, FortiGate 3700F, FortiGate 3701F, FortiGate 3960E, FortiGate 3980E, FortiGate 400E Bypass, FortiGate 400E, FortiGate 400F, FortiGate 401E, FortiGate 401F, FortiGate 40F 3G4G, FortiGate 4200F, FortiGate 4201F, FortiGate 4400F, FortiGate 4401F, FortiGate 5001E1, FortiGate 5001E, FortiGate 500E, FortiGate 501E, FortiGate 600E, FortiGate 601E, FortiGate 60E-POE, FortiGate 60E, FortiGate 60F, FortiGate 61E, FortiGate 70F, FortiGate 71F, FortiGate 800D, FortiGate 80E-POE, FortiGate 80E, FortiGate 80F Bypass, FortiGate 80F DSL, FortiGate 80F-POE, FortiGate 80F, FortiGate 81E-POE, FortiGate 81E, FortiGate 81F-POE, FortiGate 81F, FortiGate 900D, FortiGate 90E, FortiGate 91E, FortiGateRugged 60F 3G4G, FortiGateRugged 60F, FortiGateRugged 70F 3G4G, FortiGateRugged 70F, FortiWiFi 40F 3G4G, FortiWiFi 40F, FortiWiFi 60E, FortiWiFi 60F, FortiWiFi 61E, FortiWiFi 61F, FortiWiFi 80F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G-POE, FortiWiFi 81F 2R-POE, FortiWiFi 81F 2R.

It is not available for: FortiGate-VM64 Aliyun, FortiGate-VM64 AWS, FortiGate-VM64 Azure, FortiGate-VM64 GCP, FortiGate-VM64 OPC, FortiGate-VM64.

3G MODEM custom.

```
config system 3g-modem custom
  Description: 3G MODEM custom.
  edit <id>
    set class-id {user}
    set init-string {string}
    set model {string}
    set modeswitch-string {string}
    set product-id {user}
    set vendor {string}
    set vendor-id {user}
  next
end
```

config system 3g-modem custom

Parameter	Description	Type	Size	Default
class-id	USB interface class in hexadecimal format (00-ff).	user	Not Specified	
id	ID.	integer	Minimum value: 0 Maximum value: 4294967295	
init-string	Init string in hexadecimal format (even length).	string	Maximum length: 127	
model	MODEM model name.	string	Maximum length: 35	
modeswitch-string	USB modeswitch arguments. For example: '-v 1410 -p 9030 -V 1410 -P 9032 -u 3'.	string	Maximum length: 127	
product-id	USB product ID in hexadecimal format (0000-ffff).	user	Not Specified	
vendor	MODEM vendor name.	string	Maximum length: 35	
vendor-id	USB vendor ID in hexadecimal format (0000-ffff).	user	Not Specified	

config system accprofile

Configure access profiles for system administrators.

```
config system accprofile
  Description: Configure access profiles for system administrators.
  edit <name>
    set admintimeout {integer}
    set admintimeout-override [enable|disable]
    set authgrp [none|read|...]
    set comments {var-string}
    set ftviewgrp [none|read|...]
    set fwgrp [none|read|...]
    config fwgrp-permission
      Description: Custom firewall permission.
      set address [none|read|...]
      set others [none|read|...]
      set policy [none|read|...]
      set schedule [none|read|...]
      set service [none|read|...]
    end
```

```

set loggrp [none|read|...]
config loggrp-permission
    Description: Custom Log & Report permission.
    set config [none|read|...]
    set data-access [none|read|...]
    set report-access [none|read|...]
    set threat-weight [none|read|...]
end
set netgrp [none|read|...]
config netgrp-permission
    Description: Custom network permission.
    set cfg [none|read|...]
    set packet-capture [none|read|...]
    set route-cfg [none|read|...]
end
set scope [vdom|global]
set secfabgrp [none|read|...]
set sysgrp [none|read|...]
config sysgrp-permission
    Description: Custom system permission.
    set admin [none|read|...]
    set cfg [none|read|...]
    set mnt [none|read|...]
    set upd [none|read|...]
end
set system-diagnostics [enable|disable]
set system-execute-ssh [enable|disable]
set system-execute-telnet [enable|disable]
set utmgrp [none|read|...]
config utmgrp-permission
    Description: Custom Security Profile permissions.
    set antivirus [none|read|...]
    set application-control [none|read|...]
    set data-leak-prevention [none|read|...]
    set dnsfilter [none|read|...]
    set emailfilter [none|read|...]
    set endpoint-control [none|read|...]
    set file-filter [none|read|...]
    set icap [none|read|...]
    set ips [none|read|...]
    set videofilter [none|read|...]
    set voip [none|read|...]
    set waf [none|read|...]
    set webfilter [none|read|...]
end
set vpngrp [none|read|...]
set wanoptgrp [none|read|...]
set wifi [none|read|...]
next
end

```

config system accprofile

Parameter	Description	Type	Size	Default										
admintimeout	Administrator timeout for this access profile (0 - 480 min, default = 10, 0 means never timeout).	integer	Minimum value: 1 Maximum value: 480	10										
admintimeout-override	Enable/disable overriding the global administrator idle timeout.	option	-	disable										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable overriding the global administrator idle timeout.</td></tr><tr><td><i>disable</i></td><td>Disable overriding the global administrator idle timeout.</td></tr></table>	Option	Description	<i>enable</i>	Enable overriding the global administrator idle timeout.	<i>disable</i>	Disable overriding the global administrator idle timeout.							
Option	Description													
<i>enable</i>	Enable overriding the global administrator idle timeout.													
<i>disable</i>	Disable overriding the global administrator idle timeout.													
authgrp	Administrator access to Users and Devices.	option	-	none										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>none</i></td><td>No access.</td></tr><tr><td><i>read</i></td><td>Read access.</td></tr><tr><td><i>read-write</i></td><td>Read/write access.</td></tr></table>	Option	Description	<i>none</i>	No access.	<i>read</i>	Read access.	<i>read-write</i>	Read/write access.					
Option	Description													
<i>none</i>	No access.													
<i>read</i>	Read access.													
<i>read-write</i>	Read/write access.													
comments	Comment.	var-string	Maximum length: 255											
ftviewgrp	FortiView.	option	-	none										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>none</i></td><td>No access.</td></tr><tr><td><i>read</i></td><td>Read access.</td></tr><tr><td><i>read-write</i></td><td>Read/write access.</td></tr></table>	Option	Description	<i>none</i>	No access.	<i>read</i>	Read access.	<i>read-write</i>	Read/write access.					
Option	Description													
<i>none</i>	No access.													
<i>read</i>	Read access.													
<i>read-write</i>	Read/write access.													
fwgrp	Administrator access to the Firewall configuration.	option	-	none										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>none</i></td><td>No access.</td></tr><tr><td><i>read</i></td><td>Read access.</td></tr><tr><td><i>read-write</i></td><td>Read/write access.</td></tr><tr><td><i>custom</i></td><td>Customized access.</td></tr></table>	Option	Description	<i>none</i>	No access.	<i>read</i>	Read access.	<i>read-write</i>	Read/write access.	<i>custom</i>	Customized access.			
Option	Description													
<i>none</i>	No access.													
<i>read</i>	Read access.													
<i>read-write</i>	Read/write access.													
<i>custom</i>	Customized access.													
loggrp	Administrator access to Logging and Reporting including viewing log messages.	option	-	none										

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>none</i>	No access.		
	<i>read</i>	Read access.		
	<i>read-write</i>	Read/write access.		
	<i>custom</i>	Customized access.		
name	Profile name.	string	Maximum length: 35	
netgrp	Network Configuration.	option	-	none
	Option	Description		
	<i>none</i>	No access.		
	<i>read</i>	Read access.		
	<i>read-write</i>	Read/write access.		
	<i>custom</i>	Customized access.		
scope	Scope of admin access: global or specific VDOM (s).	option	-	vdom
	Option	Description		
	<i>vdom</i>	VDOM access.		
	<i>global</i>	Global access.		
secfabgrp	Security Fabric.	option	-	none
	Option	Description		
	<i>none</i>	No access.		
	<i>read</i>	Read access.		
	<i>read-write</i>	Read/write access.		
sysgrp	System Configuration.	option	-	none
	Option	Description		
	<i>none</i>	No access.		
	<i>read</i>	Read access.		
	<i>read-write</i>	Read/write access.		
	<i>custom</i>	Customized access.		

Parameter	Description	Type	Size	Default										
system-diagnostics	Enable/disable permission to run system diagnostic commands.	option	-	enable										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable permission to run system diagnostic commands.</td></tr><tr><td><i>disable</i></td><td>Disable permission to run system diagnostic commands.</td></tr></table>	Option	Description	<i>enable</i>	Enable permission to run system diagnostic commands.	<i>disable</i>	Disable permission to run system diagnostic commands.							
Option	Description													
<i>enable</i>	Enable permission to run system diagnostic commands.													
<i>disable</i>	Disable permission to run system diagnostic commands.													
system-execute-ssh	Enable/disable permission to execute SSH commands.	option	-	enable										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable permission to execute SSH commands.</td></tr><tr><td><i>disable</i></td><td>Disable permission to execute SSH commands.</td></tr></table>	Option	Description	<i>enable</i>	Enable permission to execute SSH commands.	<i>disable</i>	Disable permission to execute SSH commands.							
Option	Description													
<i>enable</i>	Enable permission to execute SSH commands.													
<i>disable</i>	Disable permission to execute SSH commands.													
system-execute-telnet	Enable/disable permission to execute TELNET commands.	option	-	enable										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable permission to execute TELNET commands.</td></tr><tr><td><i>disable</i></td><td>Disable permission to execute TELNET commands.</td></tr></table>	Option	Description	<i>enable</i>	Enable permission to execute TELNET commands.	<i>disable</i>	Disable permission to execute TELNET commands.							
Option	Description													
<i>enable</i>	Enable permission to execute TELNET commands.													
<i>disable</i>	Disable permission to execute TELNET commands.													
utmgrp	Administrator access to Security Profiles.	option	-	none										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>none</i></td><td>No access.</td></tr><tr><td><i>read</i></td><td>Read access.</td></tr><tr><td><i>read-write</i></td><td>Read/write access.</td></tr><tr><td><i>custom</i></td><td>Customized access.</td></tr></table>	Option	Description	<i>none</i>	No access.	<i>read</i>	Read access.	<i>read-write</i>	Read/write access.	<i>custom</i>	Customized access.			
Option	Description													
<i>none</i>	No access.													
<i>read</i>	Read access.													
<i>read-write</i>	Read/write access.													
<i>custom</i>	Customized access.													
vpngrp	Administrator access to IPsec, SSL, PPTP, and L2TP VPN.	option	-	none										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>none</i></td><td>No access.</td></tr><tr><td><i>read</i></td><td>Read access.</td></tr><tr><td><i>read-write</i></td><td>Read/write access.</td></tr></table>	Option	Description	<i>none</i>	No access.	<i>read</i>	Read access.	<i>read-write</i>	Read/write access.					
Option	Description													
<i>none</i>	No access.													
<i>read</i>	Read access.													
<i>read-write</i>	Read/write access.													
wanoptgrp *	Administrator access to WAN Opt & Cache.	option	-	none										

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>none</i>	No access.		
	<i>read</i>	Read access.		
	<i>read-write</i>	Read/write access.		
wifi	Administrator access to the WiFi controller and Switch controller.	option	-	none
	Option	Description		
	<i>none</i>	No access.		
	<i>read</i>	Read access.		
	<i>read-write</i>	Read/write access.		

* This parameter may not exist in some models.

config fwgrp-permission

Parameter	Description	Type	Size	Default
address	Address Configuration.	option	-	none
	Option	Description		
	<i>none</i>	No access.		
	<i>read</i>	Read access.		
	<i>read-write</i>	Read/write access.		
others	Other Firewall Configuration.	option	-	none
	Option	Description		
	<i>none</i>	No access.		
	<i>read</i>	Read access.		
	<i>read-write</i>	Read/write access.		
policy	Policy Configuration.	option	-	none
	Option	Description		
	<i>none</i>	No access.		
	<i>read</i>	Read access.		
	<i>read-write</i>	Read/write access.		

Parameter	Description	Type	Size	Default
schedule	Schedule Configuration.	option	-	none
	Option	Description		
	<i>none</i>	No access.		
	<i>read</i>	Read access.		
	<i>read-write</i>	Read/write access.		
service	Service Configuration.	option	-	none
	Option	Description		
	<i>none</i>	No access.		
	<i>read</i>	Read access.		
	<i>read-write</i>	Read/write access.		

config loggrp-permission

Parameter	Description	Type	Size	Default								
config	Log & Report configuration.	option	-	none								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>none</i></td><td>No access.</td></tr><tr><td><i>read</i></td><td>Read access.</td></tr><tr><td><i>read-write</i></td><td>Read/write access.</td></tr></table>	Option	Description	<i>none</i>	No access.	<i>read</i>	Read access.	<i>read-write</i>	Read/write access.			
Option	Description											
<i>none</i>	No access.											
<i>read</i>	Read access.											
<i>read-write</i>	Read/write access.											
data-access	Log & Report Data Access.	option	-	none								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>none</i></td><td>No access.</td></tr><tr><td><i>read</i></td><td>Read access.</td></tr><tr><td><i>read-write</i></td><td>Read/write access.</td></tr></table>	Option	Description	<i>none</i>	No access.	<i>read</i>	Read access.	<i>read-write</i>	Read/write access.			
Option	Description											
<i>none</i>	No access.											
<i>read</i>	Read access.											
<i>read-write</i>	Read/write access.											
report-access	Log & Report Report Access.	option	-	none								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>none</i></td><td>No access.</td></tr><tr><td><i>read</i></td><td>Read access.</td></tr><tr><td><i>read-write</i></td><td>Read/write access.</td></tr></table>	Option	Description	<i>none</i>	No access.	<i>read</i>	Read access.	<i>read-write</i>	Read/write access.			
Option	Description											
<i>none</i>	No access.											
<i>read</i>	Read access.											
<i>read-write</i>	Read/write access.											

Parameter	Description	Type	Size	Default
threat-weight	Log & Report Threat Weight.	option	-	none
	Option	Description		
	<i>none</i>	No access.		
	<i>read</i>	Read access.		
	<i>read-write</i>	Read/write access.		

config netgrp-permission

Parameter	Description	Type	Size	Default
cfg	Network Configuration.	option	-	none
	Option	Description		
	<i>none</i>	No access.		
	<i>read</i>	Read access.		
	<i>read-write</i>	Read/write access.		
packet-capture	Packet Capture Configuration.	option	-	none
	Option	Description		
	<i>none</i>	No access.		
	<i>read</i>	Read access.		
	<i>read-write</i>	Read/write access.		
route-cfg	Router Configuration.	option	-	none
	Option	Description		
	<i>none</i>	No access.		
	<i>read</i>	Read access.		
	<i>read-write</i>	Read/write access.		

config sysgrp-permission

Parameter	Description	Type	Size	Default
admin	Administrator Users.	option	-	none

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>none</i>	No access.		
	<i>read</i>	Read access.		
	<i>read-write</i>	Read/write access.		
cfg	System Configuration.	option	-	none
	Option	Description		
	<i>none</i>	No access.		
	<i>read</i>	Read access.		
	<i>read-write</i>	Read/write access.		
mnt	Maintenance.	option	-	none
	Option	Description		
	<i>none</i>	No access.		
	<i>read</i>	Read access.		
	<i>read-write</i>	Read/write access.		
upd	FortiGuard Updates.	option	-	none
	Option	Description		
	<i>none</i>	No access.		
	<i>read</i>	Read access.		
	<i>read-write</i>	Read/write access.		

config utmgrp-permission

Parameter	Description	Type	Size	Default
antivirus	Antivirus profiles and settings.	option	-	none
	Option	Description		
	<i>none</i>	No access.		
	<i>read</i>	Read access.		
	<i>read-write</i>	Read/write access.		
application-control	Application Control profiles and settings.	option	-	none

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>none</i>	No access.		
	<i>read</i>	Read access.		
	<i>read-write</i>	Read/write access.		
data-leak-prevention	DLP profiles and settings.	option	-	none
	Option	Description		
	<i>none</i>	No access.		
	<i>read</i>	Read access.		
	<i>read-write</i>	Read/write access.		
dnsfilter	DNS Filter profiles and settings.	option	-	none
	Option	Description		
	<i>none</i>	No access.		
	<i>read</i>	Read access.		
	<i>read-write</i>	Read/write access.		
emailfilter	Email Filter and settings.	option	-	none
	Option	Description		
	<i>none</i>	No access.		
	<i>read</i>	Read access.		
	<i>read-write</i>	Read/write access.		
endpoint-control	FortiClient Profiles.	option	-	none
	Option	Description		
	<i>none</i>	No access.		
	<i>read</i>	Read access.		
	<i>read-write</i>	Read/write access.		
file-filter	File-filter profiles and settings.	option	-	none

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>none</i>	No access.		
	<i>read</i>	Read access.		
	<i>read-write</i>	Read/write access.		
icap	ICAP profiles and settings.	option	-	none
	Option	Description		
	<i>none</i>	No access.		
	<i>read</i>	Read access.		
	<i>read-write</i>	Read/write access.		
ips	IPS profiles and settings.	option	-	none
	Option	Description		
	<i>none</i>	No access.		
	<i>read</i>	Read access.		
	<i>read-write</i>	Read/write access.		
videofilter	Video filter profiles and settings.	option	-	none
	Option	Description		
	<i>none</i>	No access.		
	<i>read</i>	Read access.		
	<i>read-write</i>	Read/write access.		
voip	VoIP profiles and settings.	option	-	none
	Option	Description		
	<i>none</i>	No access.		
	<i>read</i>	Read access.		
	<i>read-write</i>	Read/write access.		
waf	Web Application Firewall profiles and settings.	option	-	none
	Option	Description		
	<i>none</i>	No access.		

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>read</i>	Read access.		
	<i>read-write</i>	Read/write access.		
webfilter	Web Filter profiles and settings.	option	-	none
	Option	Description		
	<i>none</i>	No access.		
	<i>read</i>	Read access.		
	<i>read-write</i>	Read/write access.		

config system acme

Configure ACME client.

```

config system acme
  Description: Configure ACME client.
  config accounts
    Description: ACME accounts list.
    edit <id>
      set ca_url {string}
      set email {string}
      set privatekey {string}
      set status {string}
      set url {string}
    next
  end
  set interface <interface-name1>, <interface-name2>, ...
  set source-ip {ipv4-address}
  set source-ip6 {ipv6-address}
end

```

config system acme

Parameter	Description	Type	Size	Default
interface <interface-name>	Interface(s) on which the ACME client will listen for challenges. Interface name.	string	Maximum length: 79	
source-ip	Source IPv4 address used to connect to the ACME server.	ipv4-address	Not Specified	0.0.0.0

Parameter	Description	Type	Size	Default
source-ipv6	Source IPv6 address used to connect to the ACME server.	ipv6-address	Not Specified	::

config accounts

Parameter	Description	Type	Size	Default
ca_url	Account ca_url.	string	Maximum length: 255	
email	Account email.	string	Maximum length: 255	
id	Account id.	string	Maximum length: 255	
privatekey	Account Private Key.	string	Maximum length: 8191	
status	Account status.	string	Maximum length: 127	
url	Account url.	string	Maximum length: 511	

config system admin

Configure admin users.

```

config system admin
  Description: Configure admin users.
  edit <name>
    set accprofile {string}
    set accprofile-override [enable|disable]
    set allow-remove-admin-session [enable|disable]
    set comments {var-string}
    set email-to {string}
    set force-password-change [enable|disable]
    set fortitoken {string}
    set guest-auth [disable|enable]
    set guest-lang {string}
    set guest-usergroups <name1>, <name2>, ...
    set ip6-trusthost1 {ipv6-prefix}
    set ip6-trusthost10 {ipv6-prefix}
    set ip6-trusthost2 {ipv6-prefix}
    set ip6-trusthost3 {ipv6-prefix}
    set ip6-trusthost4 {ipv6-prefix}
    set ip6-trusthost5 {ipv6-prefix}
    set ip6-trusthost6 {ipv6-prefix}

```

```

set ip6-trusthost7 {ipv6-prefix}
set ip6-trusthost8 {ipv6-prefix}
set ip6-trusthost9 {ipv6-prefix}
set password {password-2}
set password-expire {user}
set peer-auth [enable|disable]
set peer-group {string}
set remote-auth [enable|disable]
set remote-group {string}
set schedule {string}
set sms-custom-server {string}
set sms-phone {string}
set sms-server [fortiguard|custom]
set ssh-certificate {string}
set ssh-public-key1 {user}
set ssh-public-key2 {user}
set ssh-public-key3 {user}
set trusthost1 {ipv4-classnet}
set trusthost10 {ipv4-classnet}
set trusthost2 {ipv4-classnet}
set trusthost3 {ipv4-classnet}
set trusthost4 {ipv4-classnet}
set trusthost5 {ipv4-classnet}
set trusthost6 {ipv4-classnet}
set trusthost7 {ipv4-classnet}
set trusthost8 {ipv4-classnet}
set trusthost9 {ipv4-classnet}
set two-factor [disable|fortitoken|...]
set two-factor-authentication [fortitoken|email|...]
set two-factor-notification [email|sms]
set vdom <name1>, <name2>, ...
set vdom-override [enable|disable]
set wildcard [enable|disable]
next
end

```

config system admin

Parameter	Description	Type	Size	Default
accprofile	Access profile for this administrator. Access profiles control administrator access to FortiGate features.	string	Maximum length: 35	
accprofile-override	Enable to use the name of an access profile provided by the remote authentication server to control the FortiGate features that this administrator can access.	option	-	disable

Parameter	Description	Type	Size	Default
	Option Description			
	<i>enable</i>	Enable access profile override.		
	<i>disable</i>	Disable access profile override.		
allow-remove-admin-session	Enable/disable allow admin session to be removed by privileged admin users.	option	-	enable
	Option Description			
	<i>enable</i>	Enable allow-remove option.		
	<i>disable</i>	Disable allow-remove option.		
comments	Comment.	var-string	Maximum length: 255	
email-to	This administrator's email address.	string	Maximum length: 63	
force-password-change	Enable/disable force password change on next login.	option	-	disable
	Option Description			
	<i>enable</i>	Enable force password change on next login.		
	<i>disable</i>	Disable force password change on next login.		
fortitoken	This administrator's FortiToken serial number.	string	Maximum length: 16	
guest-auth	Enable/disable guest authentication.	option	-	disable
	Option Description			
	<i>disable</i>	Disable guest authentication.		
	<i>enable</i>	Enable guest authentication.		
guest-lang	Guest management portal language.	string	Maximum length: 35	
guest-usergroups <name>	Select guest user groups. Select guest user groups.	string	Maximum length: 79	
ip6-trusthost1	Any IPv6 address from which the administrator can connect to the FortiGate unit. Default allows access from any IPv6 address.	ipv6-prefix	Not Specified	::/0

Parameter	Description	Type	Size	Default
ip6-trusthost10	Any IPv6 address from which the administrator can connect to the FortiGate unit. Default allows access from any IPv6 address.	ipv6-prefix	Not Specified	::/0
ip6-trusthost2	Any IPv6 address from which the administrator can connect to the FortiGate unit. Default allows access from any IPv6 address.	ipv6-prefix	Not Specified	::/0
ip6-trusthost3	Any IPv6 address from which the administrator can connect to the FortiGate unit. Default allows access from any IPv6 address.	ipv6-prefix	Not Specified	::/0
ip6-trusthost4	Any IPv6 address from which the administrator can connect to the FortiGate unit. Default allows access from any IPv6 address.	ipv6-prefix	Not Specified	::/0
ip6-trusthost5	Any IPv6 address from which the administrator can connect to the FortiGate unit. Default allows access from any IPv6 address.	ipv6-prefix	Not Specified	::/0
ip6-trusthost6	Any IPv6 address from which the administrator can connect to the FortiGate unit. Default allows access from any IPv6 address.	ipv6-prefix	Not Specified	::/0
ip6-trusthost7	Any IPv6 address from which the administrator can connect to the FortiGate unit. Default allows access from any IPv6 address.	ipv6-prefix	Not Specified	::/0
ip6-trusthost8	Any IPv6 address from which the administrator can connect to the FortiGate unit. Default allows access from any IPv6 address.	ipv6-prefix	Not Specified	::/0
ip6-trusthost9	Any IPv6 address from which the administrator can connect to the FortiGate unit. Default allows access from any IPv6 address.	ipv6-prefix	Not Specified	::/0
name	User name.	string	Maximum length: 64	
password	Admin user password.	password-2	Not Specified	

Parameter	Description	Type	Size	Default						
password-expire	Password expire time.	user	Not Specified							
peer-auth	Set to enable peer certificate authentication (for HTTPS admin access).	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable peer.</td></tr><tr><td>disable</td><td>Disable peer.</td></tr></table>				Option	Description	enable	Enable peer.	disable	Disable peer.
	Option	Description								
	enable	Enable peer.								
disable	Disable peer.									
peer-group	Name of peer group defined under config user group which has PKI members. Used for peer certificate authentication (for HTTPS admin access).	string	Maximum length: 35							
remote-auth	Enable/disable authentication using a remote RADIUS, LDAP, or TACACS+ server.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable remote authentication.</td></tr><tr><td>disable</td><td>Disable remote authentication.</td></tr></table>				Option	Description	enable	Enable remote authentication.	disable	Disable remote authentication.
	Option	Description								
	enable	Enable remote authentication.								
disable	Disable remote authentication.									
remote-group	User group name used for remote auth.	string	Maximum length: 35							
schedule	Firewall schedule used to restrict when the administrator can log in. No schedule means no restrictions.	string	Maximum length: 35							
sms-custom-server	Custom SMS server to send SMS messages to.	string	Maximum length: 35							
sms-phone	Phone number on which the administrator receives SMS messages.	string	Maximum length: 15							
sms-server	Send SMS messages using the FortiGuard SMS server or a custom server.	option	-	fortiguard						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>fortiguard</td><td>Send SMS by FortiGuard.</td></tr><tr><td>custom</td><td>Send SMS by custom server.</td></tr></table>				Option	Description	fortiguard	Send SMS by FortiGuard.	custom	Send SMS by custom server.
	Option	Description								
	fortiguard	Send SMS by FortiGuard.								
custom	Send SMS by custom server.									
ssh-certificate	Select the certificate to be used by the FortiGate for authentication with an SSH client.	string	Maximum length: 35							

Parameter	Description	Type	Size	Default
ssh-public-key1	Public key of an SSH client. The client is authenticated without being asked for credentials. Create the public-private key pair in the SSH client application.	user	Not Specified	
ssh-public-key2	Public key of an SSH client. The client is authenticated without being asked for credentials. Create the public-private key pair in the SSH client application.	user	Not Specified	
ssh-public-key3	Public key of an SSH client. The client is authenticated without being asked for credentials. Create the public-private key pair in the SSH client application.	user	Not Specified	
trusthost1	Any IPv4 address or subnet address and netmask from which the administrator can connect to the FortiGate unit. Default allows access from any IPv4 address.	ipv4-classnet	Not Specified	0.0.0.0 0.0.0.0
trusthost10	Any IPv4 address or subnet address and netmask from which the administrator can connect to the FortiGate unit. Default allows access from any IPv4 address.	ipv4-classnet	Not Specified	0.0.0.0 0.0.0.0
trusthost2	Any IPv4 address or subnet address and netmask from which the administrator can connect to the FortiGate unit. Default allows access from any IPv4 address.	ipv4-classnet	Not Specified	0.0.0.0 0.0.0.0
trusthost3	Any IPv4 address or subnet address and netmask from which the administrator can connect to the FortiGate unit. Default allows access from any IPv4 address.	ipv4-classnet	Not Specified	0.0.0.0 0.0.0.0
trusthost4	Any IPv4 address or subnet address and netmask from which the administrator can connect to the FortiGate unit. Default allows access from any IPv4 address.	ipv4-classnet	Not Specified	0.0.0.0 0.0.0.0
trusthost5	Any IPv4 address or subnet address and netmask from which the administrator can connect to the FortiGate unit. Default allows access from any IPv4 address.	ipv4-classnet	Not Specified	0.0.0.0 0.0.0.0
trusthost6	Any IPv4 address or subnet address and netmask from which the administrator can connect to the FortiGate unit. Default allows access from any IPv4 address.	ipv4-classnet	Not Specified	0.0.0.0 0.0.0.0

Parameter	Description	Type	Size	Default												
trusthost7	Any IPv4 address or subnet address and netmask from which the administrator can connect to the FortiGate unit. Default allows access from any IPv4 address.	ipv4-classnet	Not Specified	0.0.0.0 0.0.0.0												
trusthost8	Any IPv4 address or subnet address and netmask from which the administrator can connect to the FortiGate unit. Default allows access from any IPv4 address.	ipv4-classnet	Not Specified	0.0.0.0 0.0.0.0												
trusthost9	Any IPv4 address or subnet address and netmask from which the administrator can connect to the FortiGate unit. Default allows access from any IPv4 address.	ipv4-classnet	Not Specified	0.0.0.0 0.0.0.0												
two-factor	Enable/disable two-factor authentication.	option	-	disable												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Disable two-factor authentication.</td></tr><tr><td>fortitoken</td><td>Use FortiToken or FortiToken mobile two-factor authentication.</td></tr><tr><td>fortitoken-cloud</td><td>FortiToken Cloud Service.</td></tr><tr><td>email</td><td>Send a two-factor authentication code to the configured email-to email address.</td></tr><tr><td>sms</td><td>Send a two-factor authentication code to the configured sms-server and sms-phone.</td></tr></table>				Option	Description	disable	Disable two-factor authentication.	fortitoken	Use FortiToken or FortiToken mobile two-factor authentication.	fortitoken-cloud	FortiToken Cloud Service.	email	Send a two-factor authentication code to the configured email-to email address.	sms	Send a two-factor authentication code to the configured sms-server and sms-phone.
Option	Description															
disable	Disable two-factor authentication.															
fortitoken	Use FortiToken or FortiToken mobile two-factor authentication.															
fortitoken-cloud	FortiToken Cloud Service.															
email	Send a two-factor authentication code to the configured email-to email address.															
sms	Send a two-factor authentication code to the configured sms-server and sms-phone.															
two-factor-authentication	Authentication method by FortiToken Cloud.	option	-													
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>fortitoken</td><td>FortiToken authentication.</td></tr><tr><td>email</td><td>Email one time password.</td></tr><tr><td>sms</td><td>SMS one time password.</td></tr></table>				Option	Description	fortitoken	FortiToken authentication.	email	Email one time password.	sms	SMS one time password.				
Option	Description															
fortitoken	FortiToken authentication.															
email	Email one time password.															
sms	SMS one time password.															
two-factor-notification	Notification method for user activation by FortiToken Cloud.	option	-													
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>email</td><td>Email notification for activation code.</td></tr><tr><td>sms</td><td>SMS notification for activation code.</td></tr></table>				Option	Description	email	Email notification for activation code.	sms	SMS notification for activation code.						
Option	Description															
email	Email notification for activation code.															
sms	SMS notification for activation code.															
vdom <name>	Virtual domain(s) that the administrator can access.	string	Maximum length: 79													

Parameter	Description	Type	Size	Default						
	Virtual domain name.									
vdom-override	Enable to use the names of VDOMs provided by the remote authentication server to control the VDOMs that this administrator can access.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable VDOM override.</td></tr><tr><td><i>disable</i></td><td>Disable VDOM override.</td></tr></table>	Option	Description	<i>enable</i>	Enable VDOM override.	<i>disable</i>	Disable VDOM override.			
Option	Description									
<i>enable</i>	Enable VDOM override.									
<i>disable</i>	Disable VDOM override.									
wildcard	Enable/disable wildcard RADIUS authentication.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable username wildcard.</td></tr><tr><td><i>disable</i></td><td>Disable username wildcard.</td></tr></table>	Option	Description	<i>enable</i>	Enable username wildcard.	<i>disable</i>	Disable username wildcard.			
Option	Description									
<i>enable</i>	Enable username wildcard.									
<i>disable</i>	Disable username wildcard.									

config system affinity-interrupt



This command is available for model(s): FortiGate 4200F, FortiGate 4201F, FortiGate 4400F, FortiGate 4401F, FortiGate-VM64 Aliyun, FortiGate-VM64 AWS, FortiGate-VM64 Azure, FortiGate-VM64 GCP, FortiGate-VM64 OPC, FortiGate-VM64.

It is not available for: FortiGate 1000D, FortiGate 1000F, FortiGate 1001F, FortiGate 100EF, FortiGate 100E, FortiGate 100F, FortiGate 101F, FortiGate 1100E, FortiGate 1101E, FortiGate 140E-POE, FortiGate 140E, FortiGate 1500DT, FortiGate 1500D, FortiGate 1800F, FortiGate 1801F, FortiGate 2000E, FortiGate 200E, FortiGate 200F, FortiGate 201E, FortiGate 201F, FortiGate 2201E, FortiGate 2500E, FortiGate 2600F, FortiGate 2601F, FortiGate 3000D, FortiGate 3000F, FortiGate 3001F, FortiGate 300E, FortiGate 301E, FortiGate 3100D, FortiGate 3200D, FortiGate 3200F, FortiGate 3201F, FortiGate 3300E, FortiGate 3301E, FortiGate 3400E, FortiGate 3401E, FortiGate 3501F, FortiGate 3600E, FortiGate 3601E, FortiGate 3700D, FortiGate 3700F, FortiGate 3701F, FortiGate 3960E, FortiGate 3980E, FortiGate 400E Bypass, FortiGate 400E, FortiGate 400F, FortiGate 401E, FortiGate 401F, FortiGate 40F 3G4G, FortiGate 5001E1, FortiGate 5001E, FortiGate 500E, FortiGate 501E, FortiGate 600E, FortiGate 601E, FortiGate 60E-POE, FortiGate 60E, FortiGate 60F, FortiGate 61E, FortiGate 70F, FortiGate 71F, FortiGate 800D, FortiGate 80E-POE, FortiGate 80E, FortiGate 80F Bypass, FortiGate 80F DSL, FortiGate 80F-POE, FortiGate 80F, FortiGate 81E-POE, FortiGate 81E, FortiGate 81F-POE, FortiGate 81F, FortiGate 900D, FortiGate 90E, FortiGate 91E, FortiGateRugged 60F 3G4G, FortiGateRugged 60F, FortiGateRugged 70F 3G4G, FortiGateRugged 70F, FortiWiFi 40F 3G4G, FortiWiFi 40F, FortiWiFi 60E, FortiWiFi 60F, FortiWiFi 61E, FortiWiFi 61F, FortiWiFi 80F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G-POE, FortiWiFi 81F 2R-POE, FortiWiFi 81F 2R.

Configure interrupt affinity.

```
config system affinity-interrupt
  Description: Configure interrupt affinity.
  edit <id>
    set affinity-cpumask {string}
    set default-affinity-cpumask {string}
    set interrupt {string}
  next
end
```

config system affinity-interrupt

Parameter	Description	Type	Size	Default
affinity-cpumask	Affinity setting (64-bit hexadecimal value in the format of 0xxxxxxxxxxxxxxxxx).	string	Maximum length: 127	
default-affinity-cpumask	Default affinity setting (64-bit hexadecimal value in the format of 0xxxxxxxxxxxxxxxxx). Read-only.	string	Maximum length: 127	
id	ID of the interrupt affinity setting.	integer	Minimum value: 0 Maximum value: 4294967295	
interrupt	Interrupt name.	string	Maximum length: 127	

config system affinity-packet-redistribution



This command is available for model(s): FortiGate-VM64 Aliyun, FortiGate-VM64 AWS, FortiGate-VM64 Azure, FortiGate-VM64 GCP, FortiGate-VM64 OPC, FortiGate-VM64.

It is not available for: FortiGate 1000D, FortiGate 1000F, FortiGate 1001F, FortiGate 100EF, FortiGate 100E, FortiGate 100F, FortiGate 101F, FortiGate 1100E, FortiGate 1101E, FortiGate 140E-POE, FortiGate 140E, FortiGate 1500DT, FortiGate 1500D, FortiGate 1800F, FortiGate 1801F, FortiGate 2000E, FortiGate 200E, FortiGate 200F, FortiGate 201E, FortiGate 201F, FortiGate 2201E, FortiGate 2500E, FortiGate 2600F, FortiGate 2601F, FortiGate 3000D, FortiGate 3000F, FortiGate 3001F, FortiGate 300E, FortiGate 301E, FortiGate 3100D, FortiGate 3200D, FortiGate 3200F, FortiGate 3201F, FortiGate 3300E, FortiGate 3301E, FortiGate 3400E, FortiGate 3401E, FortiGate 3501F, FortiGate 3600E, FortiGate 3601E, FortiGate 3700D, FortiGate 3700F, FortiGate 3701F, FortiGate 3960E, FortiGate 3980E, FortiGate 400E Bypass, FortiGate 400E, FortiGate 400F, FortiGate 401E, FortiGate 401F, FortiGate 40F 3G4G, FortiGate 4200F, FortiGate 4201F, FortiGate 4400F, FortiGate 4401F, FortiGate 5001E1, FortiGate 5001E, FortiGate 500E, FortiGate 501E, FortiGate 600E, FortiGate 601E, FortiGate 60E-POE, FortiGate 60E, FortiGate 60F, FortiGate 61E, FortiGate 70F, FortiGate 71F, FortiGate 800D, FortiGate 80E-POE, FortiGate 80E, FortiGate 80F Bypass, FortiGate 80F DSL, FortiGate 80F-POE, FortiGate 80F, FortiGate 81E-POE, FortiGate 81E, FortiGate 81F-POE, FortiGate 81F, FortiGate 900D, FortiGate 90E, FortiGate 91E, FortiGateRugged 60F 3G4G, FortiGateRugged 60F, FortiGateRugged 70F 3G4G, FortiGateRugged 70F, FortiWiFi 40F 3G4G, FortiWiFi 40F, FortiWiFi 60E, FortiWiFi 60F, FortiWiFi 61E, FortiWiFi 61F, FortiWiFi 80F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G-POE, FortiWiFi 81F 2R-POE, FortiWiFi 81F 2R.

Configure packet redistribution.

```
config system affinity-packet-redistribution
  Description: Configure packet redistribution.
  edit <id>
    set affinity-cpumask {string}
    set interface {string}
    set rxqid {integer}
  next
end
```

config system affinity-packet-redistribution

Parameter	Description	Type	Size	Default
affinity-cpumask	Affinity setting for VM throughput (64-bit hexadecimal value in the format of 0xxxxxxxxxxxxxxxxx).	string	Maximum length: 127	

Parameter	Description	Type	Size	Default
id	ID of the packet redistribution setting.	integer	Minimum value: 0 Maximum value: 4294967295	0
interface	Physical interface name on which to perform packet redistribution.	string	Maximum length: 127	
rxqid	ID of the receive queue (when the interface has multiple queues) on which to perform packet redistribution.	integer	Minimum value: 0 Maximum value: 255	0

config system alarm

Configure alarm.

```

config system alarm
  Description: Configure alarm.
  set audible [enable|disable]
  config groups
    Description: Alarm groups.
    edit <id>
      set admin-auth-failure-threshold {integer}
      set admin-auth-lockout-threshold {integer}
      set decryption-failure-threshold {integer}
      set encryption-failure-threshold {integer}
      set fw-policy-id {integer}
      set fw-policy-id-threshold {integer}
      config fw-policy-violations
        Description: Firewall policy violations.
        edit <id>
          set dst-ip {ipv4-address}
          set dst-port {integer}
          set src-ip {ipv4-address}
          set src-port {integer}
          set threshold {integer}
        next
      end
      set log-full-warning-threshold {integer}
      set period {integer}
      set replay-attempt-threshold {integer}
      set self-test-failure-threshold {integer}
      set user-auth-failure-threshold {integer}
      set user-auth-lockout-threshold {integer}
    next
  end
  set status [enable|disable]
end

```

config system alarm

Parameter	Description	Type	Size	Default
audible	Enable/disable audible alarm.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable audible alarm.		
	<i>disable</i>	Disable audible alarm.		
status	Enable/disable alarm.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable alarm.		
	<i>disable</i>	Disable alarm.		

config groups

Parameter	Description	Type	Size	Default
admin-auth-failure-threshold	Admin authentication failure threshold.	integer	Minimum value: 0 Maximum value: 1024	0
admin-auth-lockout-threshold	Admin authentication lockout threshold.	integer	Minimum value: 0 Maximum value: 1024	0
decryption-failure-threshold	Decryption failure threshold.	integer	Minimum value: 0 Maximum value: 1024	0
encryption-failure-threshold	Encryption failure threshold.	integer	Minimum value: 0 Maximum value: 1024	0
fw-policy-id	Firewall policy ID.	integer	Minimum value: 0 Maximum value: 4294967295	0
fw-policy-id-threshold	Firewall policy ID threshold.	integer	Minimum value: 0 Maximum value: 1024	0
id	Group ID.	integer	Minimum value: 0 Maximum value: 4294967295	0

Parameter	Description	Type	Size	Default
log-full-warning-threshold	Log full warning threshold.	integer	Minimum value: 0 Maximum value: 1024	0
period	Time period in seconds (0 = from start up).	integer	Minimum value: 0 Maximum value: 4294967295	0
replay-attempt-threshold	Replay attempt threshold.	integer	Minimum value: 0 Maximum value: 1024	0
self-test-failure-threshold	Self-test failure threshold.	integer	Minimum value: 0 Maximum value: 1	0
user-auth-failure-threshold	User authentication failure threshold.	integer	Minimum value: 0 Maximum value: 1024	0
user-auth-lockout-threshold	User authentication lockout threshold.	integer	Minimum value: 0 Maximum value: 1024	0

config fw-policy-violations

Parameter	Description	Type	Size	Default
dst-ip	Destination IP (0=all).	ipv4-address	Not Specified	0.0.0.0
dst-port	Destination port (0=all).	integer	Minimum value: 0 Maximum value: 65535	0
id	Firewall policy violations ID.	integer	Minimum value: 0 Maximum value: 4294967295	0
src-ip	Source IP (0=all).	ipv4-address	Not Specified	0.0.0.0
src-port	Source port (0=all).	integer	Minimum value: 0 Maximum value: 65535	0
threshold	Firewall policy violation threshold.	integer	Minimum value: 0 Maximum value: 1024	0

config system alias

Configure alias command.

```
config system alias
  Description: Configure alias command.
  edit <name>
    set command {var-string}
  next
end
```

config system alias

Parameter	Description	Type	Size	Default
command	Command list to execute.	var-string	Maximum length: 255	
name	Alias command name.	string	Maximum length: 35	

config system api-user

Configure API users.

```
config system api-user
  Description: Configure API users.
  edit <name>
    set accprofile {string}
    set api-key {password-2}
    set comments {var-string}
    set cors-allow-origin {string}
    set peer-auth [enable|disable]
    set peer-group {string}
    set schedule {string}
    config trusthost
      Description: Trusthost.
      edit <id>
        set ipv4-trusthost {ipv4-classnet}
        set ipv6-trusthost {ipv6-prefix}
        set type [ipv4-trusthost|ipv6-trusthost]
      next
    end
    set vdom <name1>, <name2>, ...
  next
end
```

config system api-user

Parameter	Description	Type	Size	Default
accprofile	Admin user access profile.	string	Maximum length: 35	
api-key	Admin user password.	password-2	Not Specified	
comments	Comment.	var-string	Maximum length: 255	
cors-allow-origin	Value for Access-Control-Allow-Origin on API responses. Avoid using '*' if possible.	string	Maximum length: 269	
name	User name.	string	Maximum length: 35	
peer-auth	Enable/disable peer authentication.	option	-	disable
	Option Description			
	<i>enable</i>	Enable peer.		
	<i>disable</i>	Disable peer.		
peer-group	Peer group name.	string	Maximum length: 35	
schedule	Schedule name.	string	Maximum length: 35	
vdom <name>	Virtual domains. Virtual domain name.	string	Maximum length: 79	

config trusthost

Parameter	Description	Type	Size	Default
id	ID.	integer	Minimum value: 0 Maximum value: 4294967295	0
ipv4-trusthost	IPv4 trusted host address.	ipv4-classnet	Not Specified	0.0.0.0 0.0.0.0
ipv6-trusthost	IPv6 trusted host address.	ipv6-prefix	Not Specified	::/0
type	Trusthost type.	option	-	ipv4-trusthost

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>ipv4-trusthost</i>	IPv4 trusthost.		
	<i>ipv6-trusthost</i>	IPv6 trusthost.		

config system arp-table

Configure ARP table.

```
config system arp-table
  Description: Configure ARP table.
  edit <id>
    set interface {string}
    set ip {ipv4-address}
    set mac {mac-address}
  next
end
```

config system arp-table

Parameter	Description	Type	Size	Default
id	Unique integer ID of the entry.	integer	Minimum value: 0 0 Maximum value: 4294967295	
interface	Interface name.	string	Maximum length: 15	
ip	IP address.	ipv4- address	Not Specified	0.0.0.0
mac	MAC address.	mac- address	Not Specified	00:00:00:00:00:00

config system automation-action

Action for automation stitches.

```
config system automation-action
  Description: Action for automation stitches.
  edit <name>
    set accprofile {string}
```



```

set action-type [email|fortiexplorer-notification|...]
set alicloud-access-key-id {string}
set alicloud-access-key-secret {password}
set alicloud-function-authorization [anonymous|function]
set aws-api-key {password}
set azure-api-key {password}
set azure-function-authorization [anonymous|function|...]
set description {var-string}
set email-from {var-string}
set email-subject {var-string}
set email-to <name1>, <name2>, ...
set execute-security-fabric [enable|disable]
set http-body {var-string}
config http-headers
    Description: Request headers.
    edit <id>
        set key {var-string}
        set value {var-string}
    next
end
set message {string}
set message-type [text|json]
set method [post|put|...]
set minimum-interval {integer}
set output-size {integer}
set port {integer}
set protocol [http|https]
set replacement-message [enable|disable]
set replacemsg-group {string}
set script {var-string}
set sdn-connector <name1>, <name2>, ...
set security-tag {string}
set system-action [reboot|shutdown|...]
set timeout {integer}
set tls-certificate {string}
set uri {var-string}
set verify-host-cert [enable|disable]
next
end

```

config system automation-action

Parameter	Description	Type	Size	Default
accprofile	Access profile for CLI script action to access FortiGate features.	string	Maximum length: 35	
action-type	Action type.	option	-	alert

Parameter	Description	Type	Size	Default																																						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>email</i></td><td>Send notification email.</td></tr><tr><td><i>fortiexplorer-notification</i></td><td>Send push notification to FortiExplorer.</td></tr><tr><td><i>alert</i></td><td>Generate FortiOS dashboard alert.</td></tr><tr><td><i>disable-ssid</i></td><td>Disable interface.</td></tr><tr><td><i>system-actions</i></td><td>Perform immediate system operations on this FortiGate unit.</td></tr><tr><td><i>quarantine</i></td><td>Quarantine host.</td></tr><tr><td><i>quarantine-forticlient</i></td><td>Quarantine FortiClient by EMS.</td></tr><tr><td><i>quarantine-nsx</i></td><td>Quarantine NSX instance.</td></tr><tr><td><i>quarantine-fortinac</i></td><td>Quarantine host by FortiNAC.</td></tr><tr><td><i>ban-ip</i></td><td>Ban IP address.</td></tr><tr><td><i>aws-lambda</i></td><td>Send log data to integrated AWS service.</td></tr><tr><td><i>azure-function</i></td><td>Send log data to an Azure function.</td></tr><tr><td><i>google-cloud-function</i></td><td>Send log data to a Google Cloud function.</td></tr><tr><td><i>alicloud-function</i></td><td>Send log data to an AliCloud function.</td></tr><tr><td><i>webhook</i></td><td>Send an HTTP request.</td></tr><tr><td><i>cli-script</i></td><td>Run CLI script.</td></tr><tr><td><i>slack-notification</i></td><td>Send a notification message to a Slack incoming webhook.</td></tr><tr><td><i>microsoft-teams-notification</i></td><td>Send a notification message to a Microsoft Teams incoming webhook.</td></tr></table>	Option	Description	<i>email</i>	Send notification email.	<i>fortiexplorer-notification</i>	Send push notification to FortiExplorer.	<i>alert</i>	Generate FortiOS dashboard alert.	<i>disable-ssid</i>	Disable interface.	<i>system-actions</i>	Perform immediate system operations on this FortiGate unit.	<i>quarantine</i>	Quarantine host.	<i>quarantine-forticlient</i>	Quarantine FortiClient by EMS.	<i>quarantine-nsx</i>	Quarantine NSX instance.	<i>quarantine-fortinac</i>	Quarantine host by FortiNAC.	<i>ban-ip</i>	Ban IP address.	<i>aws-lambda</i>	Send log data to integrated AWS service.	<i>azure-function</i>	Send log data to an Azure function.	<i>google-cloud-function</i>	Send log data to a Google Cloud function.	<i>alicloud-function</i>	Send log data to an AliCloud function.	<i>webhook</i>	Send an HTTP request.	<i>cli-script</i>	Run CLI script.	<i>slack-notification</i>	Send a notification message to a Slack incoming webhook.	<i>microsoft-teams-notification</i>	Send a notification message to a Microsoft Teams incoming webhook.			
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alicloud-access-key-id	AliCloud AccessKey ID.	string	Maximum length: 35																																							
alicloud-access-key-secret	AliCloud AccessKey secret.	password	Not Specified																																							

Parameter	Description	Type	Size	Default								
alicloud-function-authorization	AliCloud function authorization type.	option	-	anonymous								
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Option	Description											
<i>anonymous</i>	Anonymous authorization (No authorization required).											
<i>function</i>	Function authorization (Authorization required).											
aws-api-key	AWS API Gateway API key.	password	Not Specified									
azure-api-key	Azure function API key.	password	Not Specified									
azure-function-authorization	Azure function authorization level.	option	-	anonymous								
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<i>function</i>	Function authorization level (Function or Host Key required).											
<i>admin</i>	Admin authorization level (Master Host Key required).											
description	Description.	var-string	Maximum length: 255									
email-from	Email sender name.	var-string	Maximum length: 127									
email-subject	Email subject.	var-string	Maximum length: 511									
email-to <name>	Email addresses. Email address.	string	Maximum length: 255									
execute-security-fabric	Enable/disable execution of CLI script on all or only one FortiGate unit in the Security Fabric.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>CLI script executes on all FortiGate units in the Security Fabric.</td></tr><tr><td><i>disable</i></td><td>CLI script executes only on the FortiGate unit that the stitch is triggered.</td></tr></table>	Option	Description	<i>enable</i>	CLI script executes on all FortiGate units in the Security Fabric.	<i>disable</i>	CLI script executes only on the FortiGate unit that the stitch is triggered.					
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<i>disable</i>	CLI script executes only on the FortiGate unit that the stitch is triggered.											
http-body	Request body (if necessary). Should be serialized json string.	var-string	Maximum length: 4095									

Parameter	Description	Type	Size	Default												
message	Message content.	string	Maximum length: 4095	%%log%%												
message-type	Message type.	option	-	text												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>text</i></td><td>Plaintext.</td></tr><tr><td><i>json</i></td><td>Custom JSON.</td></tr></table>	Option	Description	<i>text</i>	Plaintext.	<i>json</i>	Custom JSON.									
Option	Description															
<i>text</i>	Plaintext.															
<i>json</i>	Custom JSON.															
method	Request method (POST, PUT, GET, PATCH or DELETE).	option	-	post												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>post</i></td><td>POST.</td></tr><tr><td><i>put</i></td><td>PUT.</td></tr><tr><td><i>get</i></td><td>GET.</td></tr><tr><td><i>patch</i></td><td>PATCH.</td></tr><tr><td><i>delete</i></td><td>DELETE.</td></tr></table>	Option	Description	<i>post</i>	POST.	<i>put</i>	PUT.	<i>get</i>	GET.	<i>patch</i>	PATCH.	<i>delete</i>	DELETE.			
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<i>patch</i>	PATCH.															
<i>delete</i>	DELETE.															
minimum-interval	Limit execution to no more than once in this interval (in seconds).	integer	Minimum value: 0 Maximum value: 2592000	0												
name	Name.	string	Maximum length: 64													
output-size	Number of megabytes to limit script output to (1 - 1024, default = 10).	integer	Minimum value: 1 Maximum value: 1024	10												
port	Protocol port.	integer	Minimum value: 1 Maximum value: 65535	0												
protocol	Request protocol.	option	-	http												
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Parameter	Description	Type	Size	Default								
replacement-message	Enable/disable replacement message.	option	-	disable								
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Option	Description											
<i>enable</i>	Enable replacement message.											
<i>disable</i>	Disable replacement message.											
replacemsg-group	Replacement message group.	string	Maximum length: 35									
script	CLI script.	var-string	Maximum length: 1023									
sdn-connector <name>	NSX SDN connector names. SDN connector name.	string	Maximum length: 79									
security-tag	NSX security tag.	string	Maximum length: 255									
system-action	System action type.	option	-									
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>reboot</i></td><td>Reboot this FortiGate unit.</td></tr><tr><td><i>shutdown</i></td><td>Shutdown this FortiGate unit.</td></tr><tr><td><i>backup-config</i></td><td>Backup current configuration to the disk revisions.</td></tr></table>	Option	Description	<i>reboot</i>	Reboot this FortiGate unit.	<i>shutdown</i>	Shutdown this FortiGate unit.	<i>backup-config</i>	Backup current configuration to the disk revisions.			
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<i>shutdown</i>	Shutdown this FortiGate unit.											
<i>backup-config</i>	Backup current configuration to the disk revisions.											
timeout	Maximum running time for this script in seconds (0 = no timeout).	integer	Minimum value: 0 Maximum value: 300	0								
tls-certificate	Custom TLS certificate for API request.	string	Maximum length: 35									
uri	Request API URI.	var-string	Maximum length: 1023									
verify-host-cert	Enable/disable verification of the remote host certificate.	option	-	enable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable verification of the remote host certificate.</td></tr><tr><td><i>disable</i></td><td>Disable verification of the remote host certificate.</td></tr></table>	Option	Description	<i>enable</i>	Enable verification of the remote host certificate.	<i>disable</i>	Disable verification of the remote host certificate.					
Option	Description											
<i>enable</i>	Enable verification of the remote host certificate.											
<i>disable</i>	Disable verification of the remote host certificate.											

config http-headers

Parameter	Description	Type	Size	Default
id	Entry ID.	integer	Minimum value: 0 Maximum value: 4294967295	0
key	Request header key.	var-string	Maximum length: 1023	
value	Request header value.	var-string	Maximum length: 4095	

config system automation-destination

Automation destinations.

```
config system automation-destination
  Description: Automation destinations.
  edit <name>
    set destination <name1>, <name2>, ...
    set ha-group-id {integer}
    set type [fortigate|ha-cluster]
  next
end
```

config system automation-destination

Parameter	Description	Type	Size	Default
destination <name>	Destinations. Destination.	string	Maximum length: 31	
ha-group-id	Cluster group ID set for this destination (default = 0).	integer	Minimum value: 0 Maximum value: 255	0
name	Name.	string	Maximum length: 35	
type	Destination type.	option	-	fortigate
		Option	Description	
		<i>fortigate</i>	FortiGate set as destination.	
		<i>ha-cluster</i>	HA cluster set as destination.	

config system automation-stitch

Automation stitches.

```
config system automation-stitch
  Description: Automation stitches.
  edit <name>
    config actions
      Description: Configure stitch actions.
      edit <id>
        set action {string}
        set delay {integer}
        set required [enable|disable]
      next
    end
    set description {var-string}
    set destination <name1>, <name2>, ...
    set status [enable|disable]
    set trigger {string}
  next
end
```

config system automation-stitch

Parameter	Description	Type	Size	Default						
description	Description.	var-string	Maximum length: 255							
destination <name>	Serial number/HA group-name of destination devices. Destination name.	string	Maximum length: 79							
name	Name.	string	Maximum length: 35							
status	Enable/disable this stitch.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable stitch.</td></tr><tr><td>disable</td><td>Disable stitch.</td></tr></table>				Option	Description	enable	Enable stitch.	disable	Disable stitch.
	Option	Description								
	enable	Enable stitch.								
disable	Disable stitch.									
trigger	Trigger name.	string	Maximum length: 35							

config actions

Parameter	Description	Type	Size	Default
action	Action name.	string	Maximum length: 64	
delay	Delay before execution (in seconds).	integer	Minimum value: 0 Maximum value: 3600	0
id	Entry ID.	integer	Minimum value: 0 Maximum value: 4294967295	0
required	Required in action chain.	option	-	disable
		Option	Description	
		enable	Required in action chain.	
		disable	Not required in action chain.	

config system automation-trigger

Trigger for automation stitches.

```
config system automation-trigger
  Description: Trigger for automation stitches.
  edit <name>
    set description {var-string}
    set event-type [ioc|event-log|...]
    set fabric-event-name {var-string}
    set fabric-event-severity {var-string}
    set faz-event-name {var-string}
    set faz-event-severity {var-string}
    set faz-event-tags {var-string}
    config fields
      Description: Customized trigger field settings.
      edit <id>
        set name {string}
        set value {var-string}
      next
    end
  set license-type [forticare-support|fortiguard-webfilter|...]
  set logid <id1>, <id2>, ...
  set report-type [posture|coverage|...]
  set serial {var-string}
  set trigger-datetime {datetime}
  set trigger-day {integer}
```



```

set trigger-frequency [hourly|daily|...]
set trigger-hour {integer}
set trigger-minute {integer}
set trigger-type [event-based|scheduled]
set trigger-weekday [sunday|monday|...]
set vdom <name1>, <name2>, ...
next
end

```

config system automation-trigger

Parameter	Description	Type	Size	Default																																		
description	Description.	var-string	Maximum length: 255																																			
event-type	Event type.	option	-	ioc																																		
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>ioc</td><td>Indicator of compromise detected.</td></tr><tr><td>event-log</td><td>Use log ID as trigger.</td></tr><tr><td>reboot</td><td>Device reboot.</td></tr><tr><td>low-memory</td><td>Conserve mode due to low memory.</td></tr><tr><td>high-cpu</td><td>High CPU usage.</td></tr><tr><td>license-near-expiry</td><td>License near expiration date.</td></tr><tr><td>local-cert-near-expiry</td><td>The local certificate near expiration date.</td></tr><tr><td>ha-failover</td><td>HA failover.</td></tr><tr><td>config-change</td><td>Configuration change.</td></tr><tr><td>security-rating-summary</td><td>Security rating summary.</td></tr><tr><td>virus-ips-db-updated</td><td>Virus and IPS database updated.</td></tr><tr><td>faz-event</td><td>FortiAnalyzer event.</td></tr><tr><td>incoming-webhook</td><td>Incoming webhook call.</td></tr><tr><td>fabric-event</td><td>Fabric connector event.</td></tr><tr><td>ips-logs</td><td>IPS logs.</td></tr><tr><td>anomaly-logs</td><td>Anomaly logs.</td></tr></table>				Option	Description	ioc	Indicator of compromise detected.	event-log	Use log ID as trigger.	reboot	Device reboot.	low-memory	Conserve mode due to low memory.	high-cpu	High CPU usage.	license-near-expiry	License near expiration date.	local-cert-near-expiry	The local certificate near expiration date.	ha-failover	HA failover.	config-change	Configuration change.	security-rating-summary	Security rating summary.	virus-ips-db-updated	Virus and IPS database updated.	faz-event	FortiAnalyzer event.	incoming-webhook	Incoming webhook call.	fabric-event	Fabric connector event.	ips-logs	IPS logs.	anomaly-logs	Anomaly logs.
	Option	Description																																				
	ioc	Indicator of compromise detected.																																				
	event-log	Use log ID as trigger.																																				
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	license-near-expiry	License near expiration date.																																				
	local-cert-near-expiry	The local certificate near expiration date.																																				
	ha-failover	HA failover.																																				
	config-change	Configuration change.																																				
	security-rating-summary	Security rating summary.																																				
	virus-ips-db-updated	Virus and IPS database updated.																																				
	faz-event	FortiAnalyzer event.																																				
	incoming-webhook	Incoming webhook call.																																				
	fabric-event	Fabric connector event.																																				
ips-logs	IPS logs.																																					
anomaly-logs	Anomaly logs.																																					

Parameter	Description	Type	Size	Default																		
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>virus-logs</i></td><td>Virus logs.</td></tr><tr><td><i>ssh-logs</i></td><td>SSH logs.</td></tr><tr><td><i>webfilter-violation</i></td><td>Webfilter violation.</td></tr><tr><td><i>traffic-violation</i></td><td>Traffic violation.</td></tr></table>	Option	Description	<i>virus-logs</i>	Virus logs.	<i>ssh-logs</i>	SSH logs.	<i>webfilter-violation</i>	Webfilter violation.	<i>traffic-violation</i>	Traffic violation.											
	Option	Description																				
	<i>virus-logs</i>	Virus logs.																				
	<i>ssh-logs</i>	SSH logs.																				
	<i>webfilter-violation</i>	Webfilter violation.																				
<i>traffic-violation</i>	Traffic violation.																					
fabric-event-name	Fabric connector event handler name.	var-string	Maximum length: 255																			
fabric-event-severity	Fabric connector event severity.	var-string	Maximum length: 255																			
faz-event-name	FortiAnalyzer event handler name.	var-string	Maximum length: 255																			
faz-event-severity	FortiAnalyzer event severity.	var-string	Maximum length: 255																			
faz-event-tags	FortiAnalyzer event tags.	var-string	Maximum length: 255																			
license-type	License type.	option	-	forticare-support																		
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>forticare-support</i></td><td>FortiCare support license.</td></tr><tr><td><i>fortiguard-webfilter</i></td><td>FortiGuard web filter license.</td></tr><tr><td><i>fortiguard-antispam</i></td><td>FortiGuard antispam license.</td></tr><tr><td><i>fortiguard-antivirus</i></td><td>FortiGuard AntiVirus license.</td></tr><tr><td><i>fortiguard-ips</i></td><td>FortiGuard IPS license.</td></tr><tr><td><i>fortiguard-management</i></td><td>FortiGuard management service license.</td></tr><tr><td><i>forticloud</i></td><td>FortiCloud license.</td></tr><tr><td><i>any</i></td><td>Any license.</td></tr></table>	Option	Description	<i>forticare-support</i>	FortiCare support license.	<i>fortiguard-webfilter</i>	FortiGuard web filter license.	<i>fortiguard-antispam</i>	FortiGuard antispam license.	<i>fortiguard-antivirus</i>	FortiGuard AntiVirus license.	<i>fortiguard-ips</i>	FortiGuard IPS license.	<i>fortiguard-management</i>	FortiGuard management service license.	<i>forticloud</i>	FortiCloud license.	<i>any</i>	Any license.			
	Option	Description																				
	<i>forticare-support</i>	FortiCare support license.																				
	<i>fortiguard-webfilter</i>	FortiGuard web filter license.																				
	<i>fortiguard-antispam</i>	FortiGuard antispam license.																				
	<i>fortiguard-antivirus</i>	FortiGuard AntiVirus license.																				
	<i>fortiguard-ips</i>	FortiGuard IPS license.																				
	<i>fortiguard-management</i>	FortiGuard management service license.																				
<i>forticloud</i>	FortiCloud license.																					
<i>any</i>	Any license.																					

Parameter	Description	Type	Size	Default												
logid <id>	Log IDs to trigger event. Log ID.	integer	Minimum value: 1 Maximum value: 65535													
name	Name.	string	Maximum length: 35													
report-type	Security Rating report.	option	-	posture												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>posture</i></td><td>Posture report.</td></tr><tr><td><i>coverage</i></td><td>Coverage report.</td></tr><tr><td><i>optimization</i></td><td>Optimization report</td></tr><tr><td><i>any</i></td><td>Any report.</td></tr></table>				Option	Description	<i>posture</i>	Posture report.	<i>coverage</i>	Coverage report.	<i>optimization</i>	Optimization report	<i>any</i>	Any report.		
Option	Description															
<i>posture</i>	Posture report.															
<i>coverage</i>	Coverage report.															
<i>optimization</i>	Optimization report															
<i>any</i>	Any report.															
serial	Fabric connector serial number.	var-string	Maximum length: 255													
trigger-datetime	Trigger date and time (YYYY-MM-DD HH:MM:SS).	datetime	Not Specified	0000-00-00 00:00:00												
trigger-day	Day within a month to trigger.	integer	Minimum value: 1 Maximum value: 31	1												
trigger-frequency	Scheduled trigger frequency (default = daily).	option	-	daily												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>hourly</i></td><td>Run hourly.</td></tr><tr><td><i>daily</i></td><td>Run daily.</td></tr><tr><td><i>weekly</i></td><td>Run weekly.</td></tr><tr><td><i>monthly</i></td><td>Run monthly.</td></tr><tr><td><i>once</i></td><td>Run once at specified date time.</td></tr></table>				Option	Description	<i>hourly</i>	Run hourly.	<i>daily</i>	Run daily.	<i>weekly</i>	Run weekly.	<i>monthly</i>	Run monthly.	<i>once</i>	Run once at specified date time.
Option	Description															
<i>hourly</i>	Run hourly.															
<i>daily</i>	Run daily.															
<i>weekly</i>	Run weekly.															
<i>monthly</i>	Run monthly.															
<i>once</i>	Run once at specified date time.															
trigger-hour	Hour of the day on which to trigger (0 - 23, default = 1).	integer	Minimum value: 0 Maximum value: 23	0												

Parameter	Description	Type	Size	Default																
trigger-minute	Minute of the hour on which to trigger (0 - 59, default = 0).	integer	Minimum value: 0 Maximum value: 59	0																
trigger-type	Trigger type.	option	-	event-based																
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>event-based</i></td><td>Event based trigger.</td></tr><tr><td><i>scheduled</i></td><td>Scheduled trigger.</td></tr></table>				Option	Description	<i>event-based</i>	Event based trigger.	<i>scheduled</i>	Scheduled trigger.										
	Option	Description																		
	<i>event-based</i>	Event based trigger.																		
<i>scheduled</i>	Scheduled trigger.																			
trigger-weekday	Day of week for trigger.	option	-																	
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>sunday</i></td><td>Sunday.</td></tr><tr><td><i>monday</i></td><td>Monday.</td></tr><tr><td><i>tuesday</i></td><td>Tuesday.</td></tr><tr><td><i>wednesday</i></td><td>Wednesday.</td></tr><tr><td><i>thursday</i></td><td>Thursday.</td></tr><tr><td><i>friday</i></td><td>Friday.</td></tr><tr><td><i>saturday</i></td><td>Saturday.</td></tr></table>				Option	Description	<i>sunday</i>	Sunday.	<i>monday</i>	Monday.	<i>tuesday</i>	Tuesday.	<i>wednesday</i>	Wednesday.	<i>thursday</i>	Thursday.	<i>friday</i>	Friday.	<i>saturday</i>	Saturday.
	Option	Description																		
	<i>sunday</i>	Sunday.																		
	<i>monday</i>	Monday.																		
	<i>tuesday</i>	Tuesday.																		
	<i>wednesday</i>	Wednesday.																		
	<i>thursday</i>	Thursday.																		
	<i>friday</i>	Friday.																		
<i>saturday</i>	Saturday.																			
vdom <name>	Virtual domain(s) that this trigger is valid for. Virtual domain name.	string	Maximum length: 79																	

config fields

Parameter	Description	Type	Size	Default
id	Entry ID.	integer	Minimum value: 0 Maximum value: 4294967295	0
name	Name.	string	Maximum length: 35	
value	Value.	var-string	Maximum length: 63	

config system autoupdate schedule

Configure update schedule.

```
config system autoupdate schedule
  Description: Configure update schedule.
  set day [Sunday|Monday|...]
  set frequency [every|daily|...]
  set status [enable|disable]
  set time {user}
end
```

config system autoupdate schedule

Parameter	Description	Type	Size	Default
day	Update day.	option	-	Monday
	Option	Description		
	<i>Sunday</i>	Update every Sunday.		
	<i>Monday</i>	Update every Monday.		
	<i>Tuesday</i>	Update every Tuesday.		
	<i>Wednesday</i>	Update every Wednesday.		
	<i>Thursday</i>	Update every Thursday.		
	<i>Friday</i>	Update every Friday.		
	<i>Saturday</i>	Update every Saturday.		
	frequency	Update frequency.	option	-
	Option	Description		
	<i>every</i>	Time interval.		
	<i>daily</i>	Every day.		
	<i>weekly</i>	Every week.		
	<i>automatic</i>	Update automatically within every one hour period.		
	status	Enable/disable scheduled updates.	option	-
	Option	Description		
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		

Parameter	Description	Type	Size	Default
time	Update time.	user	Not Specified	

config system autoupdate tunneling

Configure web proxy tunneling for the FDN.

```

config system autoupdate tunneling
    Description: Configure web proxy tunneling for the FDN.
    set address {string}
    set password {password}
    set port {integer}
    set status [enable|disable]
    set username {string}
end

```

config system autoupdate tunneling

Parameter	Description	Type	Size	Default
address	Web proxy IP address or FQDN.	string	Maximum length: 63	
password	Web proxy password.	password	Not Specified	
port	Web proxy port.	integer	Minimum value: 0 Maximum value: 65535	0
status	Enable/disable web proxy tunneling.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		
username	Web proxy username.	string	Maximum length: 49	

config system auto-install



This command is available for model(s): FortiGate 1000D, FortiGate 1000F, FortiGate 1001F, FortiGate 100EF, FortiGate 100E, FortiGate 100F, FortiGate 101F, FortiGate 1100E, FortiGate 1101E, FortiGate 140E-POE, FortiGate 140E, FortiGate 1500DT, FortiGate 1500D, FortiGate 1800F, FortiGate 1801F, FortiGate 2000E, FortiGate 200E, FortiGate 200F, FortiGate 201E, FortiGate 201F, FortiGate 2201E, FortiGate 2500E, FortiGate 2600F, FortiGate 2601F, FortiGate 3000D, FortiGate 3000F, FortiGate 3001F, FortiGate 300E, FortiGate 301E, FortiGate 3100D, FortiGate 3200D, FortiGate 3200F, FortiGate 3201F, FortiGate 3300E, FortiGate 3301E, FortiGate 3400E, FortiGate 3401E, FortiGate 3501F, FortiGate 3600E, FortiGate 3601E, FortiGate 3700D, FortiGate 3700F, FortiGate 3701F, FortiGate 3960E, FortiGate 3980E, FortiGate 400E Bypass, FortiGate 400E, FortiGate 400F, FortiGate 401E, FortiGate 401F, FortiGate 40F 3G4G, FortiGate 4200F, FortiGate 4201F, FortiGate 4400F, FortiGate 4401F, FortiGate 5001E1, FortiGate 5001E, FortiGate 500E, FortiGate 501E, FortiGate 600E, FortiGate 601E, FortiGate 60E-POE, FortiGate 60E, FortiGate 60F, FortiGate 61E, FortiGate 70F, FortiGate 71F, FortiGate 800D, FortiGate 80E-POE, FortiGate 80E, FortiGate 80F Bypass, FortiGate 80F DSL, FortiGate 80F-POE, FortiGate 80F, FortiGate 81E-POE, FortiGate 81E, FortiGate 81F-POE, FortiGate 81F, FortiGate 900D, FortiGate 90E, FortiGate 91E, FortiGate-VM64, FortiGateRugged 60F 3G4G, FortiGateRugged 60F, FortiGateRugged 70F 3G4G, FortiGateRugged 70F, FortiWiFi 40F 3G4G, FortiWiFi 40F, FortiWiFi 60E, FortiWiFi 60F, FortiWiFi 61E, FortiWiFi 61F, FortiWiFi 80F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G-POE, FortiWiFi 81F 2R-POE, FortiWiFi 81F 2R.

It is not available for: FortiGate-VM64 Aliyun, FortiGate-VM64 AWS, FortiGate-VM64 Azure, FortiGate-VM64 GCP, FortiGate-VM64 OPC.

Configure USB auto installation.

```
config system auto-install
  Description: Configure USB auto installation.
  set auto-install-config [enable|disable]
  set auto-install-image [enable|disable]
  set default-config-file {string}
  set default-image-file {string}
end
```

config system auto-install

Parameter	Description	Type	Size	Default
auto-install-config	Enable/disable auto install the config in USB disk. This option is disabled when unset, but enabled after a factory reset.	option	-	disable

Parameter	Description	Type	Size	Default						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable config.</td></tr><tr><td><i>disable</i></td><td>Disable config.</td></tr></table>	Option	Description	<i>enable</i>	Enable config.	<i>disable</i>	Disable config.			
	Option	Description								
	<i>enable</i>	Enable config.								
<i>disable</i>	Disable config.									
auto-install-image	Enable/disable auto install the image in USB disk. This option is disabled when unset, but enabled after a factory reset.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable config.</td></tr><tr><td><i>disable</i></td><td>Disable config.</td></tr></table>	Option	Description	<i>enable</i>	Enable config.	<i>disable</i>	Disable config.			
	Option	Description								
	<i>enable</i>	Enable config.								
<i>disable</i>	Disable config.									
default-config-file	Default config file name in USB disk.	string	Maximum length: 127	fgt_system.conf						
default-image-file	Default image file name in USB disk.	string	Maximum length: 127	image.out						

config system auto-scale



This command is available for model(s): FortiGate-VM64 Aliyun, FortiGate-VM64 AWS, FortiGate-VM64 Azure, FortiGate-VM64 GCP, FortiGate-VM64 OPC.

It is not available for: FortiGate 1000D, FortiGate 1000F, FortiGate 1001F, FortiGate 100EF, FortiGate 100E, FortiGate 100F, FortiGate 101F, FortiGate 1100E, FortiGate 1101E, FortiGate 140E-POE, FortiGate 140E, FortiGate 1500DT, FortiGate 1500D, FortiGate 1800F, FortiGate 1801F, FortiGate 2000E, FortiGate 200E, FortiGate 200F, FortiGate 201E, FortiGate 201F, FortiGate 2201E, FortiGate 2500E, FortiGate 2600F, FortiGate 2601F, FortiGate 3000D, FortiGate 3000F, FortiGate 3001F, FortiGate 300E, FortiGate 301E, FortiGate 3100D, FortiGate 3200D, FortiGate 3200F, FortiGate 3201F, FortiGate 3300E, FortiGate 3301E, FortiGate 3400E, FortiGate 3401E, FortiGate 3501F, FortiGate 3600E, FortiGate 3601E, FortiGate 3700D, FortiGate 3700F, FortiGate 3701F, FortiGate 3960E, FortiGate 3980E, FortiGate 400E Bypass, FortiGate 400E, FortiGate 400F, FortiGate 401E, FortiGate 401F, FortiGate 40F 3G4G, FortiGate 4200F, FortiGate 4201F, FortiGate 4400F, FortiGate 4401F, FortiGate 5001E1, FortiGate 5001E, FortiGate 500E, FortiGate 501E, FortiGate 600E, FortiGate 601E, FortiGate 60E-POE, FortiGate 60E, FortiGate 60F, FortiGate 61E, FortiGate 70F, FortiGate 71F, FortiGate 800D, FortiGate 80E-POE, FortiGate 80E, FortiGate 80F Bypass, FortiGate 80F DSL, FortiGate 80F-POE, FortiGate 80F, FortiGate 81E-POE, FortiGate 81E, FortiGate 81F-POE, FortiGate 81F, FortiGate 900D, FortiGate 90E, FortiGate 91E, FortiGate-VM64, FortiGateRugged 60F 3G4G, FortiGateRugged 60F, FortiGateRugged 70F 3G4G, FortiGateRugged 70F, FortiWiFi 40F 3G4G, FortiWiFi 40F, FortiWiFi 60E, FortiWiFi 60F, FortiWiFi 61E, FortiWiFi 61F, FortiWiFi 80F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G-POE, FortiWiFi 81F 2R-POE, FortiWiFi 81F 2R.

Configure system auto-scaling.

```
config system auto-scale
  Description: Configure system auto-scaling.
  set callback-url {var-string}
  set hb-interval {integer}
  set primary-ip {ipv4-address-any}
  set psksecret {password-3}
  set role [primary|secondary]
  set status [enable|disable]
  set sync-interface {string}
end
```

config system auto-scale

Parameter	Description	Type	Size	Default						
callback-url	Callback URL.	var-string	Maximum length: 4095							
hb-interval	Time between sending heartbeat packets (5 - 120 seconds). Increase to reduce false positives.	integer	Minimum value: 5 Maximum value: 120	10						
primary-ip	Primary IP address.	ipv4-address-any	Not Specified	0.0.0.0						
psksecret	Pre-shared secret for auto-scaling authentication (ASCII string or hexadecimal encoded with a leading 0x).	password-3	Not Specified							
role	Auto-scaling role.	option	-	secondary						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>primary</i></td><td>Primary in auto-scaling.</td></tr><tr><td><i>secondary</i></td><td>Secondary in auto-scaling.</td></tr></table>				Option	Description	<i>primary</i>	Primary in auto-scaling.	<i>secondary</i>	Secondary in auto-scaling.
Option	Description									
<i>primary</i>	Primary in auto-scaling.									
<i>secondary</i>	Secondary in auto-scaling.									
status	Auto-Scaling status.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable system auto-scaling</td></tr><tr><td><i>disable</i></td><td>Disable system auto-scaling.</td></tr></table>				Option	Description	<i>enable</i>	Enable system auto-scaling	<i>disable</i>	Disable system auto-scaling.
Option	Description									
<i>enable</i>	Enable system auto-scaling									
<i>disable</i>	Disable system auto-scaling.									
sync-interface	Interface used for synchronization.	string	Maximum length: 15							

config system auto-script

Configure auto script.

```
config system auto-script
  Description: Configure auto script.
  edit <name>
    set interval {integer}
    set output-size {integer}
    set repeat {integer}
    set script {var-string}
    set start [manual|auto]
    set timeout {integer}
  next
end
```

config system auto-script

Parameter	Description	Type	Size	Default
interval	Repeat interval in seconds.	integer	Minimum value: 0 Maximum value: 31557600	0
name	Auto script name.	string	Maximum length: 35	
output-size	Number of megabytes to limit script output to (10 - 1024, default = 10).	integer	Minimum value: 10 Maximum value: 1024	10
repeat	Number of times to repeat this script (0 = infinite).	integer	Minimum value: 0 Maximum value: 65535	1
script	List of FortiOS CLI commands to repeat.	var-string	Maximum length: 1023	
start	Script starting mode.	option	-	manual
	Option	Description		
	manual	Starting manually.		
	auto	Starting automatically.		

Parameter	Description	Type	Size	Default
timeout	Maximum running time for this script in seconds (0 = no timeout).	integer	Minimum value: 0 Maximum value: 300	0

config system bypass



This command is available for model(s): FortiGate 2500E, FortiGate 400E Bypass, FortiGate 800D, FortiGate 80F Bypass, FortiGateRugged 60F 3G4G, FortiGateRugged 60F, FortiGateRugged 70F 3G4G, FortiGateRugged 70F.

It is not available for: FortiGate 1000D, FortiGate 1000F, FortiGate 1001F, FortiGate 100EF, FortiGate 100E, FortiGate 100F, FortiGate 101F, FortiGate 1100E, FortiGate 1101E, FortiGate 140E-POE, FortiGate 140E, FortiGate 1500DT, FortiGate 1500D, FortiGate 1800F, FortiGate 1801F, FortiGate 2000E, FortiGate 200E, FortiGate 200F, FortiGate 201E, FortiGate 201F, FortiGate 2201E, FortiGate 2600F, FortiGate 2601F, FortiGate 3000D, FortiGate 3000F, FortiGate 3001F, FortiGate 300E, FortiGate 301E, FortiGate 3100D, FortiGate 3200D, FortiGate 3200F, FortiGate 3201F, FortiGate 3300E, FortiGate 3301E, FortiGate 3400E, FortiGate 3401E, FortiGate 3501F, FortiGate 3600E, FortiGate 3601E, FortiGate 3700D, FortiGate 3700F, FortiGate 3701F, FortiGate 3960E, FortiGate 3980E, FortiGate 400E, FortiGate 400F, FortiGate 401E, FortiGate 401F, FortiGate 40F 3G4G, FortiGate 4200F, FortiGate 4201F, FortiGate 4400F, FortiGate 4401F, FortiGate 5001E1, FortiGate 5001E, FortiGate 500E, FortiGate 501E, FortiGate 600E, FortiGate 601E, FortiGate 60E-POE, FortiGate 60E, FortiGate 60F, FortiGate 61E, FortiGate 70F, FortiGate 71F, FortiGate 80E-POE, FortiGate 80E, FortiGate 80F DSL, FortiGate 80F-POE, FortiGate 80F, FortiGate 81E-POE, FortiGate 81E, FortiGate 81F-POE, FortiGate 81F, FortiGate 900D, FortiGate 90E, FortiGate 91E, FortiGate-VM64 Aliyun, FortiGate-VM64 AWS, FortiGate-VM64 Azure, FortiGate-VM64 GCP, FortiGate-VM64 OPC, FortiGate-VM64, FortiWiFi 40F 3G4G, FortiWiFi 40F, FortiWiFi 60E, FortiWiFi 60F, FortiWiFi 61E, FortiWiFi 61F, FortiWiFi 80F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G-POE, FortiWiFi 81F 2R-POE, FortiWiFi 81F 2R.

Configure system bypass.

```
config system bypass
  Description: Configure system bypass.
  set auto-recover [enable|disable]
  set bypass-timeout [2|4|...]
  set bypass-watchdog [enable|disable]
  set poweroff-bypass [enable|disable]
end
```

config system bypass

Parameter	Description	Type	Size	Default																
auto-recover *	Automatically recover from bypass mode after system reboot.	option	-	enable																
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Recover interfaces from bypass mode. The actual mode is determined by poweron-bypass setting.</td></tr><tr><td>disable</td><td>Keep interfaces in bypass mode if bypass was previously triggered.</td></tr></table>	Option	Description	enable	Recover interfaces from bypass mode. The actual mode is determined by poweron-bypass setting.	disable	Keep interfaces in bypass mode if bypass was previously triggered.													
Option	Description																			
enable	Recover interfaces from bypass mode. The actual mode is determined by poweron-bypass setting.																			
disable	Keep interfaces in bypass mode if bypass was previously triggered.																			
bypass-timeout *	timeout setting for bypass watchdog	option	-	10																
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>2</td><td>2 second</td></tr><tr><td>4</td><td>4 second</td></tr><tr><td>6</td><td>6 second</td></tr><tr><td>8</td><td>8 second</td></tr><tr><td>10</td><td>10 second</td></tr><tr><td>12</td><td>12 second</td></tr><tr><td>14</td><td>14 second</td></tr></table>	Option	Description	2	2 second	4	4 second	6	6 second	8	8 second	10	10 second	12	12 second	14	14 second			
Option	Description																			
2	2 second																			
4	4 second																			
6	6 second																			
8	8 second																			
10	10 second																			
12	12 second																			
14	14 second																			
bypass-watchdog	watchdog to bypass interfaces in case of software/hardware failure	option	-	disable																
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable watchdog for bypass interfaces.</td></tr><tr><td>disable</td><td>Disable watchdog for bypass interfaces.</td></tr></table>	Option	Description	enable	Enable watchdog for bypass interfaces.	disable	Disable watchdog for bypass interfaces.													
Option	Description																			
enable	Enable watchdog for bypass interfaces.																			
disable	Disable watchdog for bypass interfaces.																			
poweroff-bypass *	set interface bypass state in power off	option	-	disable																
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable bypass when power off.</td></tr><tr><td>disable</td><td>Disable bypass when power off.</td></tr></table>	Option	Description	enable	Enable bypass when power off.	disable	Disable bypass when power off.													
Option	Description																			
enable	Enable bypass when power off.																			
disable	Disable bypass when power off.																			

* This parameter may not exist in some models.

config system central-management

Configure central management.

```
config system central-management
  Description: Configure central management.
  set allow-monitor [enable|disable]
  set allow-push-configuration [enable|disable]
  set allow-push-firmware [enable|disable]
  set allow-remote-firmware-upgrade [enable|disable]
  set allow-remote-lte-firmware-upgrade [enable|disable]
  set ca-cert {user}
  set enc-algorithm [default|high|...]
  set fmg {user}
  set fmg-source-ip {ipv4-address}
  set fmg-source-ip6 {ipv6-address}
  set fmg-update-port [8890|443]
  set fortigate-cloud-sso-default-profile {string}
  set include-default-servers [enable|disable]
  set interface {string}
  set interface-select-method [auto|sdwan|...]
  set local-cert {string}
  set ltefw-upgrade-frequency [everyHour|every12hour|...]
  set ltefw-upgrade-time {string}
  set mode [normal|backup]
  set schedule-config-restore [enable|disable]
  set schedule-script-restore [enable|disable]
  set serial-number {user}
  config server-list
    Description: Additional servers that the FortiGate can use for updates (for AV, IPS,
updates) and ratings (for web filter and antispam ratings) servers.
    edit <id>
      set addr-type [ipv4|ipv6|...]
      set fqdn {string}
      set server-address {ipv4-address}
      set server-address6 {ipv6-address}
      set server-type {option1}, {option2}, ...
    next
  end
  set type [fortimanager|fortiguard|...]
  set use-elbc-vdom [enable|disable]
  set vdom {string}
end
```

config system central-management

Parameter	Description	Type	Size	Default
allow-monitor	Enable/disable allowing the central management server to remotely monitor this FortiGate unit.	option	-	enable

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>enable</i>	Enable remote monitoring of device.		
	<i>disable</i>	Disable remote monitoring of device.		
allow-push-configuration	Enable/disable allowing the central management server to push configuration changes to this FortiGate.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable push configuration.		
	<i>disable</i>	Disable push configuration.		
allow-push-firmware	Enable/disable allowing the central management server to push firmware updates to this FortiGate.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable push firmware.		
	<i>disable</i>	Disable push firmware.		
allow-remote-firmware-upgrade	Enable/disable remotely upgrading the firmware on this FortiGate from the central management server.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable remote firmware upgrade.		
	<i>disable</i>	Disable remote firmware upgrade.		
allow-remote-lte-firmware-upgrade *	Enable/disable remotely upgrading the lte firmware on this FortiGate from the central management server.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable remote lte firmware upgrade.		
	<i>disable</i>	Disable remote lte firmware upgrade.		
ca-cert	CA certificate to be used by FGFM protocol.	user	Not Specified	
enc-algorithm	Encryption strength for communications between the FortiGate and central management.	option	-	high

Parameter	Description	Type	Size	Default
	Option	Description		
	default	High strength algorithms and medium-strength 128-bit key length algorithms.		
	high	128-bit and larger key length algorithms.		
	low	64-bit or 56-bit key length algorithms without export restrictions.		
fmg	IP address or FQDN of the FortiManager.	user	Not Specified	
fmg-source-ip	IPv4 source address that this FortiGate uses when communicating with FortiManager.	ipv4-address	Not Specified	0.0.0.0
fmg-source-ip6	IPv6 source address that this FortiGate uses when communicating with FortiManager.	ipv6-address	Not Specified	::
fmg-update-port	Port used to communicate with FortiManager that is acting as a FortiGuard update server.	option	-	8890
	Option	Description		
	8890	Use port 8890 to communicate with FortiManager that is acting as a FortiGuard update server.		
	443	Use port 443 to communicate with FortiManager that is acting as a FortiGuard update server.		
fortigate-cloud-sso-default-profile	Override access profile.	string	Maximum length: 35	
include-default-servers	Enable/disable inclusion of public FortiGuard servers in the override server list.	option	-	enable
	Option	Description		
	enable	Enable inclusion of public FortiGuard servers in the override server list.		
	disable	Disable inclusion of public FortiGuard servers in the override server list.		
interface	Specify outgoing interface to reach server.	string	Maximum length: 15	
interface-select-method	Specify how to select outgoing interface to reach server.	option	-	auto
	Option	Description		
	auto	Set outgoing interface automatically.		

Parameter	Description	Type	Size	Default										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>sdwan</i></td><td>Set outgoing interface by SD-WAN or policy routing rules.</td></tr><tr><td><i>specify</i></td><td>Set outgoing interface manually.</td></tr></table>	Option	Description	<i>sdwan</i>	Set outgoing interface by SD-WAN or policy routing rules.	<i>specify</i>	Set outgoing interface manually.							
	Option	Description												
	<i>sdwan</i>	Set outgoing interface by SD-WAN or policy routing rules.												
<i>specify</i>	Set outgoing interface manually.													
local-cert	Certificate to be used by FGFM protocol.	string	Maximum length: 35											
ltefw-upgrade-frequency *	Set LTE firmware auto pushdown frequency.	option	-											
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>everyHour</i></td><td>Auto check and pushdown LTE firmware every hour</td></tr><tr><td><i>every12hour</i></td><td>Auto check and pushdown LTE firmware every 12 hours</td></tr><tr><td><i>everyDay</i></td><td>Auto check and pushdown LTE firmware every day</td></tr><tr><td><i>everyWeek</i></td><td>Auto check and pushdown LTE firmware every week</td></tr></table>	Option	Description	<i>everyHour</i>	Auto check and pushdown LTE firmware every hour	<i>every12hour</i>	Auto check and pushdown LTE firmware every 12 hours	<i>everyDay</i>	Auto check and pushdown LTE firmware every day	<i>everyWeek</i>	Auto check and pushdown LTE firmware every week			
	Option	Description												
	<i>everyHour</i>	Auto check and pushdown LTE firmware every hour												
	<i>every12hour</i>	Auto check and pushdown LTE firmware every 12 hours												
	<i>everyDay</i>	Auto check and pushdown LTE firmware every day												
<i>everyWeek</i>	Auto check and pushdown LTE firmware every week													
ltefw-upgrade-time *	Schedule next LTE firmware upgrade time (Local Time). Format: YYYY-MM-DD HH:MM:SS	string	Maximum length: 35											
mode	Central management mode.	option	-	normal										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>normal</i></td><td>Manage and configure this FortiGate from FortiManager.</td></tr><tr><td><i>backup</i></td><td>Manage and configure this FortiGate locally and back up its configuration to FortiManager.</td></tr></table>	Option	Description	<i>normal</i>	Manage and configure this FortiGate from FortiManager.	<i>backup</i>	Manage and configure this FortiGate locally and back up its configuration to FortiManager.							
	Option	Description												
	<i>normal</i>	Manage and configure this FortiGate from FortiManager.												
<i>backup</i>	Manage and configure this FortiGate locally and back up its configuration to FortiManager.													
schedule-config-restore	Enable/disable allowing the central management server to restore the configuration of this FortiGate.	option	-	enable										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable scheduled configuration restore.</td></tr><tr><td><i>disable</i></td><td>Disable scheduled configuration restore.</td></tr></table>	Option	Description	<i>enable</i>	Enable scheduled configuration restore.	<i>disable</i>	Disable scheduled configuration restore.							
	Option	Description												
	<i>enable</i>	Enable scheduled configuration restore.												
<i>disable</i>	Disable scheduled configuration restore.													
schedule-script-restore	Enable/disable allowing the central management server to restore the scripts stored on this FortiGate.	option	-	enable										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable scheduled script restore.</td></tr><tr><td><i>disable</i></td><td>Disable scheduled script restore.</td></tr></table>	Option	Description	<i>enable</i>	Enable scheduled script restore.	<i>disable</i>	Disable scheduled script restore.							
	Option	Description												
	<i>enable</i>	Enable scheduled script restore.												
<i>disable</i>	Disable scheduled script restore.													

Parameter	Description	Type	Size	Default
serial-number	Serial number.	user	Not Specified	
type	Central management type.	option	-	none
	Option		Description	
	fortimanager	FortiManager.		
	fortiguard	Central management of this FortiGate using FortiCloud.		
	none	No central management.		
use-elbc-vdom *	Enable/disable use of special ELBC config sync VDOM to connect to FortiManager.	option	-	disable
	Option		Description	
	enable	enable		
	disable	disable		
vdom	Virtual domain (VDOM) name to use when communicating with FortiManager.	string	Maximum length: 31	root

* This parameter may not exist in some models.

config server-list

Parameter	Description	Type	Size	Default								
addr-type	Indicate whether the FortiGate communicates with the override server using an IPv4 address, an IPv6 address or a FQDN.	option	-	ipv4								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>ipv4</td><td>IPv4 address.</td></tr><tr><td>ipv6</td><td>IPv6 address.</td></tr><tr><td>fqdn</td><td>FQDN.</td></tr></table>				Option	Description	ipv4	IPv4 address.	ipv6	IPv6 address.	fqdn	FQDN.
	Option	Description										
	ipv4	IPv4 address.										
	ipv6	IPv6 address.										
fqdn	FQDN.											
fqdn	FQDN address of override server.	string	Maximum length: 255									
id	ID.	integer	Minimum value: 0 Maximum value: 4294967295	0								
server-address	IPv4 address of override server.	ipv4-address	Not Specified	0.0.0.0								

Parameter	Description	Type	Size	Default										
server-address6	IPv6 address of override server.	ipv6-address	Not Specified	::										
server-type	FortiGuard service type.	option	-											
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>update</i></td><td>AV, IPS, and AV-query update server.</td></tr><tr><td><i>rating</i></td><td>Web filter and anti-spam rating server.</td></tr><tr><td><i>iot-query</i></td><td>IoT query server.</td></tr><tr><td><i>iot-collect</i></td><td>IoT device collection server.</td></tr></table>				Option	Description	<i>update</i>	AV, IPS, and AV-query update server.	<i>rating</i>	Web filter and anti-spam rating server.	<i>iot-query</i>	IoT query server.	<i>iot-collect</i>	IoT device collection server.
Option	Description													
<i>update</i>	AV, IPS, and AV-query update server.													
<i>rating</i>	Web filter and anti-spam rating server.													
<i>iot-query</i>	IoT query server.													
<i>iot-collect</i>	IoT device collection server.													

config system console

Configure console.

```
config system console
  Description: Configure console.
  set fortixplorer [enable|disable]
  set login [enable|disable]
  set mode [batch|line]
  set output [standard|more]
end
```

config system console

Parameter	Description	Type	Size	Default						
fortiexplorer *	Enable/disable access for FortiExplorer.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable FortiExplorer access.</td></tr><tr><td><i>disable</i></td><td>Disable FortiExplorer access.</td></tr></table>	Option	Description	<i>enable</i>	Enable FortiExplorer access.	<i>disable</i>	Disable FortiExplorer access.			
Option	Description									
<i>enable</i>	Enable FortiExplorer access.									
<i>disable</i>	Disable FortiExplorer access.									
login	Enable/disable serial console and FortiExplorer.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Console login enable.</td></tr><tr><td><i>disable</i></td><td>Console login disable.</td></tr></table>	Option	Description	<i>enable</i>	Console login enable.	<i>disable</i>	Console login disable.			
Option	Description									
<i>enable</i>	Console login enable.									
<i>disable</i>	Console login disable.									
mode	Console mode.	option	-	line						

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>batch</i>	Batch mode.		
	<i>line</i>	Line mode.		
output	Console output mode.	option	-	more
	Option	Description		
	<i>standard</i>	Standard output.		
	<i>more</i>	More page output.		

* This parameter may not exist in some models.

config system csf

Add this FortiGate to a Security Fabric or set up a new Security Fabric on this FortiGate.

```

config system csf
    Description: Add this FortiGate to a Security Fabric or set up a new Security Fabric on this
    FortiGate.
    set accept-auth-by-cert [disable|enable]
    set authorization-request-type [serial|certificate]
    set certificate {string}
    set configuration-sync [default|local]
    set downstream-access [enable|disable]
    set downstream-acprofile {string}
    config fabric-connector
        Description: Fabric connector configuration.
        edit <serial>
            set accprofile {string}
            set configuration-write-access [enable|disable]
        next
    end
    set fabric-object-unification [default|local]
    set fabric-workers {integer}
    set file-mgmt [enable|disable]
    set file-quota {integer}
    set file-quota-warning {integer}
    set forticloud-account-enforcement [enable|disable]
    set group-name {string}
    set group-password {password}
    set legacy-authentication [disable|enable]
    set log-unification [disable|enable]
    set saml-configuration-sync [default|local]
    set source-ip {ipv4-address}
    set status [enable|disable]

```

```

config trusted-list
  Description: Pre-authorized and blocked security fabric nodes.
  edit <name>
    set action [accept|deny]
    set authorization-type [serial|certificate]
    set certificate {var-string}
    set downstream-authorization [enable|disable]
    set ha-members {string}
    set index {integer}
    set serial {string}
  next
end
set upstream {string}
set upstream-interface {string}
set upstream-interface-select-method [auto|sdwan|...]
set upstream-port {integer}
end

```

config system csf

Parameter	Description	Type	Size	Default
accept-auth-by-cert	Accept connections with unknown certificates and ask admin for approval.	option	-	enable
	Option	Description		
	disable	Do not accept SSL connections with unknown certificates.		
	enable	Accept SSL connections without automatic certificate verification.		
authorization-request-type	Authorization request type.	option	-	serial
	Option	Description		
	serial	Request verification by serial number.		
	certificate	Request verification by certificate.		
certificate	Certificate.	string	Maximum length: 35	
configuration-sync	Configuration sync mode.	option	-	default
	Option	Description		
	default	Synchronize configuration for IPAM, FortiAnalyzer, FortiSandbox, and Central Management to root node.		
	local	Do not synchronize configuration with root node.		

Parameter	Description	Type	Size	Default						
downstream-access	Enable/disable downstream device access to this device's configuration and data.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable downstream device access to this device's configuration and data.</td></tr><tr><td><i>disable</i></td><td>Disable downstream device access to this device's configuration and data.</td></tr></table>	Option	Description	<i>enable</i>	Enable downstream device access to this device's configuration and data.	<i>disable</i>	Disable downstream device access to this device's configuration and data.			
	Option	Description								
	<i>enable</i>	Enable downstream device access to this device's configuration and data.								
<i>disable</i>	Disable downstream device access to this device's configuration and data.									
downstream-accprofile	Default access profile for requests from downstream devices.	string	Maximum length: 35							
fabric-object-unification	Fabric CMDB Object Unification.	option	-	default						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>default</i></td><td>Global CMDB objects will be synchronized in Security Fabric.</td></tr><tr><td><i>local</i></td><td>Global CMDB objects will not be synchronized to and from this device.</td></tr></table>	Option	Description	<i>default</i>	Global CMDB objects will be synchronized in Security Fabric.	<i>local</i>	Global CMDB objects will not be synchronized to and from this device.			
	Option	Description								
	<i>default</i>	Global CMDB objects will be synchronized in Security Fabric.								
<i>local</i>	Global CMDB objects will not be synchronized to and from this device.									
fabric-workers	Number of worker processes for Security Fabric daemon.	integer	Minimum value: 2 1 Maximum value: 4							
file-mgmt	Enable/disable Security Fabric daemon file management.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable daemon file management.</td></tr><tr><td><i>disable</i></td><td>Disable daemon file management.</td></tr></table>	Option	Description	<i>enable</i>	Enable daemon file management.	<i>disable</i>	Disable daemon file management.			
	Option	Description								
	<i>enable</i>	Enable daemon file management.								
<i>disable</i>	Disable daemon file management.									
file-quota	Maximum amount of memory that can be used by the daemon files (in bytes).	integer	Minimum value: 0 Maximum value: 4294967295	268435456						
file-quota-warning	Warn when the set percentage of quota has been used.	integer	Minimum value: 1 Maximum value: 99	90						
forticloud-account-enforcement	Fabric FortiCloud account unification.	option	-	enable						

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>enable</i>	Enable FortiCloud account ID matching for Security Fabric.		
	<i>disable</i>	Disable FortiCloud account ID matching for Security Fabric.		
group-name	Security Fabric group name. All FortiGates in a Security Fabric must have the same group name.	string	Maximum length: 35	
group-password	Security Fabric group password. All FortiGates in a Security Fabric must have the same group password.	password	Not Specified	
legacy-authentication	Enable/disable legacy authentication.	option	-	disable
	Option	Description		
	<i>disable</i>	Do not accept legacy authentication requests.		
	<i>enable</i>	Accept legacy authentication requests.		
log-unification	Enable/disable broadcast of discovery messages for log unification.	option	-	enable
	Option	Description		
	<i>disable</i>	Disable broadcast of discovery messages for log unification.		
	<i>enable</i>	Enable broadcast of discovery messages for log unification.		
saml-configuration-sync	SAML setting configuration synchronization.	option	-	default
	Option	Description		
	<i>default</i>	SAML setting for fabric members is created by fabric root.		
	<i>local</i>	Do not apply SAML configuration generated by root.		
source-ip	Source IP address for communication with the upstream FortiGate.	ipv4-address	Not Specified	0.0.0.0
status	Enable/disable Security Fabric.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable Security Fabric.		
	<i>disable</i>	Disable Security Fabric.		

Parameter	Description	Type	Size	Default
upstream	IP/FQDN of the FortiGate upstream from this FortiGate in the Security Fabric.	string	Maximum length: 255	
upstream-interface	Specify outgoing interface to reach server.	string	Maximum length: 15	
upstream-interface-select-method	Specify how to select outgoing interface to reach server.	option	-	auto
	Option		Description	
	<i>auto</i>		Set outgoing interface automatically.	
	<i>sdwan</i>		Set outgoing interface by SD-WAN or policy routing rules.	
	<i>specify</i>		Set outgoing interface manually.	
upstream-port	The port number to use to communicate with the FortiGate upstream from this FortiGate in the Security Fabric (default = 8013).	integer	Minimum value: 1 Maximum value: 65535	8013

config fabric-connector

Parameter	Description	Type	Size	Default
accprofile	Override access profile.	string	Maximum length: 35	
configuration-write-access	Enable/disable downstream device write access to configuration.	option	-	disable
	Option		Description	
	<i>enable</i>		Enable downstream device write access to configuration.	
	<i>disable</i>		Disable downstream device write access to configuration.	
serial	Serial.	string	Maximum length: 19	

config trusted-list

Parameter	Description	Type	Size	Default
action	Security fabric authorization action.	option	-	accept

Parameter	Description	Type	Size	Default						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>accept</i></td><td>Accept authorization request.</td></tr><tr><td><i>deny</i></td><td>Deny authorization request.</td></tr></table>	Option	Description	<i>accept</i>	Accept authorization request.	<i>deny</i>	Deny authorization request.			
	Option	Description								
	<i>accept</i>	Accept authorization request.								
<i>deny</i>	Deny authorization request.									
authorization-type	Authorization type.	option	-	serial						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>serial</i></td><td>Verify downstream by serial number.</td></tr><tr><td><i>certificate</i></td><td>Verify downstream by certificate.</td></tr></table>	Option	Description	<i>serial</i>	Verify downstream by serial number.	<i>certificate</i>	Verify downstream by certificate.			
	Option	Description								
	<i>serial</i>	Verify downstream by serial number.								
<i>certificate</i>	Verify downstream by certificate.									
certificate	Certificate.	var-string	Maximum length: 32767							
downstream-authorization	Trust authorizations by this node's administrator.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable downstream authorization.</td></tr><tr><td><i>disable</i></td><td>Disable downstream authorization.</td></tr></table>	Option	Description	<i>enable</i>	Enable downstream authorization.	<i>disable</i>	Disable downstream authorization.			
	Option	Description								
	<i>enable</i>	Enable downstream authorization.								
<i>disable</i>	Disable downstream authorization.									
ha-members	HA members.	string	Maximum length: 19							
index	Index of the downstream in tree.	integer	Minimum value: 1 Maximum value: 1024	0						
name	Name.	string	Maximum length: 35							
serial	Serial.	string	Maximum length: 19							

config system custom-language

Configure custom languages.

```

config system custom-language
  Description: Configure custom languages.
  edit <name>
    set comments {var-string}
    set filename {string}

```



```
next
end
```

config system custom-language

Parameter	Description	Type	Size	Default
comments	Comment.	var-string	Maximum length: 255	
filename	Custom language file path.	string	Maximum length: 63	
name	Name.	string	Maximum length: 35	

config system ddns

Configure DDNS.

```
config system ddns
  Description: Configure DDNS.
  edit <ddnsid>
    set addr-type [ipv4|ipv6]
    set bound-ip {string}
    set clear-text [disable|enable]
    set ddns-auth [disable|tsig]
    set ddns-domain {string}
    set ddns-key {password_aes256}
    set ddns-keyname {string}
    set ddns-password {password}
    set ddns-server [dyndns.org|dyns.net|...]
    set ddns-server-addr <addr1>, <addr2>, ...
    set ddns-sn {string}
    set ddns-ttl {integer}
    set ddns-username {string}
    set ddns-zone {string}
    set monitor-interface <interface-name1>, <interface-name2>, ...
    set server-type [ipv4|ipv6]
    set ssl-certificate {string}
    set update-interval {integer}
    set use-public-ip [disable|enable]
  next
end
```

config system ddns

Parameter	Description	Type	Size	Default								
addr-type	Address type of interface address in DDNS update.	option	-	ipv4								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>ipv4</td><td>Use IPv4 address of the interface.</td></tr><tr><td>ipv6</td><td>Use IPv6 address of the interface.</td></tr></table>	Option	Description	ipv4	Use IPv4 address of the interface.	ipv6	Use IPv6 address of the interface.					
Option	Description											
ipv4	Use IPv4 address of the interface.											
ipv6	Use IPv6 address of the interface.											
bound-ip	Bound IP address. Read-only.	string	Maximum length: 46									
clear-text	Enable/disable use of clear text connections.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Disable use of clear text connections.</td></tr><tr><td>enable</td><td>Enable use of clear text connections.</td></tr></table>	Option	Description	disable	Disable use of clear text connections.	enable	Enable use of clear text connections.					
Option	Description											
disable	Disable use of clear text connections.											
enable	Enable use of clear text connections.											
ddns-auth	Enable/disable TSIG authentication for your DDNS server.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Disable DDNS authentication.</td></tr><tr><td>tsig</td><td>Enable TSIG authentication based on RFC2845.</td></tr></table>	Option	Description	disable	Disable DDNS authentication.	tsig	Enable TSIG authentication based on RFC2845.					
Option	Description											
disable	Disable DDNS authentication.											
tsig	Enable TSIG authentication based on RFC2845.											
ddns-domain	Your fully qualified domain name. For example, yourname.ddns.com.	string	Maximum length: 64									
ddns-key	DDNS update key (base 64 encoding).	password_aes256	Not Specified									
ddns-keyname	DDNS update key name.	string	Maximum length: 64									
ddns-password	DDNS password.	password	Not Specified									
ddns-server	Select a DDNS service provider.	option	-									
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>dyndns.org</td><td>members.dyndns.org and dnsalias.com</td></tr><tr><td>dyns.net</td><td>www.dyns.net</td></tr><tr><td>tzo.com</td><td>rh.tzo.com</td></tr></table>	Option	Description	dyndns.org	members.dyndns.org and dnsalias.com	dyns.net	www.dyns.net	tzo.com	rh.tzo.com			
Option	Description											
dyndns.org	members.dyndns.org and dnsalias.com											
dyns.net	www.dyns.net											
tzo.com	rh.tzo.com											

Parameter	Description	Type	Size	Default																		
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>vavic.com</td><td>Peanut Hull</td></tr><tr><td>dipdns.net</td><td>dipdnsserver.dipdns.com</td></tr><tr><td>now.net.cn</td><td>ip.todayisp.com</td></tr><tr><td>dhs.org</td><td>members.dhs.org</td></tr><tr><td>easydns.com</td><td>members.easydns.com</td></tr><tr><td>genericDDNS</td><td>Generic DDNS based on RFC2136.</td></tr><tr><td>FortiGuardDDNS</td><td>FortiGuard DDNS service.</td></tr><tr><td>noip.com</td><td>dynupdate.no-ip.com</td></tr></table>	Option	Description	vavic.com	Peanut Hull	dipdns.net	dipdnsserver.dipdns.com	now.net.cn	ip.todayisp.com	dhs.org	members.dhs.org	easydns.com	members.easydns.com	genericDDNS	Generic DDNS based on RFC2136.	FortiGuardDDNS	FortiGuard DDNS service.	noip.com	dynupdate.no-ip.com			
	Option	Description																				
	vavic.com	Peanut Hull																				
	dipdns.net	dipdnsserver.dipdns.com																				
	now.net.cn	ip.todayisp.com																				
	dhs.org	members.dhs.org																				
	easydns.com	members.easydns.com																				
	genericDDNS	Generic DDNS based on RFC2136.																				
	FortiGuardDDNS	FortiGuard DDNS service.																				
noip.com	dynupdate.no-ip.com																					
ddns-server-addr <addr>	Generic DDNS server IP/FQDN list. IP address or FQDN of the server.	string	Maximum length: 256																			
ddns-sn	DDNS Serial Number.	string	Maximum length: 64																			
ddns-ttl	Time-to-live for DDNS packets.	integer	Minimum value: 300 60 Maximum value: 86400																			
ddns-username	DDNS user name.	string	Maximum length: 64																			
ddns-zone	Zone of your domain name (for example, DDNS.com).	string	Maximum length: 64																			
ddnsid	DDNS ID.	integer	Minimum value: 0 0 Maximum value: 4294967295																			
monitor-interface <interface-name>	Monitored interface. Interface name.	string	Maximum length: 79																			
server-type	Address type of the DDNS server.	option	-	ipv4																		
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>ipv4</td><td>Use IPv4 addressing.</td></tr><tr><td>ipv6</td><td>Use IPv6 addressing.</td></tr></table>	Option	Description	ipv4	Use IPv4 addressing.	ipv6	Use IPv6 addressing.															
	Option	Description																				
	ipv4	Use IPv4 addressing.																				
ipv6	Use IPv6 addressing.																					
ssl-certificate	Name of local certificate for SSL connections.	string	Maximum length: 35	Fortinet_Factory																		

Parameter	Description	Type	Size	Default
update-interval	DDNS update interval (60 - 2592000 sec, 0 means default).	integer	Minimum value: 60 Maximum value: 2592000	0
use-public-ip	Enable/disable use of public IP address.	option	-	disable
	Option	Description		
	<i>disable</i>	Disable use of public IP address.		
	<i>enable</i>	Enable use of public IP address.		

config system dedicated-mgmt

Configure dedicated management.

```
config system dedicated-mgmt
  Description: Configure dedicated management.
  set default-gateway {ipv4-address}
  set dhcp-end-ip {ipv4-address}
  set dhcp-netmask {ipv4-netmask}
  set dhcp-server [enable|disable]
  set dhcp-start-ip {ipv4-address}
  set interface {string}
  set status [enable|disable]
end
```

config system dedicated-mgmt

Parameter	Description	Type	Size	Default
default-gateway	Default gateway for dedicated management interface.	ipv4-address	Not Specified	0.0.0.0
dhcp-end-ip	DHCP end IP for dedicated management.	ipv4-address	Not Specified	0.0.0.0
dhcp-netmask	DHCP netmask.	ipv4-netmask	Not Specified	0.0.0.0
dhcp-server	Enable/disable DHCP server on management interface.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable DHCP server on management port.		

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>disable</i>	Disable DHCP server on management port.		
dhcp-start-ip	DHCP start IP for dedicated management.	ipv4-address	Not Specified	0.0.0.0
interface	Dedicated management interface.	string	Maximum length: 15	
status	Enable/disable dedicated management.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		

config system device-upgrade

Independent upgrades for managed devices.

```

config system device-upgrade
  Description: Independent upgrades for managed devices.
  edit <serial>
    set device-type [fortiswitch|fortiap|...]
    set failure-reason [none|internal|...]
    set maximum-minutes {integer}
    set setup-time {user}
    set status [disabled|initialized|...]
    set time {user}
    set timing [immediate|scheduled]
    set upgrade-path {user}
  next
end

```

config system device-upgrade

Parameter	Description	Type	Size	Default
device-type	Fortinet device type.	option	-	fortiswitch
	Option	Description		
	<i>fortiswitch</i>	This device is a FortiSwitch.		
	<i>fortiap</i>	This device is a FortiAP.		

Parameter	Description	Type	Size	Default																																
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>fortiextender</i></td><td>This device is a FortiExtender.</td></tr></table>		Option	Description	<i>fortiextender</i>	This device is a FortiExtender.																														
	Option	Description																																		
<i>fortiextender</i>	This device is a FortiExtender.																																			
failure-reason	Upgrade failure reason.	option	-	none																																
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>none</i></td><td>No failure.</td></tr><tr><td><i>internal</i></td><td>An internal error occurred.</td></tr><tr><td><i>timeout</i></td><td>The upgrade timed out.</td></tr><tr><td><i>device-type-unsupported</i></td><td>The device type was not supported by the FortiGate.</td></tr><tr><td><i>download-failed</i></td><td>The image could not be downloaded.</td></tr><tr><td><i>device-missing</i></td><td>The device was disconnected from the FortiGate.</td></tr><tr><td><i>version-unavailable</i></td><td>An image matching the device and version could not be found.</td></tr><tr><td><i>staging-failed</i></td><td>The image could not be pushed to the device.</td></tr><tr><td><i>reboot-failed</i></td><td>The device could not be rebooted.</td></tr><tr><td><i>device-not-reconnected</i></td><td>The device did not reconnect after rebooting.</td></tr><tr><td><i>node-not-ready</i></td><td>A device in the Security Fabric tree was not ready.</td></tr><tr><td><i>no-final-confirmation</i></td><td>The coordinating FortiGate did not confirm the upgrade.</td></tr><tr><td><i>no-confirmation-query</i></td><td>A downstream FortiGate did not initiate final confirmation.</td></tr><tr><td><i>config-error-log-nonempty</i></td><td>Configuration errors encountered during the upgrade.</td></tr><tr><td><i>node-failed</i></td><td>A device in the Security Fabric tree failed.</td></tr></table>		Option	Description	<i>none</i>	No failure.	<i>internal</i>	An internal error occurred.	<i>timeout</i>	The upgrade timed out.	<i>device-type-unsupported</i>	The device type was not supported by the FortiGate.	<i>download-failed</i>	The image could not be downloaded.	<i>device-missing</i>	The device was disconnected from the FortiGate.	<i>version-unavailable</i>	An image matching the device and version could not be found.	<i>staging-failed</i>	The image could not be pushed to the device.	<i>reboot-failed</i>	The device could not be rebooted.	<i>device-not-reconnected</i>	The device did not reconnect after rebooting.	<i>node-not-ready</i>	A device in the Security Fabric tree was not ready.	<i>no-final-confirmation</i>	The coordinating FortiGate did not confirm the upgrade.	<i>no-confirmation-query</i>	A downstream FortiGate did not initiate final confirmation.	<i>config-error-log-nonempty</i>	Configuration errors encountered during the upgrade.	<i>node-failed</i>	A device in the Security Fabric tree failed.		
	Option	Description																																		
	<i>none</i>	No failure.																																		
	<i>internal</i>	An internal error occurred.																																		
	<i>timeout</i>	The upgrade timed out.																																		
	<i>device-type-unsupported</i>	The device type was not supported by the FortiGate.																																		
	<i>download-failed</i>	The image could not be downloaded.																																		
	<i>device-missing</i>	The device was disconnected from the FortiGate.																																		
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<i>config-error-log-nonempty</i>	Configuration errors encountered during the upgrade.																																			
<i>node-failed</i>	A device in the Security Fabric tree failed.																																			
maximum-minutes	Maximum number of minutes to allow for immediate upgrade preparation.	integer	Minimum value: 5 Maximum value: 10080	15																																

Parameter	Description	Type	Size	Default
serial	Serial number of the node to include.	string	Maximum length: 79	
setup-time	Upgrade preparation start time in UTC (hh:mm yyyy/mm/dd UTC).	user	Not Specified	
status	Current status of the upgrade.	option	-	disabled
	Option	Description		
	<i>disabled</i>	No federated upgrade has been configured.		
	<i>initialized</i>	The upgrade has been configured.		
	<i>downloading</i>	The image is downloading in preparation for the upgrade.		
	<i>device-disconnected</i>	The image downloads are complete, but one or more devices have disconnected.		
	<i>ready</i>	The image download finished and the upgrade is pending.		
	<i>coordinating</i>	The upgrade is coordinating with other running upgrades.		
	<i>staging</i>	The upgrade is confirmed and images are being staged.		
	<i>final-check</i>	The upgrade is ready and final checks are in progress.		
	<i>upgrade-devices</i>	The upgrade is ready and devices are being rebooted.		
	<i>cancelled</i>	The upgrade was cancelled due to the tree not being ready.		
	<i>confirmed</i>	The upgrade was confirmed and reboots are running.		
	<i>done</i>	The upgrade completed successfully.		
<i>failed</i>	The upgrade failed due to a local issue.			
time	Scheduled upgrade execution time in UTC (hh:mm yyyy/mm/dd UTC).	user	Not Specified	
timing	Run immediately or at a scheduled time.	option	-	immediate
	Option	Description		
	<i>immediate</i>	Begin the upgrade immediately.		
	<i>scheduled</i>	Begin the upgrade at a configured time.		
upgrade-path	Fortinet OS image versions to upgrade through in major-minor-patch format, such as 7-0-4.	user	Not Specified	

config system dhcp server

Configure DHCP servers.

```

config system dhcp server
    Description: Configure DHCP servers.
    edit <id>
        set auto-configuration [disable|enable]
        set auto-managed-status [disable|enable]
        set conflicted-ip-timeout {integer}
        set ddns-auth [disable|tsig]
        set ddns-key {password_aes256}
        set ddns-keyname {string}
        set ddns-server-ip {ipv4-address}
        set ddns-ttl {integer}
        set ddns-update [disable|enable]
        set ddns-update-override [disable|enable]
        set ddns-zone {string}
        set default-gateway {ipv4-address}
        set dhcp-settings-from-fortipam [disable|enable]
        set dns-server1 {ipv4-address}
        set dns-server2 {ipv4-address}
        set dns-server3 {ipv4-address}
        set dns-server4 {ipv4-address}
        set dns-service [local|default|...]
        set domain {string}
    config exclude-range
        Description: Exclude one or more ranges of IP addresses from being assigned to
clients.
        edit <id>
            set end-ip {ipv4-address}
            set lease-time {integer}
            set start-ip {ipv4-address}
            set uci-match [disable|enable]
            set uci-string <uci-string1>, <uci-string2>, ...
            set vci-match [disable|enable]
            set vci-string <vci-string1>, <vci-string2>, ...
        next
    end
    set filename {string}
    set forticlient-on-net-status [disable|enable]
    set interface {string}
    set ip-mode [range|usrgrp]
    config ip-range
        Description: DHCP IP range configuration.
        edit <id>
            set end-ip {ipv4-address}
            set lease-time {integer}
            set start-ip {ipv4-address}
            set uci-match [disable|enable]
            set uci-string <uci-string1>, <uci-string2>, ...
            set vci-match [disable|enable]
            set vci-string <vci-string1>, <vci-string2>, ...
        next
    end
    set ipsec-lease-hold {integer}

```



```

set lease-time {integer}
set mac-acl-default-action [assign|block]
set netmask {ipv4-netmask}
set next-server {ipv4-address}
set ntp-server1 {ipv4-address}
set ntp-server2 {ipv4-address}
set ntp-server3 {ipv4-address}
set ntp-service [local|default|...]
config options
    Description: DHCP options.
    edit <id>
        set code {integer}
        set ip {user}
        set type [hex|string|...]
        set uci-match [disable|enable]
        set uci-string <uci-string1>, <uci-string2>, ...
        set value {string}
        set vci-match [disable|enable]
        set vci-string <vci-string1>, <vci-string2>, ...
    next
end
config reserved-address
    Description: Options for the DHCP server to assign IP settings to specific MAC
addresses.
    edit <id>
        set action [assign|block|...]
        set circuit-id {string}
        set circuit-id-type [hex|string]
        set description {var-string}
        set ip {ipv4-address}
        set mac {mac-address}
        set remote-id {string}
        set remote-id-type [hex|string]
        set type [mac|option82]
    next
end
set server-type [regular|ipsec]
set status [disable|enable]
set tftp-server <tftp-server1>, <tftp-server2>, ...
set timezone [01|02|...]
set timezone-option [disable|default|...]
set vci-match [disable|enable]
set vci-string <vci-string1>, <vci-string2>, ...
set wifi-ac-service [specify|local]
set wifi-ac1 {ipv4-address}
set wifi-ac2 {ipv4-address}
set wifi-ac3 {ipv4-address}
set wins-server1 {ipv4-address}
set wins-server2 {ipv4-address}
next
end

```

config system dhcp server

Parameter	Description	Type	Size	Default						
auto-configuration	Enable/disable auto configuration.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Disable auto configuration.</td></tr><tr><td>enable</td><td>Enable auto configuration.</td></tr></table>	Option	Description	disable	Disable auto configuration.	enable	Enable auto configuration.			
Option	Description									
disable	Disable auto configuration.									
enable	Enable auto configuration.									
auto-managed-status	Enable/disable use of this DHCP server once this interface has been assigned an IP address from FortiIPAM.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Disable use of this DHCP server once this interface has been assigned an IP address from FortiIPAM.</td></tr><tr><td>enable</td><td>Enable use of this DHCP server once this interface has been assigned an IP address from FortiIPAM.</td></tr></table>	Option	Description	disable	Disable use of this DHCP server once this interface has been assigned an IP address from FortiIPAM.	enable	Enable use of this DHCP server once this interface has been assigned an IP address from FortiIPAM.			
Option	Description									
disable	Disable use of this DHCP server once this interface has been assigned an IP address from FortiIPAM.									
enable	Enable use of this DHCP server once this interface has been assigned an IP address from FortiIPAM.									
conflicted-ip-timeout	Time in seconds to wait after a conflicted IP address is removed from the DHCP range before it can be reused.	integer	Minimum value: 60 Maximum value: 8640000	1800						
ddns-auth	DDNS authentication mode.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Disable DDNS authentication.</td></tr><tr><td>tsig</td><td>TSIG based on RFC2845.</td></tr></table>	Option	Description	disable	Disable DDNS authentication.	tsig	TSIG based on RFC2845.			
Option	Description									
disable	Disable DDNS authentication.									
tsig	TSIG based on RFC2845.									
ddns-key	DDNS update key (base 64 encoding).	password_aes256	Not Specified							
ddns-keyname	DDNS update key name.	string	Maximum length: 64							
ddns-server-ip	DDNS server IP.	ipv4-address	Not Specified	0.0.0.0						
ddns-ttl	TTL.	integer	Minimum value: 60 Maximum value: 86400	300						
ddns-update	Enable/disable DDNS update for DHCP.	option	-	disable						

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>disable</i>	Disable DDNS update for DHCP.		
	<i>enable</i>	Enable DDNS update for DHCP.		
ddns-update-override	Enable/disable DDNS update override for DHCP.	option	-	disable
	Option	Description		
	<i>disable</i>	Disable DDNS update override for DHCP.		
	<i>enable</i>	Enable DDNS update override for DHCP.		
ddns-zone	Zone of your domain name (ex. DDNS.com).	string	Maximum length: 64	
default-gateway	Default gateway IP address assigned by the DHCP server.	ipv4-address	Not Specified	0.0.0.0
dhcp-settings-from-fortipam	Enable/disable populating of DHCP server settings from FortiPAM.	option	-	disable
	Option	Description		
	<i>disable</i>	Disable populating of DHCP server settings from FortiPAM.		
	<i>enable</i>	Enable populating of DHCP server settings from FortiPAM.		
dns-server1	DNS server 1.	ipv4-address	Not Specified	0.0.0.0
dns-server2	DNS server 2.	ipv4-address	Not Specified	0.0.0.0
dns-server3	DNS server 3.	ipv4-address	Not Specified	0.0.0.0
dns-server4	DNS server 4.	ipv4-address	Not Specified	0.0.0.0
dns-service	Options for assigning DNS servers to DHCP clients.	option	-	specify
	Option	Description		
	<i>local</i>	IP address of the interface the DHCP server is added to becomes the client's DNS server IP address.		
	<i>default</i>	Clients are assigned the FortiGate's configured DNS servers.		
	<i>specify</i>	Specify up to 3 DNS servers in the DHCP server configuration.		

Parameter	Description	Type	Size	Default						
domain	Domain name suffix for the IP addresses that the DHCP server assigns to clients.	string	Maximum length: 35							
filename	Name of the boot file on the TFTP server.	string	Maximum length: 127							
forticlient-on-net-status	Enable/disable FortiClient-On-Net service for this DHCP server.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Disable FortiClient On-Net Status.</td></tr><tr><td>enable</td><td>Enable FortiClient On-Net Status.</td></tr></table>				Option	Description	disable	Disable FortiClient On-Net Status.	enable	Enable FortiClient On-Net Status.
Option	Description									
disable	Disable FortiClient On-Net Status.									
enable	Enable FortiClient On-Net Status.									
id	ID.	integer	Minimum value: 0 0 Maximum value: 4294967295							
interface	DHCP server can assign IP configurations to clients connected to this interface.	string	Maximum length: 15							
ip-mode	Method used to assign client IP.	option	-	range						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>range</td><td>Use range defined by start-ip/end-ip to assign client IP.</td></tr><tr><td>usrgrp</td><td>Use user-group defined method to assign client IP.</td></tr></table>				Option	Description	range	Use range defined by start-ip/end-ip to assign client IP.	usrgrp	Use user-group defined method to assign client IP.
Option	Description									
range	Use range defined by start-ip/end-ip to assign client IP.									
usrgrp	Use user-group defined method to assign client IP.									
ipsec-lease-hold	DHCP over IPsec leases expire this many seconds after tunnel down (0 to disable forced-expiry).	integer	Minimum value: 60 0 Maximum value: 8640000							
lease-time	Lease time in seconds, 0 means unlimited.	integer	Minimum value: 300 300 Maximum value: 8640000							
mac-acl-default-action	MAC access control default action (allow or block assigning IP settings).	option	-	assign						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>assign</td><td>Allow the DHCP server to assign IP settings to clients on the MAC access control list.</td></tr><tr><td>block</td><td>Block the DHCP server from assigning IP settings to clients on the MAC access control list.</td></tr></table>				Option	Description	assign	Allow the DHCP server to assign IP settings to clients on the MAC access control list.	block	Block the DHCP server from assigning IP settings to clients on the MAC access control list.
Option	Description									
assign	Allow the DHCP server to assign IP settings to clients on the MAC access control list.									
block	Block the DHCP server from assigning IP settings to clients on the MAC access control list.									

Parameter	Description	Type	Size	Default								
netmask	Netmask assigned by the DHCP server.	ipv4-netmask	Not Specified	0.0.0.0								
next-server	IP address of a server (for example, a TFTP sever) that DHCP clients can download a boot file from.	ipv4-address	Not Specified	0.0.0.0								
ntp-server1	NTP server 1.	ipv4-address	Not Specified	0.0.0.0								
ntp-server2	NTP server 2.	ipv4-address	Not Specified	0.0.0.0								
ntp-server3	NTP server 3.	ipv4-address	Not Specified	0.0.0.0								
ntp-service	Options for assigning Network Time Protocol (NTP) servers to DHCP clients.	option	-	specify								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>local</td><td>IP address of the interface the DHCP server is added to becomes the client's NTP server IP address.</td></tr><tr><td>default</td><td>Clients are assigned the FortiGate's configured NTP servers.</td></tr><tr><td>specify</td><td>Specify up to 3 NTP servers in the DHCP server configuration.</td></tr></table>				Option	Description	local	IP address of the interface the DHCP server is added to becomes the client's NTP server IP address.	default	Clients are assigned the FortiGate's configured NTP servers.	specify	Specify up to 3 NTP servers in the DHCP server configuration.
Option	Description											
local	IP address of the interface the DHCP server is added to becomes the client's NTP server IP address.											
default	Clients are assigned the FortiGate's configured NTP servers.											
specify	Specify up to 3 NTP servers in the DHCP server configuration.											
server-type	DHCP server can be a normal DHCP server or an IPsec DHCP server.	option	-	regular								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>regular</td><td>Regular DHCP service.</td></tr><tr><td>ipsec</td><td>DHCP over IPsec service.</td></tr></table>				Option	Description	regular	Regular DHCP service.	ipsec	DHCP over IPsec service.		
Option	Description											
regular	Regular DHCP service.											
ipsec	DHCP over IPsec service.											
status	Enable/disable this DHCP configuration.	option	-	enable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Do not use this DHCP server configuration.</td></tr><tr><td>enable</td><td>Use this DHCP server configuration.</td></tr></table>				Option	Description	disable	Do not use this DHCP server configuration.	enable	Use this DHCP server configuration.		
Option	Description											
disable	Do not use this DHCP server configuration.											
enable	Use this DHCP server configuration.											
tftp-server <tftp-server>	One or more hostnames or IP addresses of the TFTP servers in quotes separated by spaces. TFTP server.	string	Maximum length: 63									
timezone	Select the time zone to be assigned to DHCP clients.	option	-	00								

Parameter	Description	Type	Size	Default
	Option	Description		
	01	(GMT-11:00) Midway Island, Samoa		
	02	(GMT-10:00) Hawaii		
	03	(GMT-9:00) Alaska		
	04	(GMT-8:00) Pacific Time (US & Canada)		
	05	(GMT-7:00) Arizona		
	81	(GMT-7:00) Baja California Sur, Chihuahua		
	06	(GMT-7:00) Mountain Time (US & Canada)		
	07	(GMT-6:00) Central America		
	08	(GMT-6:00) Central Time (US & Canada)		
	09	(GMT-6:00) Mexico City		
	10	(GMT-6:00) Saskatchewan		
	11	(GMT-5:00) Bogota, Lima, Quito		
	12	(GMT-5:00) Eastern Time (US & Canada)		
	13	(GMT-5:00) Indiana (East)		
	74	(GMT-4:00) Caracas		
	14	(GMT-4:00) Atlantic Time (Canada)		
	77	(GMT-4:00) Georgetown		
	15	(GMT-4:00) La Paz		
	87	(GMT-4:00) Paraguay		
	16	(GMT-3:00) Santiago		
	17	(GMT-3:30) Newfoundland		
	18	(GMT-3:00) Brasília		
	19	(GMT-3:00) Buenos Aires		
	20	(GMT-3:00) Nuuk (Greenland)		
	75	(GMT-3:00) Uruguay		
	21	(GMT-2:00) Mid-Atlantic		
	22	(GMT-1:00) Azores		
	23	(GMT-1:00) Cape Verde Is.		
	24	(GMT) Monrovia		

Parameter	Description	Type	Size	Default

Option	Description
80	(GMT) Greenwich Mean Time
79	(GMT) Casablanca
25	(GMT) Dublin, Edinburgh, Lisbon, London, Canary Is.
26	(GMT+1:00) Amsterdam, Berlin, Bern, Rome, Stockholm, Vienna
27	(GMT+1:00) Belgrade, Bratislava, Budapest, Ljubljana, Prague
28	(GMT+1:00) Brussels, Copenhagen, Madrid, Paris
78	(GMT+1:00) Namibia
29	(GMT+1:00) Sarajevo, Skopje, Warsaw, Zagreb
30	(GMT+1:00) West Central Africa
31	(GMT+2:00) Kyiv, Athens, Sofia, Vilnius
32	(GMT+2:00) Bucharest
33	(GMT+2:00) Cairo
34	(GMT+2:00) Harare, Pretoria
35	(GMT+2:00) Helsinki, Riga, Tallinn
36	(GMT+2:00) Jerusalem
37	(GMT+3:00) Baghdad
38	(GMT+3:00) Kuwait, Riyadh
83	(GMT+3:00) Moscow
84	(GMT+3:00) Minsk
40	(GMT+3:00) Nairobi
85	(GMT+3:00) Istanbul
39	(GMT+3:00) St. Petersburg, Volgograd
41	(GMT+3:30) Tehran
42	(GMT+4:00) Abu Dhabi, Muscat
43	(GMT+4:00) Baku
44	(GMT+4:30) Kabul
45	(GMT+5:00) Ekaterinburg
46	(GMT+5:00) Islamabad, Karachi, Tashkent
47	(GMT+5:30) Kolkata, Chennai, Mumbai, New Delhi

Parameter	Description	Type	Size	Default
	Option	Description		
	51	(GMT+5:30) Sri Jayawardenepara		
	48	(GMT+5:45) Kathmandu		
	49	(GMT+5:00) Almaty, Astana		
	50	(GMT+6:00) Dhaka		
	52	(GMT+6:30) Rangoon		
	53	(GMT+7:00) Bangkok, Hanoi, Jakarta, Novosibirsk		
	54	(GMT+7:00) Krasnoyarsk		
	55	(GMT+8:00) Beijing, ChongQing, HongKong, Urumgi, Irkutsk		
	56	(GMT+8:00) Ulaan Bataar		
	57	(GMT+8:00) Kuala Lumpur, Singapore		
	58	(GMT+8:00) Perth		
	59	(GMT+8:00) Taipei		
	60	(GMT+9:00) Osaka, Sapporo, Tokyo, Seoul		
	61	(GMT+9:00) Yakutsk		
	62	(GMT+9:30) Adelaide		
	63	(GMT+9:30) Darwin		
	64	(GMT+10:00) Brisbane		
	65	(GMT+10:00) Canberra, Melbourne, Sydney		
	66	(GMT+10:00) Guam, Port Moresby		
	67	(GMT+10:00) Hobart		
	68	(GMT+10:00) Vladivostok		
	69	(GMT+10:00) Magadan		
	70	(GMT+11:00) Solomon Is., New Caledonia		
	71	(GMT+12:00) Auckland, Wellington		
	72	(GMT+12:00) Fiji, Kamchatka, Marshall Is.		
	00	(GMT+12:00) Eniwetok, Kwajalein		
	82	(GMT+12:45) Chatham Islands		
	73	(GMT+13:00) Nuku'alofa		
	86	(GMT+13:00) Samoa		

Parameter	Description	Type	Size	Default								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>76</td><td>(GMT+14:00) Kiritimati</td></tr></table>	Option	Description	76	(GMT+14:00) Kiritimati							
Option	Description											
76	(GMT+14:00) Kiritimati											
timezone-option	Options for the DHCP server to set the client's time zone.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Do not set the client's time zone.</td></tr><tr><td>default</td><td>Clients are assigned the FortiGate's configured time zone.</td></tr><tr><td>specify</td><td>Specify the time zone to be assigned to DHCP clients.</td></tr></table>	Option	Description	disable	Do not set the client's time zone.	default	Clients are assigned the FortiGate's configured time zone.	specify	Specify the time zone to be assigned to DHCP clients.			
Option	Description											
disable	Do not set the client's time zone.											
default	Clients are assigned the FortiGate's configured time zone.											
specify	Specify the time zone to be assigned to DHCP clients.											
vci-match	Enable/disable vendor class identifier (VCI) matching. When enabled only DHCP requests with a matching VCI are served.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Disable VCI matching.</td></tr><tr><td>enable</td><td>Enable VCI matching.</td></tr></table>	Option	Description	disable	Disable VCI matching.	enable	Enable VCI matching.					
Option	Description											
disable	Disable VCI matching.											
enable	Enable VCI matching.											
vci-string <vci-string>	One or more VCI strings in quotes separated by spaces. VCI strings.	string	Maximum length: 255									
wifi-ac-service	Options for assigning WiFi access controllers to DHCP clients.	option	-	specify								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>specify</td><td>Specify up to 3 WiFi Access Controllers in the DHCP server configuration.</td></tr><tr><td>local</td><td>IP address of the interface the DHCP server is added to becomes the client's WiFi Access Controller IP address.</td></tr></table>	Option	Description	specify	Specify up to 3 WiFi Access Controllers in the DHCP server configuration.	local	IP address of the interface the DHCP server is added to becomes the client's WiFi Access Controller IP address.					
Option	Description											
specify	Specify up to 3 WiFi Access Controllers in the DHCP server configuration.											
local	IP address of the interface the DHCP server is added to becomes the client's WiFi Access Controller IP address.											
wifi-ac1	WiFi Access Controller 1 IP address (DHCP option 138, RFC 5417).	ipv4-address	Not Specified	0.0.0.0								
wifi-ac2	WiFi Access Controller 2 IP address (DHCP option 138, RFC 5417).	ipv4-address	Not Specified	0.0.0.0								
wifi-ac3	WiFi Access Controller 3 IP address (DHCP option 138, RFC 5417).	ipv4-address	Not Specified	0.0.0.0								
wins-server1	WINS server 1.	ipv4-address	Not Specified	0.0.0.0								
wins-server2	WINS server 2.	ipv4-address	Not Specified	0.0.0.0								

config exclude-range

Parameter	Description	Type	Size	Default
end-ip	End of IP range.	ipv4-address	Not Specified	0.0.0.0
id	ID.	integer	Minimum value: 0 Maximum value: 4294967295	0
lease-time	Lease time in seconds, 0 means default lease time.	integer	Minimum value: 300 Maximum value: 8640000	0
start-ip	Start of IP range.	ipv4-address	Not Specified	0.0.0.0
uci-match	Enable/disable user class identifier (UCI) matching. When enabled only DHCP requests with a matching UCI are served with this range.	option	-	disable
	Option		Description	
	<i>disable</i>		Disable UCI matching.	
	<i>enable</i>		Enable UCI matching.	
uci-string <uci-string>	One or more UCI strings in quotes separated by spaces. UCI strings.	string	Maximum length: 255	
vci-match	Enable/disable vendor class identifier (VCI) matching. When enabled only DHCP requests with a matching VCI are served with this range.	option	-	disable
	Option		Description	
	<i>disable</i>		Disable VCI matching.	
	<i>enable</i>		Enable VCI matching.	
vci-string <vci-string>	One or more VCI strings in quotes separated by spaces. VCI strings.	string	Maximum length: 255	

config ip-range

Parameter	Description	Type	Size	Default
end-ip	End of IP range.	ipv4-address	Not Specified	0.0.0.0
id	ID.	integer	Minimum value: 0 Maximum value: 4294967295	0
lease-time	Lease time in seconds, 0 means default lease time.	integer	Minimum value: 300 Maximum value: 8640000	0
start-ip	Start of IP range.	ipv4-address	Not Specified	0.0.0.0
uci-match	Enable/disable user class identifier (UCI) matching. When enabled only DHCP requests with a matching UCI are served with this range.	option	-	disable
	Option		Description	
	<i>disable</i>		Disable UCI matching.	
	<i>enable</i>		Enable UCI matching.	
uci-string <uci-string>	One or more UCI strings in quotes separated by spaces. UCI strings.	string	Maximum length: 255	
vci-match	Enable/disable vendor class identifier (VCI) matching. When enabled only DHCP requests with a matching VCI are served with this range.	option	-	disable
	Option		Description	
	<i>disable</i>		Disable VCI matching.	
	<i>enable</i>		Enable VCI matching.	
vci-string <vci-string>	One or more VCI strings in quotes separated by spaces. VCI strings.	string	Maximum length: 255	

config options

Parameter	Description	Type	Size	Default										
code	DHCP option code.	integer	Minimum value: 0 Maximum value: 255	0										
id	ID.	integer	Minimum value: 0 Maximum value: 4294967295	0										
ip	DHCP option IPs.	user	Not Specified											
type	DHCP option type.	option	-	hex										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>hex</td><td>DHCP option in hex.</td></tr><tr><td>string</td><td>DHCP option in string.</td></tr><tr><td>ip</td><td>DHCP option in IP.</td></tr><tr><td>fqdn</td><td>DHCP option in domain search option format.</td></tr></table>	Option	Description	hex	DHCP option in hex.	string	DHCP option in string.	ip	DHCP option in IP.	fqdn	DHCP option in domain search option format.			
Option	Description													
hex	DHCP option in hex.													
string	DHCP option in string.													
ip	DHCP option in IP.													
fqdn	DHCP option in domain search option format.													
uci-match	Enable/disable user class identifier (UCI) matching. When enabled only DHCP requests with a matching UCI are served with this option.	option	-	disable										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Disable UCI matching.</td></tr><tr><td>enable</td><td>Enable UCI matching.</td></tr></table>	Option	Description	disable	Disable UCI matching.	enable	Enable UCI matching.							
Option	Description													
disable	Disable UCI matching.													
enable	Enable UCI matching.													
uci-string <uci-string>	One or more UCI strings in quotes separated by spaces. UCI strings.	string	Maximum length: 255											
value	DHCP option value.	string	Maximum length: 312											
vci-match	Enable/disable vendor class identifier (VCI) matching. When enabled only DHCP requests with a matching VCI are served with this option.	option	-	disable										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Disable VCI matching.</td></tr><tr><td>enable</td><td>Enable VCI matching.</td></tr></table>	Option	Description	disable	Disable VCI matching.	enable	Enable VCI matching.							
Option	Description													
disable	Disable VCI matching.													
enable	Enable VCI matching.													
vci-string <vci-string>	One or more VCI strings in quotes separated by spaces. VCI strings.	string	Maximum length: 255											

config reserved-address

Parameter	Description	Type	Size	Default								
action	Options for the DHCP server to configure the client with the reserved MAC address.	option	-	reserved								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>assign</td><td>Configure the client with this MAC address like any other client.</td></tr><tr><td>block</td><td>Block the DHCP server from assigning IP settings to the client with this MAC address.</td></tr><tr><td>reserved</td><td>Assign the reserved IP address to the client with this MAC address.</td></tr></table>	Option	Description	assign	Configure the client with this MAC address like any other client.	block	Block the DHCP server from assigning IP settings to the client with this MAC address.	reserved	Assign the reserved IP address to the client with this MAC address.			
Option	Description											
assign	Configure the client with this MAC address like any other client.											
block	Block the DHCP server from assigning IP settings to the client with this MAC address.											
reserved	Assign the reserved IP address to the client with this MAC address.											
circuit-id	Option 82 circuit-ID of the client that will get the reserved IP address.	string	Maximum length: 312									
circuit-id-type	DHCP option type.	option	-	string								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>hex</td><td>DHCP option in hex.</td></tr><tr><td>string</td><td>DHCP option in string.</td></tr></table>	Option	Description	hex	DHCP option in hex.	string	DHCP option in string.					
Option	Description											
hex	DHCP option in hex.											
string	DHCP option in string.											
description	Description.	var-string	Maximum length: 255									
id	ID.	integer	Minimum value: 0 0 Maximum value: 4294967295									
ip	IP address to be reserved for the MAC address.	ipv4-address	Not Specified	0.0.0.0								
mac	MAC address of the client that will get the reserved IP address.	mac-address	Not Specified	00:00:00:00:00:00								
remote-id	Option 82 remote-ID of the client that will get the reserved IP address.	string	Maximum length: 312									
remote-id-type	DHCP option type.	option	-	string								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>hex</td><td>DHCP option in hex.</td></tr><tr><td>string</td><td>DHCP option in string.</td></tr></table>	Option	Description	hex	DHCP option in hex.	string	DHCP option in string.					
Option	Description											
hex	DHCP option in hex.											
string	DHCP option in string.											
type	DHCP reserved-address type.	option	-	mac								

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>mac</i>	Match with MAC address.		
	<i>option82</i>	Match with DHCP option 82.		

config system dhcp6 server

Configure DHCPv6 servers.

```

config system dhcp6 server
    Description: Configure DHCPv6 servers.
    edit <id>
        set delegated-prefix-iaid {integer}
        set dns-search-list [delegated|specify]
        set dns-server1 {ipv6-address}
        set dns-server2 {ipv6-address}
        set dns-server3 {ipv6-address}
        set dns-server4 {ipv6-address}
        set dns-service [delegated|default|...]
        set domain {string}
        set interface {string}
        set ip-mode [range|delegated]
        config ip-range
            Description: DHCP IP range configuration.
            edit <id>
                set end-ip {ipv6-address}
                set start-ip {ipv6-address}
            next
        end
        set lease-time {integer}
        set option1 {user}
        set option2 {user}
        set option3 {user}
        set prefix-mode [dhcp6|ra]
        config prefix-range
            Description: DHCP prefix configuration.
            edit <id>
                set end-prefix {ipv6-address}
                set prefix-length {integer}
                set start-prefix {ipv6-address}
            next
        end
        set rapid-commit [disable|enable]
        set status [disable|enable]
        set subnet {ipv6-prefix}
        set upstream-interface {string}

```

```
next
end
```

config system dhcp6 server

Parameter	Description	Type	Size	Default								
delegated-prefix-iaid	IAID of obtained delegated-prefix from the upstream interface.	integer	Minimum value: 0 0 Maximum value: 4294967295	0								
dns-search-list	DNS search list options.	option	-	specify								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>delegated</td><td>Delegated the DNS search list.</td></tr><tr><td>specify</td><td>Specify the DNS search list.</td></tr></table>	Option	Description	delegated	Delegated the DNS search list.	specify	Specify the DNS search list.					
Option	Description											
delegated	Delegated the DNS search list.											
specify	Specify the DNS search list.											
dns-server1	DNS server 1.	ipv6-address	Not Specified	::								
dns-server2	DNS server 2.	ipv6-address	Not Specified	::								
dns-server3	DNS server 3.	ipv6-address	Not Specified	::								
dns-server4	DNS server 4.	ipv6-address	Not Specified	::								
dns-service	Options for assigning DNS servers to DHCPv6 clients.	option	-	specify								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>delegated</td><td>Delegated DNS settings.</td></tr><tr><td>default</td><td>Clients are assigned the FortiGate's configured DNS servers.</td></tr><tr><td>specify</td><td>Specify up to 3 DNS servers in the DHCPv6 server configuration.</td></tr></table>	Option	Description	delegated	Delegated DNS settings.	default	Clients are assigned the FortiGate's configured DNS servers.	specify	Specify up to 3 DNS servers in the DHCPv6 server configuration.			
Option	Description											
delegated	Delegated DNS settings.											
default	Clients are assigned the FortiGate's configured DNS servers.											
specify	Specify up to 3 DNS servers in the DHCPv6 server configuration.											
domain	Domain name suffix for the IP addresses that the DHCP server assigns to clients.	string	Maximum length: 35									
id	ID.	integer	Minimum value: 0 0 Maximum value: 4294967295	0								

Parameter	Description	Type	Size	Default						
interface	DHCP server can assign IP configurations to clients connected to this interface.	string	Maximum length: 15							
ip-mode	Method used to assign client IP.	option	-	range						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>range</td><td>Use range defined by start IP/end IP to assign client IP.</td></tr><tr><td>delegated</td><td>Use delegated prefix method to assign client IP.</td></tr></table>	Option	Description	range	Use range defined by start IP/end IP to assign client IP.	delegated	Use delegated prefix method to assign client IP.			
Option	Description									
range	Use range defined by start IP/end IP to assign client IP.									
delegated	Use delegated prefix method to assign client IP.									
lease-time	Lease time in seconds, 0 means unlimited.	integer	Minimum value: 300 Maximum value: 8640000	604800						
option1	Option 1.	user	Not Specified							
option2	Option 2.	user	Not Specified							
option3	Option 3.	user	Not Specified							
prefix-mode	Assigning a prefix from a DHCPv6 client or RA.	option	-	dhcp6						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>dhcp6</td><td>Use delegated prefix from a DHCPv6 client.</td></tr><tr><td>ra</td><td>Use prefix from RA.</td></tr></table>	Option	Description	dhcp6	Use delegated prefix from a DHCPv6 client.	ra	Use prefix from RA.			
Option	Description									
dhcp6	Use delegated prefix from a DHCPv6 client.									
ra	Use prefix from RA.									
rapid-commit	Enable/disable allow/disallow rapid commit.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Do not allow rapid commit.</td></tr><tr><td>enable</td><td>Allow rapid commit.</td></tr></table>	Option	Description	disable	Do not allow rapid commit.	enable	Allow rapid commit.			
Option	Description									
disable	Do not allow rapid commit.									
enable	Allow rapid commit.									
status	Enable/disable this DHCPv6 configuration.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Enable this DHCPv6 server configuration.</td></tr><tr><td>enable</td><td>Disable this DHCPv6 server configuration.</td></tr></table>	Option	Description	disable	Enable this DHCPv6 server configuration.	enable	Disable this DHCPv6 server configuration.			
Option	Description									
disable	Enable this DHCPv6 server configuration.									
enable	Disable this DHCPv6 server configuration.									
subnet	Subnet or subnet-id if the IP mode is delegated.	ipv6-prefix	Not Specified	::/0						
upstream-interface	Interface name from where delegated information is provided.	string	Maximum length: 15							

config ip-range

Parameter	Description	Type	Size	Default
end-ip	End of IP range.	ipv6-address	Not Specified	::
id	ID.	integer	Minimum value: 0 Maximum value: 4294967295	0
start-ip	Start of IP range.	ipv6-address	Not Specified	::

config prefix-range

Parameter	Description	Type	Size	Default
end-prefix	End of prefix range.	ipv6-address	Not Specified	::
id	ID.	integer	Minimum value: 0 Maximum value: 4294967295	0
prefix-length	Prefix length.	integer	Minimum value: 1 Maximum value: 128	0
start-prefix	Start of prefix range.	ipv6-address	Not Specified	::

config system dnp3-proxy



This command is available for model(s): FortiGateRugged 60F 3G4G, FortiGateRugged 60F, FortiGateRugged 70F 3G4G, FortiGateRugged 70F.

It is not available for: FortiGate 1000D, FortiGate 1000F, FortiGate 1001F, FortiGate 100EF, FortiGate 100E, FortiGate 100F, FortiGate 101F, FortiGate 1100E, FortiGate 1101E, FortiGate 140E-POE, FortiGate 140E, FortiGate 1500DT, FortiGate 1500D, FortiGate 1800F, FortiGate 1801F, FortiGate 2000E, FortiGate 200E, FortiGate 200F, FortiGate 201E, FortiGate 201F, FortiGate 2201E, FortiGate 2500E, FortiGate 2600F, FortiGate 2601F, FortiGate 3000D, FortiGate 3000F, FortiGate 3001F, FortiGate 300E, FortiGate 301E, FortiGate 3100D, FortiGate 3200D, FortiGate 3200F, FortiGate 3201F, FortiGate 3300E, FortiGate 3301E, FortiGate 3400E, FortiGate 3401E, FortiGate 3501F, FortiGate 3600E, FortiGate 3601E, FortiGate 3700D, FortiGate 3700F, FortiGate 3701F, FortiGate 3960E, FortiGate 3980E, FortiGate 400E Bypass, FortiGate 400E, FortiGate 400F, FortiGate 401E, FortiGate 401F, FortiGate 40F 3G4G, FortiGate 4200F, FortiGate 4201F, FortiGate 4400F, FortiGate 4401F, FortiGate 5001E1, FortiGate 5001E, FortiGate 500E, FortiGate 501E, FortiGate 600E, FortiGate 601E, FortiGate 60E-POE, FortiGate 60E, FortiGate 60F, FortiGate 61E, FortiGate 70F, FortiGate 71F, FortiGate 800D, FortiGate 80E-POE, FortiGate 80E, FortiGate 80F Bypass, FortiGate 80F DSL, FortiGate 80F-POE, FortiGate 80F, FortiGate 81E-POE, FortiGate 81E, FortiGate 81F-POE, FortiGate 81F, FortiGate 900D, FortiGate 90E, FortiGate 91E, FortiGate-VM64 Aliyun, FortiGate-VM64 AWS, FortiGate-VM64 Azure, FortiGate-VM64 GCP, FortiGate-VM64 OPC, FortiGate-VM64, FortiWiFi 40F 3G4G, FortiWiFi 40F, FortiWiFi 60E, FortiWiFi 60F, FortiWiFi 61E, FortiWiFi 61F, FortiWiFi 80F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G-POE, FortiWiFi 81F 2R-POE, FortiWiFi 81F 2R.

Configure dnpproxy settings.

```
config system dnp3-proxy
  Description: Configure dnpproxy settings.
  set port {integer}
  set status [enable|disable]
  set term-baudrate [9600|19200|...]
  set term-databits {integer}
  set term-flowcontrol [none|xon_xoff|...]
  set term-parity [none|odd|...]
  set term-stopbits {integer}
end
```

config system dnp3-proxy

Parameter	Description	Type	Size	Default										
port	DNP3 TCPServer Port.	integer	Minimum value: 1 Maximum value: 65535	20000										
status	Enable/disable DNP daemon.	option	-	disable										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable DNP daemon.</td></tr><tr><td><i>disable</i></td><td>Disable DNP daemon.</td></tr></table>	Option	Description	<i>enable</i>	Enable DNP daemon.	<i>disable</i>	Disable DNP daemon.							
Option	Description													
<i>enable</i>	Enable DNP daemon.													
<i>disable</i>	Disable DNP daemon.													
term-baudrate	Term Baudrate.	option	-	19200										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>9600</i></td><td>set DNP baudrate to 9600</td></tr><tr><td><i>19200</i></td><td>set DNP baudrate to 19200</td></tr><tr><td><i>38400</i></td><td>set DNP baudrate to 38400</td></tr><tr><td><i>115200</i></td><td>set DNP baudrate to 115200</td></tr></table>	Option	Description	<i>9600</i>	set DNP baudrate to 9600	<i>19200</i>	set DNP baudrate to 19200	<i>38400</i>	set DNP baudrate to 38400	<i>115200</i>	set DNP baudrate to 115200			
Option	Description													
<i>9600</i>	set DNP baudrate to 9600													
<i>19200</i>	set DNP baudrate to 19200													
<i>38400</i>	set DNP baudrate to 38400													
<i>115200</i>	set DNP baudrate to 115200													
term-databits	Term Data Bits.	integer	Minimum value: 0 Maximum value: 65535	8										
term-flowcontrol	Term Flow Control	option	-	none										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>none</i></td><td>No flow control.</td></tr><tr><td><i>xon_xoff</i></td><td>Enable software flow control on both input and output.</td></tr><tr><td><i>hardware</i></td><td>Enable hardware flow control.</td></tr></table>	Option	Description	<i>none</i>	No flow control.	<i>xon_xoff</i>	Enable software flow control on both input and output.	<i>hardware</i>	Enable hardware flow control.					
Option	Description													
<i>none</i>	No flow control.													
<i>xon_xoff</i>	Enable software flow control on both input and output.													
<i>hardware</i>	Enable hardware flow control.													
term-parity	Term Parity	option	-	none										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>none</i></td><td>No parity check.</td></tr></table>	Option	Description	<i>none</i>	No parity check.									
Option	Description													
<i>none</i>	No parity check.													

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>odd</i>	Odd parity check.		
	<i>even</i>	Even parity check.		
term-stopbits	Term Stop Bits.	integer	Minimum value: 0 Maximum value: 65535	1

config system dns

Configure DNS.

```

config system dns
    Description: Configure DNS.
    set alt-primary {ipv4-address}
    set alt-secondary {ipv4-address}
    set cache-notfound-responses [disable|enable]
    set dns-cache-limit {integer}
    set dns-cache-ttl {integer}
    set domain <domain1>, <domain2>, ...
    set fqdn-cache-ttl {integer}
    set fqdn-min-refresh {integer}
    set interface {string}
    set interface-select-method [auto|sdwan|...]
    set ip6-primary {ipv6-address}
    set ip6-secondary {ipv6-address}
    set log [disable|error|...]
    set primary {ipv4-address}
    set protocol {option1}, {option2}, ...
    set retry {integer}
    set secondary {ipv4-address}
    set server-hostname <hostname1>, <hostname2>, ...
    set server-select-method [least-rtt|failover]
    set source-ip {ipv4-address}
    set ssl-certificate {string}
    set timeout {integer}
end

```

config system dns

Parameter	Description	Type	Size	Default								
alt-primary	Alternate primary DNS server. This is not used as a failover DNS server.	ipv4-address	Not Specified	0.0.0.0								
alt-secondary	Alternate secondary DNS server. This is not used as a failover DNS server.	ipv4-address	Not Specified	0.0.0.0								
cache-notfound-responses	Enable/disable response from the DNS server when a record is not in cache.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Disable cache NOTFOUND responses from DNS server.</td></tr><tr><td>enable</td><td>Enable cache NOTFOUND responses from DNS server.</td></tr></table>				Option	Description	disable	Disable cache NOTFOUND responses from DNS server.	enable	Enable cache NOTFOUND responses from DNS server.		
Option	Description											
disable	Disable cache NOTFOUND responses from DNS server.											
enable	Enable cache NOTFOUND responses from DNS server.											
dns-cache-limit	Maximum number of records in the DNS cache.	integer	Minimum value: 0 Maximum value: 4294967295	5000								
dns-cache-ttl	Duration in seconds that the DNS cache retains information.	integer	Minimum value: 60 Maximum value: 86400	1800								
domain <domain>	Search suffix list for hostname lookup. DNS search domain list separated by space (maximum 8 domains).	string	Maximum length: 127									
fqdn-cache-ttl	FQDN cache time to live in seconds (0 - 86400, default = 0).	integer	Minimum value: 0 Maximum value: 86400	0								
fqdn-min-refresh	FQDN cache minimum refresh time in seconds (10 - 3600, default = 60).	integer	Minimum value: 10 Maximum value: 3600	60								
interface	Specify outgoing interface to reach server.	string	Maximum length: 15									
interface-select-method	Specify how to select outgoing interface to reach server.	option	-	auto								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>auto</td><td>Set outgoing interface automatically.</td></tr><tr><td>sdwan</td><td>Set outgoing interface by SD-WAN or policy routing rules.</td></tr><tr><td>specify</td><td>Set outgoing interface manually.</td></tr></table>				Option	Description	auto	Set outgoing interface automatically.	sdwan	Set outgoing interface by SD-WAN or policy routing rules.	specify	Set outgoing interface manually.
Option	Description											
auto	Set outgoing interface automatically.											
sdwan	Set outgoing interface by SD-WAN or policy routing rules.											
specify	Set outgoing interface manually.											

Parameter	Description	Type	Size	Default								
ip6-primary	Primary DNS server IPv6 address.	ipv6-address	Not Specified	::								
ip6-secondary	Secondary DNS server IPv6 address.	ipv6-address	Not Specified	::								
log	Local DNS log setting.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Disable.</td></tr><tr><td>error</td><td>Enable local DNS error log.</td></tr><tr><td>all</td><td>Enable local DNS log.</td></tr></table>				Option	Description	disable	Disable.	error	Enable local DNS error log.	all	Enable local DNS log.
Option	Description											
disable	Disable.											
error	Enable local DNS error log.											
all	Enable local DNS log.											
primary	Primary DNS server IP address.	ipv4-address	Not Specified	0.0.0.0								
protocol	DNS transport protocols.	option	-	cleartext								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>cleartext</td><td>DNS over UDP/53, DNS over TCP/53.</td></tr><tr><td>dot</td><td>DNS over TLS/853.</td></tr><tr><td>doh</td><td>DNS over HTTPS/443.</td></tr></table>				Option	Description	cleartext	DNS over UDP/53, DNS over TCP/53.	dot	DNS over TLS/853.	doh	DNS over HTTPS/443.
Option	Description											
cleartext	DNS over UDP/53, DNS over TCP/53.											
dot	DNS over TLS/853.											
doh	DNS over HTTPS/443.											
retry	Number of times to retry (0 - 5).	integer	Minimum value: 0 Maximum value: 5	2								
secondary	Secondary DNS server IP address.	ipv4-address	Not Specified	0.0.0.0								
server-hostname <hostname>	DNS server host name list. DNS server host name list separated by space (maximum 4 domains).	string	Maximum length: 127									
server-select-method	Specify how configured servers are prioritized.	option	-	least-rtt								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>least-rtt</td><td>Select servers based on least round trip time.</td></tr><tr><td>failover</td><td>Select servers based on the order they are configured.</td></tr></table>				Option	Description	least-rtt	Select servers based on least round trip time.	failover	Select servers based on the order they are configured.		
Option	Description											
least-rtt	Select servers based on least round trip time.											
failover	Select servers based on the order they are configured.											
source-ip	IP address used by the DNS server as its source IP.	ipv4-address	Not Specified	0.0.0.0								

Parameter	Description	Type	Size	Default
ssl-certificate	Name of local certificate for SSL connections.	string	Maximum length: 35	Fortinet_Factory
timeout	DNS query timeout interval in seconds (1 - 10).	integer	Minimum value: 1 Maximum value: 10	5

config system dns64

Configure DNS64.

```
config system dns64
    Description: Configure DNS64.
    set always-synthesize-aaaa-record [enable|disable]
    set dns64-prefix {ipv6-prefix}
    set status [enable|disable]
end
```

config system dns64

Parameter	Description	Type	Size	Default
always-synthesize-aaaa-record	Enable/disable AAAA record synthesis (default = enable).	option	-	enable
	Option	Description		
	<i>enable</i>	Enable AAAA record synthesis.		
	<i>disable</i>	Disable AAAA record synthesis.		
dns64-prefix	DNS64 prefix must be ::/96 (default = 64:ff9b::/96).	ipv6-prefix	Not Specified	64:ff9b::/96
status	Enable/disable DNS64 (default = disable).	option	-	disable
	Option	Description		
	<i>enable</i>	Enable DNS64.		
	<i>disable</i>	Disable DNS64.		

config system dns-database

Configure DNS databases.

```

config system dns-database
    Description: Configure DNS databases.
    edit <name>
        set allow-transfer {user}
        set authoritative [enable|disable]
        set contact {string}
        config dns-entry
            Description: DNS entry.
            edit <id>
                set canonical-name {string}
                set hostname {string}
                set ip {ipv4-address-any}
                set ipv6 {ipv6-address}
                set preference {integer}
                set status [enable|disable]
                set ttl {integer}
                set type [A|NS|...]
            next
        end
        set domain {string}
        set forwarder {user}
        set ip-primary {ipv4-address-any}
        set primary-name {string}
        set rr-max {integer}
        set source-ip {ipv4-address}
        set status [enable|disable]
        set ttl {integer}
        set type [primary|secondary]
        set view [shadow|public|...]
    next
end

```

config system dns-database

Parameter	Description	Type	Size	Default
allow-transfer	DNS zone transfer IP address list.	user	Not Specified	
authoritative	Enable/disable authoritative zone.	option	-	enable
	Option		Description	
	enable		Enable authoritative zone.	
	disable		Disable authoritative zone.	
contact	Email address of the administrator for this zone. You can specify only the username, such as admin or the full email address, such as admin@test.com When using only a username, the domain of the email will be this zone.	string	Maximum length: 255	host

Parameter	Description	Type	Size	Default						
domain	Domain name.	string	Maximum length: 255							
forwarder	DNS zone forwarder IP address list.	user	Not Specified							
ip-primary	IP address of primary DNS server. Entries in this primary DNS server and imported into the DNS zone.	ipv4-address-any	Not Specified	0.0.0.0						
name	Zone name.	string	Maximum length: 35							
primary-name	Domain name of the default DNS server for this zone.	string	Maximum length: 255	dns						
rr-max	Maximum number of resource records (10 - 65536, 0 means infinite).	integer	Minimum value: 10 Maximum value: 65536	16384						
source-ip	Source IP for forwarding to DNS server.	ipv4-address	Not Specified	0.0.0.0						
status	Enable/disable this DNS zone.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable setting.</td></tr><tr><td><i>disable</i></td><td>Disable setting.</td></tr></table>				Option	Description	<i>enable</i>	Enable setting.	<i>disable</i>	Disable setting.
Option	Description									
<i>enable</i>	Enable setting.									
<i>disable</i>	Disable setting.									
ttl	Default time-to-live value for the entries of this DNS zone (0 - 2147483647 sec, default = 86400).	integer	Minimum value: 0 Maximum value: 2147483647	86400						
type	Zone type (primary to manage entries directly, secondary to import entries from other zones).	option	-	primary						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>primary</i></td><td>Primary DNS zone, to manage entries directly.</td></tr><tr><td><i>secondary</i></td><td>Secondary DNS zone, to import entries from other DNS zones.</td></tr></table>				Option	Description	<i>primary</i>	Primary DNS zone, to manage entries directly.	<i>secondary</i>	Secondary DNS zone, to import entries from other DNS zones.
Option	Description									
<i>primary</i>	Primary DNS zone, to manage entries directly.									
<i>secondary</i>	Secondary DNS zone, to import entries from other DNS zones.									
view	Zone view (public to serve public clients, shadow to serve internal clients).	option	-	shadow						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>shadow</i></td><td>Shadow DNS zone to serve internal clients.</td></tr></table>				Option	Description	<i>shadow</i>	Shadow DNS zone to serve internal clients.		
Option	Description									
<i>shadow</i>	Shadow DNS zone to serve internal clients.									

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>public</i>	Public DNS zone to serve public clients.		
	<i>shadow-ztna</i>	implicit DNS zone for ztna dox tunnel.		

config dns-entry

Parameter	Description	Type	Size	Default
canonical-name	Canonical name of the host.	string	Maximum length: 255	
hostname	Name of the host.	string	Maximum length: 255	
id	DNS entry ID.	integer	Minimum value: 0 0 Maximum value: 4294967295	
ip	IPv4 address of the host.	ipv4-address-any	Not Specified	0.0.0.0
ipv6	IPv6 address of the host.	ipv6-address	Not Specified	::
preference	DNS entry preference (0 - 65535, highest preference = 0, default = 10).	integer	Minimum value: 0 0 Maximum value: 65535	10
status	Enable/disable resource record status.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable resource record status.		
	<i>disable</i>	Disable resource record status.		
ttl	Time-to-live for this entry (0 to 2147483647 sec, default = 0).	integer	Minimum value: 0 0 Maximum value: 2147483647	0
type	Resource record type.	option	-	A
	Option	Description		
	A	Host type.		

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>NS</i>	Name server type.		
	<i>CNAME</i>	Canonical name type.		
	<i>MX</i>	Mail exchange type.		
	<i>AAAA</i>	IPv6 host type.		
	<i>PTR</i>	Pointer type.		
	<i>PTR_V6</i>	IPv6 pointer type.		

config system dns-server

Configure DNS servers.

```

config system dns-server
  Description: Configure DNS servers.
  edit <name>
    set dnsfilter-profile {string}
    set doh [enable|disable]
    set mode [recursive|non-recursive|...]
  next
end

```

config system dns-server

Parameter	Description	Type	Size	Default
dnsfilter-profile	DNS filter profile.	string	Maximum length: 35	
doh	DNS over HTTPS/443.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable DNS over HTTPS.		
	<i>disable</i>	Disable DNS over HTTPS.		
mode	DNS server mode.	option	-	recursive
	Option	Description		
	<i>recursive</i>	Shadow DNS database and forward.		

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>non-recursive</i>	Public DNS database only.		
	<i>forward-only</i>	Forward only.		
name	DNS server name.	string	Maximum length: 15	

config system dscp-based-priority

Configure DSCP based priority table.

```
config system dscp-based-priority
  Description: Configure DSCP based priority table.
  edit <id>
    set ds {integer}
    set priority [low|medium|...]
  next
end
```

config system dscp-based-priority

Parameter	Description	Type	Size	Default
ds	DSCP(DiffServ) DS value (0 - 63).	integer	Minimum value: 0 Maximum value: 63	0
id	Item ID.	integer	Minimum value: 0 Maximum value: 4294967295	0
priority	DSCP based priority level.	option	-	high
	Option	Description		
	<i>low</i>	Low priority.		
	<i>medium</i>	Medium priority.		
	<i>high</i>	High priority.		

config system elbc



This command is available for model(s): FortiGate 5001E1, FortiGate 5001E.

It is not available for: FortiGate 1000D, FortiGate 1000F, FortiGate 1001F, FortiGate 100EF, FortiGate 100E, FortiGate 100F, FortiGate 101F, FortiGate 1100E, FortiGate 1101E, FortiGate 140E-POE, FortiGate 140E, FortiGate 1500DT, FortiGate 1500D, FortiGate 1800F, FortiGate 1801F, FortiGate 2000E, FortiGate 200E, FortiGate 200F, FortiGate 201E, FortiGate 201F, FortiGate 2201E, FortiGate 2500E, FortiGate 2600F, FortiGate 2601F, FortiGate 3000D, FortiGate 3000F, FortiGate 3001F, FortiGate 300E, FortiGate 301E, FortiGate 3100D, FortiGate 3200D, FortiGate 3200F, FortiGate 3201F, FortiGate 3300E, FortiGate 3301E, FortiGate 3400E, FortiGate 3401E, FortiGate 3501F, FortiGate 3600E, FortiGate 3601E, FortiGate 3700D, FortiGate 3700F, FortiGate 3701F, FortiGate 3960E, FortiGate 3980E, FortiGate 400E Bypass, FortiGate 400E, FortiGate 400F, FortiGate 401E, FortiGate 401F, FortiGate 40F 3G4G, FortiGate 4200F, FortiGate 4201F, FortiGate 4400F, FortiGate 4401F, FortiGate 500E, FortiGate 501E, FortiGate 600E, FortiGate 601E, FortiGate 60E-POE, FortiGate 60E, FortiGate 60F, FortiGate 61E, FortiGate 70F, FortiGate 71F, FortiGate 800D, FortiGate 80E-POE, FortiGate 80E, FortiGate 80F Bypass, FortiGate 80F DSL, FortiGate 80F-POE, FortiGate 80F, FortiGate 81E-POE, FortiGate 81E, FortiGate 81F-POE, FortiGate 81F, FortiGate 900D, FortiGate 90E, FortiGate 91E, FortiGate-VM64 Aliyun, FortiGate-VM64 AWS, FortiGate-VM64 Azure, FortiGate-VM64 GCP, FortiGate-VM64 OPC, FortiGate-VM64, FortiGateRugged 60F 3G4G, FortiGateRugged 60F, FortiGateRugged 70F 3G4G, FortiGateRugged 70F, FortiWiFi 40F 3G4G, FortiWiFi 40F, FortiWiFi 60E, FortiWiFi 60F, FortiWiFi 61E, FortiWiFi 61F, FortiWiFi 80F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G-POE, FortiWiFi 81F 2R-POE, FortiWiFi 81F 2R.

Configure enhanced load balance cluster.

```
config system elbc
  Description: Configure enhanced load balance cluster.
  set graceful-upgrade [enable|disable]
  set hb-device <name1>, <name2>, ...
  set inter-chassis-support [enable|disable]
  set mode [none|forticontroller|...]
end
```

config system elbc

Parameter	Description	Type	Size	Default
graceful-upgrade	enable/disable graceful upgrade	option	-	enable
	Option	Description		
	<i>enable</i>	Enable setting.		

Parameter	Description	Type	Size	Default								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>disable</i></td><td>Disable setting.</td></tr></table>	Option	Description	<i>disable</i>	Disable setting.							
Option	Description											
<i>disable</i>	Disable setting.											
hb-device <name>	ELBC heartbeat device. set interface name	string	Maximum length: 79									
inter- chassis- support	Enable/disable content-cluster across multiple chassis.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable content-cluster across multiple chassis.</td></tr><tr><td><i>disable</i></td><td>Disable content-cluster across multiple chassis.</td></tr></table>	Option	Description	<i>enable</i>	Enable content-cluster across multiple chassis.	<i>disable</i>	Disable content-cluster across multiple chassis.					
Option	Description											
<i>enable</i>	Enable content-cluster across multiple chassis.											
<i>disable</i>	Disable content-cluster across multiple chassis.											
mode	ELBC mode.	option	-	none								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>none</i></td><td>ELBC mode disabled.</td></tr><tr><td><i>forticontroller</i></td><td>FortiController.</td></tr><tr><td><i>dual- forticontroller</i></td><td>Dual-FortiController.</td></tr></table>	Option	Description	<i>none</i>	ELBC mode disabled.	<i>forticontroller</i>	FortiController.	<i>dual- forticontroller</i>	Dual-FortiController.			
Option	Description											
<i>none</i>	ELBC mode disabled.											
<i>forticontroller</i>	FortiController.											
<i>dual- forticontroller</i>	Dual-FortiController.											

config system email-server

Configure the email server used by the FortiGate various things. For example, for sending email messages to users to support user authentication features.

```
config system email-server
    Description: Configure the email server used by the FortiGate various things. For example, for
    sending email messages to users to support user authentication features.
    set authenticate [enable|disable]
    set interface {string}
    set interface-select-method [auto|sdwan|...]
    set password {password}
    set port {integer}
    set reply-to {string}
    set security [none|starttls|...]
    set server {string}
    set source-ip {ipv4-address}
    set source-ip6 {ipv6-address}
    set ssl-min-proto-version [default|SSLv3|...]
    set type {option}
    set username {string}
```

```

set validate-server [enable|disable]
end

```

config system email-server

Parameter	Description	Type	Size	Default
authenticate	Enable/disable authentication.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable authentication.		
	<i>disable</i>	Disable authentication.		
interface	Specify outgoing interface to reach server.	string	Maximum length: 15	
interface-select-method	Specify how to select outgoing interface to reach server.	option	-	auto
	Option	Description		
	<i>auto</i>	Set outgoing interface automatically.		
	<i>sdwan</i>	Set outgoing interface by SD-WAN or policy routing rules.		
	<i>specify</i>	Set outgoing interface manually.		
password	SMTP server user password for authentication.	password	Not Specified	
port	SMTP server port.	integer	Minimum value: 1 Maximum value: 65535	25
reply-to	Reply-To email address.	string	Maximum length: 63	
security	Connection security used by the email server.	option	-	none
	Option	Description		
	<i>none</i>	None.		
	<i>starttls</i>	STARTTLS.		
	<i>smtps</i>	SSL/TLS.		
server	SMTP server IP address or hostname.	string	Maximum length: 63	

Parameter	Description	Type	Size	Default
source-ip	SMTP server IPv4 source IP.	ipv4-address	Not Specified	0.0.0.0
source-ip6	SMTP server IPv6 source IP.	ipv6-address	Not Specified	::
ssl-min-protocol-version	Minimum supported protocol version for SSL/TLS connections (default is to follow system global setting).	option	-	default
	Option	Description		
	default	Follow system global setting.		
	SSLv3	SSLv3.		
	TLSv1	TLSv1.		
	TLSv1-1	TLSv1.1.		
	TLSv1-2	TLSv1.2.		
type	Use FortiGuard Message service or custom email server.	option	-	custom
	Option	Description		
	custom	Use custom email server.		
username	SMTP server user name for authentication.	string	Maximum length: 63	
validate-server	Enable/disable validation of server certificate.	option	-	disable
	Option	Description		
	enable	Enable validation of server certificate.		
	disable	Disable validation of server certificate.		

config system external-resource

Configure external resource.

```
config system external-resource
  Description: Configure external resource.
  edit <name>
    set category {integer}
    set comments {var-string}
    set interface {string}
    set interface-select-method [auto|sdwan|...]
```



```

set password {password}
set refresh-rate {integer}
set resource {string}
set server-identity-check [none|basic|...]
set source-ip {ipv4-address}
set status [enable|disable]
set type [category|address|...]
set update-method [feed|push]
set user-agent {var-string}
set username {string}
set uuid {uuid}
next
end

```

config system external-resource

Parameter	Description	Type	Size	Default								
category	User resource category.	integer	Minimum value: 192 Maximum value: 221	0								
comments	Comment.	var-string	Maximum length: 255									
interface	Specify outgoing interface to reach server.	string	Maximum length: 15									
interface-select-method	Specify how to select outgoing interface to reach server.	option	-	auto								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>auto</td><td>Set outgoing interface automatically.</td></tr><tr><td>sdwan</td><td>Set outgoing interface by SD-WAN or policy routing rules.</td></tr><tr><td>specify</td><td>Set outgoing interface manually.</td></tr></table>				Option	Description	auto	Set outgoing interface automatically.	sdwan	Set outgoing interface by SD-WAN or policy routing rules.	specify	Set outgoing interface manually.
Option	Description											
auto	Set outgoing interface automatically.											
sdwan	Set outgoing interface by SD-WAN or policy routing rules.											
specify	Set outgoing interface manually.											
name	External resource name.	string	Maximum length: 35									
password	HTTP basic authentication password.	password	Not Specified									
refresh-rate	Time interval to refresh external resource (1 - 43200 min, default = 5 min).	integer	Minimum value: 1 Maximum value: 43200	5								

Parameter	Description	Type	Size	Default										
resource	URI of external resource.	string	Maximum length: 511											
server-identity-check	Certificate verification option.	option	-	none										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>none</i></td><td>No certificate verification.</td></tr><tr><td><i>basic</i></td><td>Check server certificate only.</td></tr><tr><td><i>full</i></td><td>Check server certificate and verify the domain matches in the server certificate.</td></tr></table>	Option	Description	<i>none</i>	No certificate verification.	<i>basic</i>	Check server certificate only.	<i>full</i>	Check server certificate and verify the domain matches in the server certificate.					
Option	Description													
<i>none</i>	No certificate verification.													
<i>basic</i>	Check server certificate only.													
<i>full</i>	Check server certificate and verify the domain matches in the server certificate.													
source-ip	Source IPv4 address used to communicate with server.	ipv4-address	Not Specified	0.0.0.0										
status	Enable/disable user resource.	option	-	enable										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable user resource.</td></tr><tr><td><i>disable</i></td><td>Disable user resource.</td></tr></table>	Option	Description	<i>enable</i>	Enable user resource.	<i>disable</i>	Disable user resource.							
Option	Description													
<i>enable</i>	Enable user resource.													
<i>disable</i>	Disable user resource.													
type	User resource type.	option	-	category										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>category</i></td><td>FortiGuard category.</td></tr><tr><td><i>address</i></td><td>Firewall IP address.</td></tr><tr><td><i>domain</i></td><td>Domain Name.</td></tr><tr><td><i>malware</i></td><td>Malware hash.</td></tr></table>	Option	Description	<i>category</i>	FortiGuard category.	<i>address</i>	Firewall IP address.	<i>domain</i>	Domain Name.	<i>malware</i>	Malware hash.			
Option	Description													
<i>category</i>	FortiGuard category.													
<i>address</i>	Firewall IP address.													
<i>domain</i>	Domain Name.													
<i>malware</i>	Malware hash.													
update-method	External resource update method.	option	-	feed										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>feed</i></td><td>FortiGate unit will pull update from the external resource.</td></tr><tr><td><i>push</i></td><td>External Resource update is pushed to the FortiGate unit through the FortiGate unit's RESTAPI/CLI.</td></tr></table>	Option	Description	<i>feed</i>	FortiGate unit will pull update from the external resource.	<i>push</i>	External Resource update is pushed to the FortiGate unit through the FortiGate unit's RESTAPI/CLI.							
Option	Description													
<i>feed</i>	FortiGate unit will pull update from the external resource.													
<i>push</i>	External Resource update is pushed to the FortiGate unit through the FortiGate unit's RESTAPI/CLI.													
user-agent	HTTP User-Agent header (default = 'curl/7.58.0').	var-string	Maximum length: 255											
username	HTTP basic authentication user name.	string	Maximum length: 64											

Parameter	Description	Type	Size	Default
uuid	Universally Unique Identifier (UUID; automatically assigned but can be manually reset).	uuid	Not Specified	00000000-0000-0000-0000-000000000000

config system fabric-vpn

Setup for self orchestrated fabric auto discovery VPN.

```

config system fabric-vpn
  Description: Setup for self orchestrated fabric auto discovery VPN.
  config advertised-subnets
    Description: Local advertised subnets.
    edit <id>
      set access [inbound|bidirectional]
      set bgp-network {integer}
      set firewall-address {string}
      set policies {integer}
      set prefix {ipv4-classnet}
    next
  end
  set bgp-as {integer}
  set branch-name {string}
  set health-checks {string}
  set loopback-address-block {ipv4-classnet-host}
  set loopback-advertised-subnet {integer}
  set loopback-interface {string}
  config overlays
    Description: Local overlay interfaces table.
    edit <name>
      set bgp-neighbor {string}
      set bgp-neighbor-group {string}
      set bgp-neighbor-range {integer}
      set bgp-network {integer}
      set interface {string}
      set ipsec-phase1 {string}
      set overlay-policy {integer}
      set overlay-tunnel-block {ipv4-classnet-host}
      set remote-gw {ipv4-address-any}
      set route-policy {integer}
      set sdwan-member {integer}
    next
  end
  set policy-rule [health-check|manual|...]
  set psksecret {password-3}
  set sdwan-zone {string}
  set status [enable|disable]
  set sync-mode [enable|disable]

```

```

set vpn-role [hub|spoke]
end

```

config system fabric-vpn

Parameter	Description	Type	Size	Default								
bgp-as	BGP Router AS number, valid from 1 to 4294967295.	integer	Minimum value: 0 0 Maximum value: 4294967295	0								
branch-name	Branch name.	string	Maximum length: 35									
health-checks	Underlying health checks.	string	Maximum length: 35									
loopback-address-block	IPv4 address and subnet mask for hub's loopback address, syntax: X.X.X.X/24.	ipv4-classnet-host	Not Specified	0.0.0.0 0.0.0.0								
loopback-advertised-subnet	Loopback advertised subnet reference.	integer	Minimum value: 0 0 Maximum value: 4294967295	0								
loopback-interface	Loopback interface.	string	Maximum length: 15									
policy-rule	Policy creation rule.	option	-	health-check								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>health-check</td><td>Create health check policy automatically.</td></tr><tr><td>manual</td><td>All policies will be created manually.</td></tr><tr><td>auto</td><td>Automatically create allow policies.</td></tr></table>				Option	Description	health-check	Create health check policy automatically.	manual	All policies will be created manually.	auto	Automatically create allow policies.
Option	Description											
health-check	Create health check policy automatically.											
manual	All policies will be created manually.											
auto	Automatically create allow policies.											
psksecret	Pre-shared secret for ADVPN.	password-3	Not Specified									
sdwan-zone	Reference to created SD-WAN zone.	string	Maximum length: 35									
status	Enable/disable Fabric VPN.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable Fabric VPN.</td></tr><tr><td>disable</td><td>Disable Fabric VPN.</td></tr></table>				Option	Description	enable	Enable Fabric VPN.	disable	Disable Fabric VPN.		
Option	Description											
enable	Enable Fabric VPN.											
disable	Disable Fabric VPN.											
sync-mode	Setting synchronised by fabric or manual.	option	-	enable								

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>enable</i>	Enable fabric led configuration synchronisation.		
	<i>disable</i>	Disable fabric led configuration synchronisation.		
vpn-role	Fabric VPN role.	option	-	hub
	Option	Description		
	<i>hub</i>	VPN hub.		
	<i>spoke</i>	VPN spoke.		

config advertised-subnets

Parameter	Description	Type	Size	Default
access	Access policy direction.	option	-	inbound
	Option	Description		
	<i>inbound</i>	Allow inbound traffic to subnet.		
	<i>bidirectional</i>	Allow inbound and outbound traffic to subnet.		
bgp-network	Underlying BGP network.	integer	Minimum value: 0 0 Maximum value: 4294967295	
firewall-address	Underlying firewall address.	string	Maximum length: 79	
id	ID.	integer	Minimum value: 0 0 Maximum value: 4294967294	
policies	Underlying policies.	integer	Minimum value: 0 0 Maximum value: 4294967295	
prefix	Network prefix.	ipv4-classnet	Not Specified	0.0.0.0 0.0.0.0

config overlays

Parameter	Description	Type	Size	Default
bgp-neighbor	Underlying BGP neighbor entry.	string	Maximum length: 45	
bgp-neighbor-group	Underlying BGP neighbor group entry.	string	Maximum length: 45	
bgp-neighbor-range	Underlying BGP neighbor range entry.	integer	Minimum value: 0 Maximum value: 4294967295	
bgp-network	Underlying BGP network.	integer	Minimum value: 0 Maximum value: 4294967295	
interface	Underlying interface name.	string	Maximum length: 15	
ipsec-phase1	IPsec interface.	string	Maximum length: 35	
name	Overlay name.	string	Maximum length: 79	
overlay-policy	The overlay policy to allow ADVPN thru traffic.	integer	Minimum value: 0 Maximum value: 4294967295	
overlay-tunnel-block	IPv4 address and subnet mask for the overlay tunnel , syntax: X.X.X.X/24.	ipv4-classnet-host	Not Specified	0.0.0.0 0.0.0.0
remote-gw	IP address of the hub gateway (Set by hub).	ipv4-address-any	Not Specified	0.0.0.0
route-policy	Underlying router policy.	integer	Minimum value: 0 Maximum value: 4294967295	
sdwan-member	Reference to SD-WAN member entry.	integer	Minimum value: 0 Maximum value: 4294967295	

config system federated-upgrade

Coordinate federated upgrades within the Security Fabric.

```
config system federated-upgrade
  Description: Coordinate federated upgrades within the Security Fabric.
  set failure-device {string}
  set failure-reason [none|internal|...]
  set ha-reboot-controller {string}
  set next-path-index {integer}
  config node-list
    Description: Nodes which will be included in the upgrade.
    edit <serial>
      set coordinating-fortigate {string}
      set device-type [fortigate|fortiswitch|...]
      set maximum-minutes {integer}
      set setup-time {user}
      set time {user}
      set timing [immediate|scheduled]
      set upgrade-path {user}
    next
  end
  set source [user|auto-firmware-upgrade]
  set status [disabled|initialized|...]
  set upgrade-id {integer}
end
```

config system federated-upgrade

Parameter	Description	Type	Size	Default
failure-device	Serial number of the node to include.	string	Maximum length: 79	
failure-reason	Reason for upgrade failure.	option	-	none
		Option	Description	
		<i>none</i>	No failure.	
		<i>internal</i>	An internal error occurred.	
		<i>timeout</i>	The upgrade timed out.	
		<i>device-type-unsupported</i>	The device type was not supported by the FortiGate.	
		<i>download-failed</i>	The image could not be downloaded.	

Parameter	Description	Type	Size	Default																						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>device-missing</i></td><td>The device was disconnected from the FortiGate.</td></tr><tr><td><i>version-unavailable</i></td><td>An image matching the device and version could not be found.</td></tr><tr><td><i>staging-failed</i></td><td>The image could not be pushed to the device.</td></tr><tr><td><i>reboot-failed</i></td><td>The device could not be rebooted.</td></tr><tr><td><i>device-not-reconnected</i></td><td>The device did not reconnect after rebooting.</td></tr><tr><td><i>node-not-ready</i></td><td>A device in the Security Fabric tree was not ready.</td></tr><tr><td><i>no-final-confirmation</i></td><td>The coordinating FortiGate did not confirm the upgrade.</td></tr><tr><td><i>no-confirmation-query</i></td><td>A downstream FortiGate did not initiate final confirmation.</td></tr><tr><td><i>config-error-log-nonempty</i></td><td>Configuration errors encountered during the upgrade.</td></tr><tr><td><i>node-failed</i></td><td>A device in the Security Fabric tree failed.</td></tr></table>	Option	Description	<i>device-missing</i>	The device was disconnected from the FortiGate.	<i>version-unavailable</i>	An image matching the device and version could not be found.	<i>staging-failed</i>	The image could not be pushed to the device.	<i>reboot-failed</i>	The device could not be rebooted.	<i>device-not-reconnected</i>	The device did not reconnect after rebooting.	<i>node-not-ready</i>	A device in the Security Fabric tree was not ready.	<i>no-final-confirmation</i>	The coordinating FortiGate did not confirm the upgrade.	<i>no-confirmation-query</i>	A downstream FortiGate did not initiate final confirmation.	<i>config-error-log-nonempty</i>	Configuration errors encountered during the upgrade.	<i>node-failed</i>	A device in the Security Fabric tree failed.			
	Option	Description																								
	<i>device-missing</i>	The device was disconnected from the FortiGate.																								
	<i>version-unavailable</i>	An image matching the device and version could not be found.																								
	<i>staging-failed</i>	The image could not be pushed to the device.																								
	<i>reboot-failed</i>	The device could not be rebooted.																								
	<i>device-not-reconnected</i>	The device did not reconnect after rebooting.																								
	<i>node-not-ready</i>	A device in the Security Fabric tree was not ready.																								
	<i>no-final-confirmation</i>	The coordinating FortiGate did not confirm the upgrade.																								
	<i>no-confirmation-query</i>	A downstream FortiGate did not initiate final confirmation.																								
	<i>config-error-log-nonempty</i>	Configuration errors encountered during the upgrade.																								
<i>node-failed</i>	A device in the Security Fabric tree failed.																									
ha-reboot-controller	Serial number of the FortiGate unit that will control the reboot process for the federated upgrade of the HA cluster.	string	Maximum length: 79																							
next-path-index	The index of the next image to upgrade to.	integer	Minimum value: 0 Maximum value: 10	0																						
source	Source that set up the federated upgrade config.	option	-	user																						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>user</i></td><td>Upgrade configured based on user input.</td></tr><tr><td><i>auto-firmware-upgrade</i></td><td>Upgrade configured by the FortiGuard auto-firmware-upgrade feature.</td></tr></table>	Option	Description	<i>user</i>	Upgrade configured based on user input.	<i>auto-firmware-upgrade</i>	Upgrade configured by the FortiGuard auto-firmware-upgrade feature.																			
	Option	Description																								
	<i>user</i>	Upgrade configured based on user input.																								
<i>auto-firmware-upgrade</i>	Upgrade configured by the FortiGuard auto-firmware-upgrade feature.																									
status	Current status of the upgrade.	option	-	disabled																						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>disabled</i></td><td>No federated upgrade has been configured.</td></tr><tr><td><i>initialized</i></td><td>The upgrade has been configured.</td></tr></table>	Option	Description	<i>disabled</i>	No federated upgrade has been configured.	<i>initialized</i>	The upgrade has been configured.																			
	Option	Description																								
	<i>disabled</i>	No federated upgrade has been configured.																								
<i>initialized</i>	The upgrade has been configured.																									

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>downloading</i>	The image is downloading in preparation for the upgrade.		
	<i>device-disconnected</i>	The image downloads are complete, but one or more devices have disconnected.		
	<i>ready</i>	The image download finished and the upgrade is pending.		
	<i>coordinating</i>	The upgrade is coordinating with other running upgrades.		
	<i>staging</i>	The upgrade is confirmed and images are being staged.		
	<i>final-check</i>	The upgrade is ready and final checks are in progress.		
	<i>upgrade-devices</i>	The upgrade is ready and devices are being rebooted.		
	<i>cancelled</i>	The upgrade was cancelled due to the tree not being ready.		
	<i>confirmed</i>	The upgrade was confirmed and reboots are running.		
	<i>done</i>	The upgrade completed successfully.		
<i>failed</i>	The upgrade failed due to a local issue.			
upgrade-id	Unique identifier for this upgrade.	integer	Minimum value: 0 Maximum value: 4294967295	

config node-list

Parameter	Description	Type	Size	Default
coordinating-fortigate	Serial number of the FortiGate unit that controls this device.	string	Maximum length: 79	
device-type	Fortinet device type.	option	-	fortigate
	Option	Description		
	fortigate	This device is a FortiGate.		
	fortiswitch	This device is a FortiSwitch.		
	fortiap	This device is a FortiAP.		
	fortiextender	This device is a FortiExtender.		

Parameter	Description	Type	Size	Default
maximum-minutes	Maximum number of minutes to allow for immediate upgrade preparation.	integer	Minimum value: 5 Maximum value: 10080	15
serial	Serial number of the node to include.	string	Maximum length: 79	
setup-time	Upgrade preparation start time in UTC (hh:mm yyyy/mm/dd UTC).	user	Not Specified	
time	Scheduled upgrade execution time in UTC (hh:mm yyyy/mm/dd UTC).	user	Not Specified	
timing	Run immediately or at a scheduled time.	option	-	immediate
	Option	Description		
	<i>immediate</i>	Begin the upgrade immediately.		
	<i>scheduled</i>	Begin the upgrade at a configured time.		
upgrade-path	Fortinet OS image versions to upgrade through in major-minor-patch format, such as 7-0-4.	user	Not Specified	

config system fips-cc

Configure FIPS-CC mode.

```
config system fips-cc
  Description: Configure FIPS-CC mode.
  set key-generation-self-test [enable|disable]
  set self-test-period {integer}
  set status [enable|disable]
end
```

config system fips-cc

Parameter	Description	Type	Size	Default
key-generation-self-test	Enable/disable self tests after key generation.	option	-	disable

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>enable</i>	Enable self tests after key generation.		
	<i>disable</i>	Disable self tests after key generation.		
self-test-period	Self test period.	integer	Minimum value: 1 Maximum value: 1440	1440
status	Enable/disable ciphers for FIPS mode of operation.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable FIPS-CC mode.		
	<i>disable</i>	Disable FIPS-CC mode.		

config system fortiguard

Configure FortiGuard services.

```

config system fortiguard
  Description: Configure FortiGuard services.
  set antispam-cache [enable|disable]
  set antispam-cache-mpercent {integer}
  set antispam-cache-ttl {integer}
  set antispam-expiration {integer}
  set antispam-force-off [enable|disable]
  set antispam-license {integer}
  set antispam-timeout {integer}
  set anycast-sdns-server-ip {ipv4-address}
  set anycast-sdns-server-port {integer}
  set auto-firmware-upgrade [enable|disable]
  set auto-firmware-upgrade-day {option1}, {option2}, ...
  set auto-firmware-upgrade-delay {integer}
  set auto-firmware-upgrade-end-hour {integer}
  set auto-firmware-upgrade-start-hour {integer}
  set auto-join-forticloud [enable|disable]
  set ddns-server-ip {ipv4-address}
  set ddns-server-ip6 {ipv6-address}
  set ddns-server-port {integer}
  set fortiguard-anycast [enable|disable]
  set fortiguard-anycast-source [fortinet|aws|...]
  set gui-prompt-auto-upgrade [enable|disable]
  set interface {string}
  set interface-select-method [auto|sdwan|...]
  set load-balance-servers {integer}

```

```

set outbreak-prevention-cache [enable|disable]
set outbreak-prevention-cache-mpercent {integer}
set outbreak-prevention-cache-ttl {integer}
set outbreak-prevention-expiration {integer}
set outbreak-prevention-force-off [enable|disable]
set outbreak-prevention-license {integer}
set outbreak-prevention-timeout {integer}
set persistent-connection [enable|disable]
set port [8888|53|...]
set protocol [udp|http|...]
set proxy-password {password}
set proxy-server-ip {string}
set proxy-server-port {integer}
set proxy-username {string}
set sandbox-inline-scan [enable|disable]
set sandbox-region {string}
set sdns-options {option1}, {option2}, ...
set sdns-server-ip {user}
set sdns-server-port {integer}
set service-account-id {string}
set source-ip {ipv4-address}
set source-ip6 {ipv6-address}
set update-build-proxy [enable|disable]
set update-extdb [enable|disable]
set update-ffdb [enable|disable]
set update-server-location [automatic|usa|...]
set update-uwdb [enable|disable]
set vdom {string}
set videofilter-expiration {integer}
set videofilter-license {integer}
set webfilter-cache [enable|disable]
set webfilter-cache-ttl {integer}
set webfilter-expiration {integer}
set webfilter-force-off [enable|disable]
set webfilter-license {integer}
set webfilter-timeout {integer}
end

```

config system fortiguard

Parameter	Description	Type	Size	Default						
antispam-cache	Enable/disable FortiGuard antispam request caching. Uses a small amount of memory but improves performance.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable FortiGuard antispam request caching.</td></tr><tr><td><i>disable</i></td><td>Disable FortiGuard antispam request caching.</td></tr></table>				Option	Description	<i>enable</i>	Enable FortiGuard antispam request caching.	<i>disable</i>	Disable FortiGuard antispam request caching.
Option	Description									
<i>enable</i>	Enable FortiGuard antispam request caching.									
<i>disable</i>	Disable FortiGuard antispam request caching.									

Parameter	Description	Type	Size	Default						
antispam-cache-mpercent	Maximum percentage of FortiGate memory the antispam cache is allowed to use (1 - 15).	integer	Minimum value: 1 Maximum value: 15	2						
antispam-cache-ttl	Time-to-live for antispam cache entries in seconds (300 - 86400). Lower times reduce the cache size. Higher times may improve performance since the cache will have more entries.	integer	Minimum value: 300 Maximum value: 86400	1800						
antispam-expiration	Expiration date of the FortiGuard antispam contract. Read-only.	integer	Minimum value: 0 Maximum value: 4294967295	0						
antispam-force-off	Enable/disable turning off the FortiGuard antispam service.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Turn off the FortiGuard antispam service.</td></tr><tr><td>disable</td><td>Allow the FortiGuard antispam service.</td></tr></table>				Option	Description	enable	Turn off the FortiGuard antispam service.	disable	Allow the FortiGuard antispam service.
Option	Description									
enable	Turn off the FortiGuard antispam service.									
disable	Allow the FortiGuard antispam service.									
antispam-license	Interval of time between license checks for the FortiGuard antispam contract. Read-only.	integer	Minimum value: 0 Maximum value: 4294967295	4294967295						
antispam-timeout	Antispam query time out (1 - 30 sec, default = 7).	integer	Minimum value: 1 Maximum value: 30	7						
anycast-sdns-server-ip	IP address of the FortiGuard anycast DNS rating server.	ipv4-address	Not Specified	0.0.0.0						
anycast-sdns-server-port	Port to connect to on the FortiGuard anycast DNS rating server.	integer	Minimum value: 1 Maximum value: 65535	853						
auto-firmware-upgrade	Enable/disable automatic patch-level firmware upgrade from FortiGuard. The FortiGate unit searches for new patches only in the same major and minor version. Enabled by default for entry-level FortiGates; see Automatic firmware updates .	option	-	disable **						

Parameter	Description	Type	Size	Default																
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable automatic patch-level firmware upgrade to latest version from FortiGuard.</td></tr><tr><td><i>disable</i></td><td>Disable automatic patch-level firmware upgrade to latest version from FortiGuard.</td></tr></table>				Option	Description	<i>enable</i>	Enable automatic patch-level firmware upgrade to latest version from FortiGuard.	<i>disable</i>	Disable automatic patch-level firmware upgrade to latest version from FortiGuard.										
	Option	Description																		
	<i>enable</i>	Enable automatic patch-level firmware upgrade to latest version from FortiGuard.																		
<i>disable</i>	Disable automatic patch-level firmware upgrade to latest version from FortiGuard.																			
auto-firmware-upgrade-day	Allowed day(s) of the week to install an automatic patch-level firmware upgrade from FortiGuard (default is none). Disallow any day of the week to use auto-firmware-upgrade-delay instead, which waits for designated days before installing an automatic patch-level firmware upgrade.	option	-																	
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>sunday</i></td><td>Sunday.</td></tr><tr><td><i>monday</i></td><td>Monday.</td></tr><tr><td><i>tuesday</i></td><td>Tuesday.</td></tr><tr><td><i>wednesday</i></td><td>Wednesday.</td></tr><tr><td><i>thursday</i></td><td>Thursday.</td></tr><tr><td><i>friday</i></td><td>Friday.</td></tr><tr><td><i>saturday</i></td><td>Saturday.</td></tr></table>				Option	Description	<i>sunday</i>	Sunday.	<i>monday</i>	Monday.	<i>tuesday</i>	Tuesday.	<i>wednesday</i>	Wednesday.	<i>thursday</i>	Thursday.	<i>friday</i>	Friday.	<i>saturday</i>	Saturday.
	Option	Description																		
	<i>sunday</i>	Sunday.																		
	<i>monday</i>	Monday.																		
	<i>tuesday</i>	Tuesday.																		
	<i>wednesday</i>	Wednesday.																		
	<i>thursday</i>	Thursday.																		
	<i>friday</i>	Friday.																		
<i>saturday</i>	Saturday.																			
auto-firmware-upgrade-delay	Delay of day(s) before installing an automatic patch-level firmware upgrade from FortiGuard (default = 3). Set it 0 to use auto-firmware-upgrade-day instead, which selects allowed day(s) of the week for installing an automatic patch-level firmware upgrade.	integer	Minimum value: 3 0 Maximum value: 14																	
auto-firmware-upgrade-end-hour	End time in the designated time window for automatic patch-level firmware upgrade from FortiGuard in 24 hour time (0 ~ 23, default = 4). When the end time is smaller than the start time, the end time is interpreted as the next day. The actual upgrade time is selected randomly within the time window.	integer	Minimum value: 4 0 Maximum value: 23																	

Parameter	Description	Type	Size	Default								
auto-firmware-upgrade-start-hour	Start time in the designated time window for automatic patch-level firmware upgrade from FortiGuard in 24 hour time (0 ~ 23, default = 2). The actual upgrade time is selected randomly within the time window.	integer	Minimum value: 0 Maximum value: 23	1								
auto-join-forticloud *	Automatically connect to and login to FortiCloud.	option	-	enable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable automatic connection and login to FortiCloud.</td></tr><tr><td>disable</td><td>Disable automatic connection and login to FortiCloud.</td></tr></table>	Option	Description	enable	Enable automatic connection and login to FortiCloud.	disable	Disable automatic connection and login to FortiCloud.					
Option	Description											
enable	Enable automatic connection and login to FortiCloud.											
disable	Disable automatic connection and login to FortiCloud.											
ddns-server-ip	IP address of the FortiDDNS server.	ipv4-address	Not Specified	0.0.0.0								
ddns-server-ip6	IPv6 address of the FortiDDNS server.	ipv6-address	Not Specified	::								
ddns-server-port	Port used to communicate with FortiDDNS servers.	integer	Minimum value: 1 Maximum value: 65535	443								
fortiguard-anycast	Enable/disable use of FortiGuard's Anycast network.	option	-	enable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable use of FortiGuard's Anycast network.</td></tr><tr><td>disable</td><td>Disable use of FortiGuard's Anycast network.</td></tr></table>	Option	Description	enable	Enable use of FortiGuard's Anycast network.	disable	Disable use of FortiGuard's Anycast network.					
Option	Description											
enable	Enable use of FortiGuard's Anycast network.											
disable	Disable use of FortiGuard's Anycast network.											
fortiguard-anycast-source	Configure which of Fortinet's servers to provide FortiGuard services in FortiGuard's anycast network. Default is Fortinet.	option	-	fortinet								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>fortinet</td><td>Use Fortinet's servers to provide FortiGuard services in FortiGuard's anycast network.</td></tr><tr><td>aws</td><td>Use Fortinet's AWS servers to provide FortiGuard services in FortiGuard's anycast network.</td></tr><tr><td>debug</td><td>Use Fortinet's internal test servers to provide FortiGuard services in FortiGuard's anycast network.</td></tr></table>	Option	Description	fortinet	Use Fortinet's servers to provide FortiGuard services in FortiGuard's anycast network.	aws	Use Fortinet's AWS servers to provide FortiGuard services in FortiGuard's anycast network.	debug	Use Fortinet's internal test servers to provide FortiGuard services in FortiGuard's anycast network.			
Option	Description											
fortinet	Use Fortinet's servers to provide FortiGuard services in FortiGuard's anycast network.											
aws	Use Fortinet's AWS servers to provide FortiGuard services in FortiGuard's anycast network.											
debug	Use Fortinet's internal test servers to provide FortiGuard services in FortiGuard's anycast network.											

Parameter	Description	Type	Size	Default
gui-prompt-auto-upgrade	Enable/disable prompting of automatic patch-level firmware upgrade recommendation.	option	-	disable **
	Option	Description		
	<i>enable</i>	Enable prompting of automatic patch-level firmware upgrade recommendation.		
	<i>disable</i>	Disable prompting of automatic patch-level firmware upgrade recommendation.		
interface	Specify outgoing interface to reach server.	string	Maximum length: 15	
interface-select-method	Specify how to select outgoing interface to reach server.	option	-	auto
	Option	Description		
	<i>auto</i>	Set outgoing interface automatically.		
	<i>sdwan</i>	Set outgoing interface by SD-WAN or policy routing rules.		
	<i>specify</i>	Set outgoing interface manually.		
load-balance-servers	Number of servers to alternate between as first FortiGuard option.	integer	Minimum value: 1 Maximum value: 266	
outbreak-prevention-cache	Enable/disable FortiGuard Virus Outbreak Prevention cache.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable FortiGuard antivirus caching.		
	<i>disable</i>	Disable FortiGuard antivirus caching.		
outbreak-prevention-cache-mpercent	Maximum percent of memory FortiGuard Virus Outbreak Prevention cache can use (1 - 15%, default = 2).	integer	Minimum value: 1 Maximum value: 15	2
outbreak-prevention-cache-ttl	Time-to-live for FortiGuard Virus Outbreak Prevention cache entries (300 - 86400 sec, default = 300).	integer	Minimum value: 300 Maximum value: 86400	300

Parameter	Description	Type	Size	Default
outbreak-prevention-expiration	Expiration date of FortiGuard Virus Outbreak Prevention contract. Read-only.	integer	Minimum value: 0 0 Maximum value: 4294967295	0
outbreak-prevention-force-off	Turn off FortiGuard Virus Outbreak Prevention service.	option	-	disable
	Option	Description		
	enable	Turn off FortiGuard antivirus service.		
	disable	Allow the FortiGuard antivirus service.		
outbreak-prevention-license	Interval of time between license checks for FortiGuard Virus Outbreak Prevention contract. Read-only.	integer	Minimum value: 4294967295 0 Maximum value: 4294967295	4294967295
outbreak-prevention-timeout	FortiGuard Virus Outbreak Prevention time out (1 - 30 sec, default = 7).	integer	Minimum value: 7 1 Maximum value: 30	7
persistent-connection	Enable/disable use of persistent connection to receive update notification from FortiGuard.	option	-	disable
	Option	Description		
	enable	Enable persistent connection to receive update notification from FortiGuard.		
	disable	Disable persistent connection to receive update notification from FortiGuard.		
port	Port used to communicate with the FortiGuard servers.	option	-	443
	Option	Description		
	8888	port 8888 for server communication.		
	53	port 53 for server communication.		
	80	port 80 for server communication.		
	443	port 443 for server communication.		
protocol	Protocol used to communicate with the FortiGuard servers.	option	-	https

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>udp</i>	UDP for server communication (for use by FortiGuard or FortiManager).		
	<i>http</i>	HTTP for server communication (for use only by FortiManager).		
	<i>https</i>	HTTPS for server communication (for use by FortiGuard or FortiManager).		
proxy-password	Proxy user password.	password	Not Specified	
proxy-server-ip	Hostname or IP address of the proxy server.	string	Maximum length: 63	
proxy-server-port	Port used to communicate with the proxy server.	integer	Minimum value: 0 0 Maximum value: 65535	
proxy-username	Proxy user name.	string	Maximum length: 64	
sandbox-inline-scan	Enable/disable FortiCloud Sandbox inline-scan.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable FortiCloud Sandbox inline scan.		
	<i>disable</i>	Disable FortiCloud Sandbox inline scan.		
sandbox-region	FortiCloud Sandbox region.	string	Maximum length: 63	
sdns-options	Customization options for the FortiGuard DNS service.	option	-	
	Option	Description		
	<i>include-question-section</i>	Include DNS question section in the FortiGuard DNS setup message.		
sdns-server-ip	IP address of the FortiGuard DNS rating server.	user	Not Specified	
sdns-server-port	Port to connect to on the FortiGuard DNS rating server.	integer	Minimum value: 53 1 Maximum value: 65535	
service-account-id	Service account ID.	string	Maximum length: 50	

Parameter	Description	Type	Size	Default								
source-ip	Source IPv4 address used to communicate with FortiGuard.	ipv4-address	Not Specified	0.0.0.0								
source-ip6	Source IPv6 address used to communicate with FortiGuard.	ipv6-address	Not Specified	::								
update-build-proxy	Enable/disable proxy dictionary rebuild.	option	-	enable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable proxy dictionary rebuild.</td></tr><tr><td><i>disable</i></td><td>Disable proxy dictionary rebuild.</td></tr></table>	Option	Description	<i>enable</i>	Enable proxy dictionary rebuild.	<i>disable</i>	Disable proxy dictionary rebuild.					
Option	Description											
<i>enable</i>	Enable proxy dictionary rebuild.											
<i>disable</i>	Disable proxy dictionary rebuild.											
update-extdb	Enable/disable external resource update.	option	-	enable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable external resource update.</td></tr><tr><td><i>disable</i></td><td>Disable external resource update.</td></tr></table>	Option	Description	<i>enable</i>	Enable external resource update.	<i>disable</i>	Disable external resource update.					
Option	Description											
<i>enable</i>	Enable external resource update.											
<i>disable</i>	Disable external resource update.											
update-ffdb	Enable/disable Internet Service Database update.	option	-	enable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable Internet Service Database update.</td></tr><tr><td><i>disable</i></td><td>Disable Internet Service Database update.</td></tr></table>	Option	Description	<i>enable</i>	Enable Internet Service Database update.	<i>disable</i>	Disable Internet Service Database update.					
Option	Description											
<i>enable</i>	Enable Internet Service Database update.											
<i>disable</i>	Disable Internet Service Database update.											
update-server-location	Location from which to receive FortiGuard updates.	option	-	automatic								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>automatic</i></td><td>FortiGuard servers chosen based on closest proximity to FortiGate unit.</td></tr><tr><td><i>usa</i></td><td>FortiGuard servers in United States.</td></tr><tr><td><i>eu</i></td><td>FortiGuard servers in the European Union.</td></tr></table>	Option	Description	<i>automatic</i>	FortiGuard servers chosen based on closest proximity to FortiGate unit.	<i>usa</i>	FortiGuard servers in United States.	<i>eu</i>	FortiGuard servers in the European Union.			
Option	Description											
<i>automatic</i>	FortiGuard servers chosen based on closest proximity to FortiGate unit.											
<i>usa</i>	FortiGuard servers in United States.											
<i>eu</i>	FortiGuard servers in the European Union.											
update-uwdb	Enable/disable allowlist update.	option	-	enable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable allowlist update.</td></tr><tr><td><i>disable</i></td><td>Disable allowlist update.</td></tr></table>	Option	Description	<i>enable</i>	Enable allowlist update.	<i>disable</i>	Disable allowlist update.					
Option	Description											
<i>enable</i>	Enable allowlist update.											
<i>disable</i>	Disable allowlist update.											

Parameter	Description	Type	Size	Default						
vdom	FortiGuard Service virtual domain name.	string	Maximum length: 31							
videofilter-expiration	Expiration date of the FortiGuard video filter contract. Read-only.	integer	Minimum value: 0 Maximum value: 4294967295	0						
videofilter-license	Interval of time between license checks for the FortiGuard video filter contract. Read-only.	integer	Minimum value: 0 Maximum value: 4294967295	4294967295						
webfilter-cache	Enable/disable FortiGuard web filter caching.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable FortiGuard web filter caching.</td></tr><tr><td>disable</td><td>Disable FortiGuard web filter caching.</td></tr></table>				Option	Description	enable	Enable FortiGuard web filter caching.	disable	Disable FortiGuard web filter caching.
Option	Description									
enable	Enable FortiGuard web filter caching.									
disable	Disable FortiGuard web filter caching.									
webfilter-cache-ttl	Time-to-live for web filter cache entries in seconds (300 - 86400).	integer	Minimum value: 300 Maximum value: 86400	3600						
webfilter-expiration	Expiration date of the FortiGuard web filter contract. Read-only.	integer	Minimum value: 0 Maximum value: 4294967295	0						
webfilter-force-off	Enable/disable turning off the FortiGuard web filtering service.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Turn off the FortiGuard web filtering service.</td></tr><tr><td>disable</td><td>Allow the FortiGuard web filtering service to operate.</td></tr></table>				Option	Description	enable	Turn off the FortiGuard web filtering service.	disable	Allow the FortiGuard web filtering service to operate.
Option	Description									
enable	Turn off the FortiGuard web filtering service.									
disable	Allow the FortiGuard web filtering service to operate.									
webfilter-license	Interval of time between license checks for the FortiGuard web filter contract. Read-only.	integer	Minimum value: 0 Maximum value: 4294967295	4294967295						
webfilter-timeout	Web filter query time out (1 - 30 sec, default = 7).	integer	Minimum value: 1 Maximum value: 30	15						

* This parameter may not exist in some models.

** Values may differ between models.

config system fortindr

Configure FortiNDR.

```
config system fortindr
  Description: Configure FortiNDR.
  set interface {string}
  set interface-select-method [auto|sdwan|...]
  set source-ip {string}
  set status [disable|enable]
end
```

config system fortindr

Parameter	Description	Type	Size	Default								
interface	Specify outgoing interface to reach server.	string	Maximum length: 15									
interface-select-method	Specify how to select outgoing interface to reach server.	option	-	auto								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>auto</td><td>Set outgoing interface automatically.</td></tr><tr><td>sdwan</td><td>Set outgoing interface by SD-WAN or policy routing rules.</td></tr><tr><td>specify</td><td>Set outgoing interface manually.</td></tr></table>	Option	Description	auto	Set outgoing interface automatically.	sdwan	Set outgoing interface by SD-WAN or policy routing rules.	specify	Set outgoing interface manually.			
Option	Description											
auto	Set outgoing interface automatically.											
sdwan	Set outgoing interface by SD-WAN or policy routing rules.											
specify	Set outgoing interface manually.											
source-ip	Source IP address for communications to FortiNDR.	string	Maximum length: 63									
status	Enable/disable FortiNDR.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Disable FortiNDR.</td></tr><tr><td>enable</td><td>Enable FortiNDR.</td></tr></table>	Option	Description	disable	Disable FortiNDR.	enable	Enable FortiNDR.					
Option	Description											
disable	Disable FortiNDR.											
enable	Enable FortiNDR.											

config system fortisandbox

Configure FortiSandbox.

```
config system fortisandbox
  Description: Configure FortiSandbox.
  set email {string}
```

```

set enc-algorithm [default|high|...]
set forticloud [enable|disable]
set inline-scan [enable|disable]
set interface {string}
set interface-select-method [auto|sdwan|...]
set server {string}
set source-ip {string}
set ssl-min-proto-version [default|SSLv3|...]
set status [enable|disable]
end

```

config system fortisandbox

Parameter	Description	Type	Size	Default								
email	Notifier email address.	string	Maximum length: 63									
enc-algorithm	Configure the level of SSL protection for secure communication with FortiSandbox.	option	-	default								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>default</td><td>SSL communication with high and medium encryption algorithms.</td></tr><tr><td>high</td><td>SSL communication with high encryption algorithms.</td></tr><tr><td>low</td><td>SSL communication with low encryption algorithms.</td></tr></table>	Option	Description	default	SSL communication with high and medium encryption algorithms.	high	SSL communication with high encryption algorithms.	low	SSL communication with low encryption algorithms.			
Option	Description											
default	SSL communication with high and medium encryption algorithms.											
high	SSL communication with high encryption algorithms.											
low	SSL communication with low encryption algorithms.											
forticloud	Enable/disable FortiSandbox Cloud.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable FortiSandbox Cloud.</td></tr><tr><td>disable</td><td>Disable FortiSandbox Cloud.</td></tr></table>	Option	Description	enable	Enable FortiSandbox Cloud.	disable	Disable FortiSandbox Cloud.					
Option	Description											
enable	Enable FortiSandbox Cloud.											
disable	Disable FortiSandbox Cloud.											
inline-scan	Enable/disable FortiSandbox inline scan.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable FortiSandbox inline scan.</td></tr><tr><td>disable</td><td>Disable FortiSandbox inline scan.</td></tr></table>	Option	Description	enable	Enable FortiSandbox inline scan.	disable	Disable FortiSandbox inline scan.					
Option	Description											
enable	Enable FortiSandbox inline scan.											
disable	Disable FortiSandbox inline scan.											
interface	Specify outgoing interface to reach server.	string	Maximum length: 15									
interface-select-method	Specify how to select outgoing interface to reach server.	option	-	auto								

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>auto</i>	Set outgoing interface automatically.		
	<i>sdwan</i>	Set outgoing interface by SD-WAN or policy routing rules.		
	<i>specify</i>	Set outgoing interface manually.		
server	Server address of the remote FortiSandbox.	string	Maximum length: 63	
source-ip	Source IP address for communications to FortiSandbox.	string	Maximum length: 63	
ssl-min-proto-version	Minimum supported protocol version for SSL/TLS connections (default is to follow system global setting).	option	-	default
	Option	Description		
	<i>default</i>	Follow system global setting.		
	<i>SSLv3</i>	SSLv3.		
	<i>TLSv1</i>	TLSv1.		
	<i>TLSv1-1</i>	TLSv1.1.		
	<i>TLSv1-2</i>	TLSv1.2.		
status	Enable/disable FortiSandbox.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable FortiSandbox.		
	<i>disable</i>	Disable FortiSandbox.		

config system fsso-polling

Configure Fortinet Single Sign On (FSSO) server.

```

config system fsso-polling
    Description: Configure Fortinet Single Sign On (FSSO) server.
    set auth-password {password}
    set authentication [enable|disable]
    set listening-port {integer}
    set status [enable|disable]
end

```

config system fssso-polling

Parameter	Description	Type	Size	Default
auth-password	Password to connect to FSSO Agent.	password	Not Specified	
authentication	Enable/disable FSSO Agent Authentication.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable FSSO Agent Authentication.		
	<i>disable</i>	Disable FSSO Agent Authentication.		
listening-port	Listening port to accept clients (1 - 65535).	integer	Minimum value: 1 Maximum value: 65535	8000
status	Enable/disable FSSO Polling Mode.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable FSSO Polling Mode.		
	<i>disable</i>	Disable FSSO Polling Mode.		

config system ftm-push

Configure FortiToken Mobile push services.

```
config system ftm-push
  Description: Configure FortiToken Mobile push services.
  set server {string}
  set server-cert {string}
  set server-ip {ipv4-address}
  set server-port {integer}
  set status [enable|disable]
end
```

config system ftm-push

Parameter	Description	Type	Size	Default
server	IPv4 address or domain name of FortiToken Mobile push services server.	string	Maximum length: 127	

Parameter	Description	Type	Size	Default
server-cert	Name of the server certificate to be used for SSL (default = Fortinet_Factory).	string	Maximum length: 35	Fortinet_Factory
server-ip	IPv4 address of FortiToken Mobile push services server (format: xxx.xxx.xxx.xxx).	ipv4-address	Not Specified	0.0.0.0
server-port	Port to communicate with FortiToken Mobile push services server (1 - 65535, default = 4433).	integer	Minimum value: 1 Maximum value: 65535	4433
status	Enable/disable the use of FortiToken Mobile push services.	option	-	disable
		Option	Description	
		<i>enable</i>	Enable FortiToken Mobile push services.	
		<i>disable</i>	Disable FortiToken Mobile push services.	

config system geneve

Configure GENEVE devices.

```

config system geneve
  Description: Configure GENEVE devices.
  edit <name>
    set dstport {integer}
    set interface {string}
    set ip-version [ipv4-unicast|ipv6-unicast]
    set remote-ip {ipv4-address}
    set remote-ip6 {ipv6-address}
    set type [ethernet|ppp]
    set vni {integer}
  next
end

```

config system geneve

Parameter	Description	Type	Size	Default
dstport	GENEVE destination port (1 - 65535, default = 6081).	integer	Minimum value: 1 Maximum value: 65535	6081

Parameter	Description	Type	Size	Default						
interface	Outgoing interface for GENEVE encapsulated traffic.	string	Maximum length: 15							
ip-version	IP version to use for the GENEVE interface and so for communication over the GENEVE. IPv4 or IPv6 unicast.	option	-	ipv4-unicast						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>ipv4-unicast</td><td>Use IPv4 unicast addressing over the GENEVE.</td></tr><tr><td>ipv6-unicast</td><td>Use IPv6 unicast addressing over the GENEVE.</td></tr></table>				Option	Description	ipv4-unicast	Use IPv4 unicast addressing over the GENEVE.	ipv6-unicast	Use IPv6 unicast addressing over the GENEVE.
Option	Description									
ipv4-unicast	Use IPv4 unicast addressing over the GENEVE.									
ipv6-unicast	Use IPv6 unicast addressing over the GENEVE.									
name	GENEVE device or interface name. Must be an unique interface name.	string	Maximum length: 15							
remote-ip	IPv4 address of the GENEVE interface on the device at the remote end of the GENEVE.	ipv4-address	Not Specified	0.0.0.0						
remote-ip6	IPv6 IP address of the GENEVE interface on the device at the remote end of the GENEVE.	ipv6-address	Not Specified	::						
type	GENEVE type.	option	-	ethernet						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>ethernet</td><td>Internal packet includes Ethernet header.</td></tr><tr><td>ppp</td><td>Internal packet does not include Ethernet header.</td></tr></table>				Option	Description	ethernet	Internal packet includes Ethernet header.	ppp	Internal packet does not include Ethernet header.
Option	Description									
ethernet	Internal packet includes Ethernet header.									
ppp	Internal packet does not include Ethernet header.									
vni	GENEVE network ID.	integer	Minimum value: 0 Maximum value: 16777215	0						

config system geoip-override

Configure geographical location mapping for IP address(es) to override mappings from FortiGuard.

```

config system geoip-override
    Description: Configure geographical location mapping for IP address(es) to override mappings
    from FortiGuard.
    edit <name>
        set country-id {string}
        set description {string}
        config ip-range
            Description: Table of IP ranges assigned to country.
            edit <id>
                set end-ip {ipv4-address}
                set start-ip {ipv4-address}
            
```

```

        next
    end
    config ip6-range
        Description: Table of IPv6 ranges assigned to country.
        edit <id>
            set end-ip {ipv6-address}
            set start-ip {ipv6-address}
        next
    end
next
end

```

config system geoip-override

Parameter	Description	Type	Size	Default
country-id	Two character Country ID code.	string	Maximum length: 2	
description	Description.	string	Maximum length: 127	
name	Location name.	string	Maximum length: 63	

config ip-range

Parameter	Description	Type	Size	Default
end-ip	Ending IP address, inclusive, of the address range (format: xxx.xxx.xxx.xxx).	ipv4-address	Not Specified	0.0.0.0
id	ID of individual entry in the IP range table.	integer	Minimum value: 0 Maximum value: 65535	0
start-ip	Starting IP address, inclusive, of the address range (format: xxx.xxx.xxx.xxx).	ipv4-address	Not Specified	0.0.0.0

config ip6-range

Parameter	Description	Type	Size	Default
end-ip	Ending IP address, inclusive, of the address range (format: xxxx:xxxx:xxxx:xxxx:xxxx:xxxx:xxxx:xxxx).	ipv6-address	Not Specified	::

Parameter	Description	Type	Size	Default
id	ID of individual entry in the IPv6 range table.	integer	Minimum value: 0 Maximum value: 65535	0
start-ip	Starting IP address, inclusive, of the address range (format: xxxx:xxxx:xxxx:xxxx:xxxx:xxxx:xxxx:xxxx).	ipv6-address	Not Specified	::

config system global

Configure global attributes.

```
config system global
  Description: Configure global attributes.
  set admin-ble-button [enable|disable]
  set admin-concurrent [enable|disable]
  set admin-console-timeout {integer}
  set admin-forticloud-sso-default-profile {string}
  set admin-forticloud-sso-login [enable|disable]
  set admin-host {string}
  set admin-hsts-max-age {integer}
  set admin-https-pki-required [enable|disable]
  set admin-https-redirect [enable|disable]
  set admin-https-ssl-banned-ciphers {option1}, {option2}, ...
  set admin-https-ssl-ciphersuites {option1}, {option2}, ...
  set admin-https-ssl-versions {option1}, {option2}, ...
  set admin-lockout-duration {integer}
  set admin-lockout-threshold {integer}
  set admin-login-max {integer}
  set admin-port {integer}
  set admin-reset-button [enable|disable]
  set admin-restrict-local [enable|disable]
  set admin-scp [enable|disable]
  set admin-server-cert {string}
  set admin-sport {integer}
  set admin-ssh-grace-time {integer}
  set admin-ssh-password [enable|disable]
  set admin-ssh-port {integer}
  set admin-ssh-v1 [enable|disable]
  set admin-telnet [enable|disable]
  set admin-telnet-port {integer}
  set admintimeout {integer}
  set alias {string}
  set allow-traffic-redirect [enable|disable]
  set anti-replay [disable|loose|...]
  set arp-max-entry {integer}
  set auth-cert {string}
```

```
set auth-http-port {integer}
set auth-https-port {integer}
set auth-ike-saml-port {integer}
set auth-keepalive [enable|disable]
set auth-session-limit [block-new|logout-inactive]
set auto-auth-extension-device [enable|disable]
set autorun-log-fsck [enable|disable]
set av-affinity {string}
set av-failopen [pass|off|...]
set av-failopen-session [enable|disable]
set batch-cmdb [enable|disable]
set block-session-timer {integer}
set br-fdb-max-entry {integer}
set cert-chain-max {integer}
set cfg-revert-timeout {integer}
set cfg-save [automatic|manual|...]
set check-protocol-header [loose|strict]
set check-reset-range [strict|disable]
set cli-audit-log [enable|disable]
set cloud-communication [enable|disable]
set clt-cert-req [enable|disable]
set cmdbsvr-affinity {string}
set cpu-use-threshold {integer}
set csr-ca-attribute [enable|disable]
set daily-restart [enable|disable]
set default-service-source-port {user}
set device-idle-timeout {integer}
set dh-params [1024|1536|...]
set dnsproxy-worker-count {integer}
set early-tcp-npu-session [enable|disable]
set edit-vdom-prompt [enable|disable]
set extender-controller-reserved-network {ipv4-classnet-host}
set failtime {integer}
set faz-disk-buffer-size {integer}
set fds-statistics [enable|disable]
set fds-statistics-period {integer}
set fgd-alert-subscription {option1}, {option2}, ...
set forticontroller-proxy [enable|disable]
set forticontroller-proxy-port {integer}
set fortiextender [disable|enable]
set fortiextender-data-port {integer}
set fortiextender-discovery-lockdown [disable|enable]
set fortiextender-provision-on-authorization [enable|disable]
set fortiextender-vlan-mode [enable|disable]
set fortiservice-port {integer}
set fortitoken-cloud [enable|disable]
set gui-allow-incompatible-fabric-fgt [enable|disable]
set gui-app-detection-sdwan [enable|disable]
set gui-auto-upgrade-setup-warning [enable|disable]
set gui-cdn-domain-override {string}
set gui-cdn-usage [enable|disable]
set gui-certificates [enable|disable]
```

```
set gui-custom-language [enable|disable]
set gui-date-format [yyyy/MM/dd|dd/MM/yyyy|...]
set gui-date-time-source [system|browser]
set gui-device-latitude {string}
set gui-device-longitude {string}
set gui-display-hostname [enable|disable]
set gui-firmware-upgrade-warning [enable|disable]
set gui-forticare-registration-setup-warning [enable|disable]
set gui-fortigate-cloud-sandbox [enable|disable]
set gui-ipv6 [enable|disable]
set gui-local-out [enable|disable]
set gui-replacement-message-groups [enable|disable]
set gui-rest-api-cache [enable|disable]
set gui-theme [jade|neutrino|...]
set gui-wireless-opensecurity [enable|disable]
set gui-workflow-management [enable|disable]
set ha-affinity {string}
set honor-df [enable|disable]
set hostname {string}
set hyper-scale-vdom-num {integer}
set igmp-state-limit {integer}
set interface-subnet-usage [disable|enable]
set internal-switch-speed {option1}, {option2}, ...
set internet-service-database [mini|standard|...]
set interval {integer}
set ip-fragment-mem-thresholds {integer}
set ip-src-port-range {user}
set ips-affinity {string}
set ipsec-asic-offload [enable|disable]
set ipsec-ha-seqjump-rate {integer}
set ipsec-hmac-offload [enable|disable]
set ipsec-qat-offload [enable|disable]
set ipsec-round-robin [enable|disable]
set ipsec-soft-dec-async [enable|disable]
set ipv6-accept-dad {integer}
set ipv6-allow-anycast-probe [enable|disable]
set ipv6-allow-local-in-silent-drop [enable|disable]
set ipv6-allow-multicast-probe [enable|disable]
set ipv6-allow-traffic-redirect [enable|disable]
set irq-time-accounting [auto|force]
set language [english|french|...]
set ldapconntimeout {integer}
set legacy-poe-device-support [enable|disable]
set lldp-reception [enable|disable]
set lldp-transmission [enable|disable]
set log-single-cpu-high [enable|disable]
set log-ssl-connection [enable|disable]
set log-uuid-address [enable|disable]
set login-timestamp [enable|disable]
set long-vdom-name [enable|disable]
set management-ip {string}
set management-port {integer}
```

```

set management-port-use-admin-sport [enable|disable]
set management-vdom {string}
set max-route-cache-size {integer}
set memory-use-threshold-extreme {integer}
set memory-use-threshold-green {integer}
set memory-use-threshold-red {integer}
set miglog-affinity {string}
set miglogd-children {integer}
set multi-factor-authentication [optional|mandatory]
set ndp-max-entry {integer}
set npu-neighbor-update [enable|disable]
set per-user-bal [enable|disable]
set pmtu-discovery [enable|disable]
set policy-auth-concurrent {integer}
set post-login-banner [disable|enable]
set pre-login-banner [enable|disable]
set private-data-encryption [disable|enable]
set proxy-auth-lifetime [enable|disable]
set proxy-auth-lifetime-timeout {integer}
set proxy-auth-timeout {integer}
set proxy-cert-use-mgmt-vdom [enable|disable]
set proxy-hardware-acceleration [disable|enable]
set proxy-keep-alive-mode [session|traffic|...]
set proxy-re-authentication-time {integer}
set proxy-resource-mode [enable|disable]
set proxy-worker-count {integer}
set radius-port {integer}
set reboot-upon-config-restore [enable|disable]
set refresh {integer}
set remoteauthtimeout {integer}
set reset-sessionless-tcp [enable|disable]
set restart-time {user}
set revision-backup-on-logout [enable|disable]
set revision-image-auto-backup [enable|disable]
set scanunit-count {integer}
set security-rating-result-submission [enable|disable]
set security-rating-run-on-schedule [enable|disable]
set send-pmtu-icmp [enable|disable]
set sflowd-max-children-num {integer}
set show-backplane-intf [enable|disable]
set snat-route-change [enable|disable]
set special-file-23-support [disable|enable]
set speedtest-server [enable|disable]
set split-port {string}
config split-port-mode
    Description: Configure split port mode of ports.
    edit <interface>
        set split-mode [disable|4x10G|...]
    next
end
set ssd-trim-date {integer}
set ssd-trim-freq [never|hourly|...]

```

```

set ssd-trim-hour {integer}
set ssd-trim-min {integer}
set ssd-trim-weekday [sunday|monday|...]
set ssh-enc-algo {option1}, {option2}, ...
set ssh-kex-algo {option1}, {option2}, ...
set ssh-mac-algo {option1}, {option2}, ...
set ssl-min-proto-version [SSLv3|TLSv1|...]
set ssl-static-key-ciphers [enable|disable]
set sslvpn-ems-sn-check [enable|disable]
set sslvpn-max-worker-count {integer}
set strict-dirty-session-check [enable|disable]
set strong-crypto [enable|disable]
set switch-controller [disable|enable]
set switch-controller-reserved-network {ipv4-classnet-host}
set sys-perf-log-interval {integer}
set syslog-affinity {string}
set tcp-halfclose-timer {integer}
set tcp-halfopen-timer {integer}
set tcp-option [enable|disable]
set tcp-rst-timer {integer}
set tcp-timewait-timer {integer}
set tftp [enable|disable]
set timezone [01|02|...]
set traffic-priority [tos|dscp]
set traffic-priority-level [low|medium|...]
set two-factor-email-expiry {integer}
set two-factor-fac-expiry {integer}
set two-factor-ftk-expiry {integer}
set two-factor-ftm-expiry {integer}
set two-factor-sms-expiry {integer}
set udp-idle-timer {integer}
set url-filter-affinity {string}
set url-filter-count {integer}
set user-device-store-max-devices {integer}
set user-device-store-max-unified-mem {integer}
set user-device-store-max-users {integer}
set vdom-mode [no-vdom|multi-vdom]
set vip-arp-range [unlimited|restricted]
set virtual-switch-vlan [enable|disable]
set wad-affinity {string}
set wad-csvc-cs-count {integer}
set wad-csvc-db-count {integer}
set wad-memory-change-granularity {integer}
set wad-restart-end-time {user}
set wad-restart-mode [none|time|...]
set wad-restart-start-time {user}
set wad-source-affinity [disable|enable]
set wad-worker-count {integer}
set wifi-ca-certificate {string}
set wifi-certificate {string}
set wimax-4g-usb [enable|disable]
set wireless-controller [enable|disable]

```



```

set wireless-controller-port {integer}
set wireless-mode [ac|client|...]
end

```

config system global

Parameter	Description	Type	Size	Default						
admin-ble-button *	press the BLE button can enable BLE function	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Press the BLE button can enable BLE function</td></tr><tr><td>disable</td><td>Press the BLE button cannot enable BLE function</td></tr></table>	Option	Description	enable	Press the BLE button can enable BLE function	disable	Press the BLE button cannot enable BLE function			
Option	Description									
enable	Press the BLE button can enable BLE function									
disable	Press the BLE button cannot enable BLE function									
admin-concurrent	Enable/disable concurrent administrator logins. Use policy-auth-concurrent for firewall authenticated users.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable admin concurrent login.</td></tr><tr><td>disable</td><td>Disable admin concurrent login.</td></tr></table>	Option	Description	enable	Enable admin concurrent login.	disable	Disable admin concurrent login.			
Option	Description									
enable	Enable admin concurrent login.									
disable	Disable admin concurrent login.									
admin-console-timeout	Console login timeout that overrides the admin timeout value (15 - 300 seconds, default = 0, which disables the timeout).	integer	Minimum value: 0 15 Maximum value: 300							
admin-forticloud-sso-default-profile	Override access profile.	string	Maximum length: 35							
admin-forticloud-sso-login	Enable/disable FortiCloud admin login via SSO.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable FortiCloud admin login via SSO.</td></tr><tr><td>disable</td><td>Disable FortiCloud admin login via SSO.</td></tr></table>	Option	Description	enable	Enable FortiCloud admin login via SSO.	disable	Disable FortiCloud admin login via SSO.			
Option	Description									
enable	Enable FortiCloud admin login via SSO.									
disable	Disable FortiCloud admin login via SSO.									

Parameter	Description	Type	Size	Default						
admin-host	Administrative host for HTTP and HTTPS. When set, will be used in lieu of the client's Host header for any redirection.	string	Maximum length: 255							
admin-hsts-max-age	HTTPS Strict-Transport-Security header max-age in seconds. A value of 0 will reset any HSTS records in the browser. When admin-https-redirect is disabled the header max-age will be 0.	integer	Minimum value: 0 Maximum value: 2147483647	15552000						
admin-https-pki-required	Enable/disable admin login method. Enable to force administrators to provide a valid certificate to log in if PKI is enabled. Disable to allow administrators to log in with a certificate or password.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Admin users must provide a valid certificate when PKI is enabled for HTTPS admin access.</td></tr><tr><td>disable</td><td>Admin users can login by providing a valid certificate or password.</td></tr></table>				Option	Description	enable	Admin users must provide a valid certificate when PKI is enabled for HTTPS admin access.	disable	Admin users can login by providing a valid certificate or password.
Option	Description									
enable	Admin users must provide a valid certificate when PKI is enabled for HTTPS admin access.									
disable	Admin users can login by providing a valid certificate or password.									
admin-https-redirect	Enable/disable redirection of HTTP administration access to HTTPS.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable redirecting HTTP administration access to HTTPS.</td></tr><tr><td>disable</td><td>Disable redirecting HTTP administration access to HTTPS.</td></tr></table>				Option	Description	enable	Enable redirecting HTTP administration access to HTTPS.	disable	Disable redirecting HTTP administration access to HTTPS.
Option	Description									
enable	Enable redirecting HTTP administration access to HTTPS.									
disable	Disable redirecting HTTP administration access to HTTPS.									

Parameter	Description	Type	Size	Default																																		
admin-https-ssl-banned-ciphers	Select one or more cipher technologies that cannot be used in GUI HTTPS negotiations. Only applies to TLS 1.2 and below.	option	-																																			
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>RSA</i></td><td>Ban the use of cipher suites using RSA key.</td></tr><tr><td><i>DHE</i></td><td>Ban the use of cipher suites using authenticated ephemeral DH key agreement.</td></tr><tr><td><i>ECDHE</i></td><td>Ban the use of cipher suites using authenticated ephemeral ECDH key agreement.</td></tr><tr><td><i>DSS</i></td><td>Ban the use of cipher suites using DSS authentication.</td></tr><tr><td><i>ECDSA</i></td><td>Ban the use of cipher suites using ECDSA authentication.</td></tr><tr><td><i>AES</i></td><td>Ban the use of cipher suites using either 128 or 256 bit AES.</td></tr><tr><td><i>AESGCM</i></td><td>Ban the use of cipher suites using AES in Galois Counter Mode (GCM).</td></tr><tr><td><i>CAMELLIA</i></td><td>Ban the use of cipher suites using either 128 or 256 bit CAMELLIA.</td></tr><tr><td><i>3DES</i></td><td>Ban the use of cipher suites using triple DES.</td></tr><tr><td><i>SHA1</i></td><td>Ban the use of cipher suites using HMAC-SHA1.</td></tr><tr><td><i>SHA256</i></td><td>Ban the use of cipher suites using HMAC-SHA256.</td></tr><tr><td><i>SHA384</i></td><td>Ban the use of cipher suites using HMAC-SHA384.</td></tr><tr><td><i>STATIC</i></td><td>Ban the use of cipher suites using static keys.</td></tr><tr><td><i>CHACHA20</i></td><td>Ban the use of cipher suites using ChaCha20.</td></tr><tr><td><i>ARIA</i></td><td>Ban the use of cipher suites using ARIA.</td></tr><tr><td><i>AESCCM</i></td><td>Ban the use of cipher suites using AESCCM.</td></tr></table>	Option	Description	<i>RSA</i>	Ban the use of cipher suites using RSA key.	<i>DHE</i>	Ban the use of cipher suites using authenticated ephemeral DH key agreement.	<i>ECDHE</i>	Ban the use of cipher suites using authenticated ephemeral ECDH key agreement.	<i>DSS</i>	Ban the use of cipher suites using DSS authentication.	<i>ECDSA</i>	Ban the use of cipher suites using ECDSA authentication.	<i>AES</i>	Ban the use of cipher suites using either 128 or 256 bit AES.	<i>AESGCM</i>	Ban the use of cipher suites using AES in Galois Counter Mode (GCM).	<i>CAMELLIA</i>	Ban the use of cipher suites using either 128 or 256 bit CAMELLIA.	<i>3DES</i>	Ban the use of cipher suites using triple DES.	<i>SHA1</i>	Ban the use of cipher suites using HMAC-SHA1.	<i>SHA256</i>	Ban the use of cipher suites using HMAC-SHA256.	<i>SHA384</i>	Ban the use of cipher suites using HMAC-SHA384.	<i>STATIC</i>	Ban the use of cipher suites using static keys.	<i>CHACHA20</i>	Ban the use of cipher suites using ChaCha20.	<i>ARIA</i>	Ban the use of cipher suites using ARIA.	<i>AESCCM</i>	Ban the use of cipher suites using AESCCM.			
Option	Description																																					
<i>RSA</i>	Ban the use of cipher suites using RSA key.																																					
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<i>CHACHA20</i>	Ban the use of cipher suites using ChaCha20.																																					
<i>ARIA</i>	Ban the use of cipher suites using ARIA.																																					
<i>AESCCM</i>	Ban the use of cipher suites using AESCCM.																																					
admin-https-ssl-ciphersuites	Select one or more TLS 1.3 ciphersuites to enable. Does not affect ciphers in TLS 1.2 and below. At least one must be enabled. To disable all, remove TLS1.3 from admin-https-ssl-versions.	option	-	TLS-AES-128-GCM-SHA256 TLS-AES-256-GCM-SHA384 TLS-CHACHA20-POLY1305-SHA256																																		

Parameter	Description	Type	Size	Default													
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>TLS-AES-128-GCM-SHA256</td><td>Enable TLS-AES-128-GCM-SHA256 in TLS 1.3.</td></tr><tr><td>TLS-AES-256-GCM-SHA384</td><td>Enable TLS-AES-256-GCM-SHA384 in TLS 1.3.</td></tr><tr><td>TLS-CHACHA20-POLY1305-SHA256</td><td>Enable TLS-CHACHA20-POLY1305-SHA256 in TLS 1.3.</td></tr><tr><td>TLS-AES-128-CCM-SHA256</td><td>Enable TLS-AES-128-CCM-SHA256 in TLS 1.3.</td></tr><tr><td>TLS-AES-128-CCM-8-SHA256</td><td>Enable TLS-AES-128-CCM-8-SHA256 in TLS 1.3.</td></tr></table>		Option	Description	TLS-AES-128-GCM-SHA256	Enable TLS-AES-128-GCM-SHA256 in TLS 1.3.	TLS-AES-256-GCM-SHA384	Enable TLS-AES-256-GCM-SHA384 in TLS 1.3.	TLS-CHACHA20-POLY1305-SHA256	Enable TLS-CHACHA20-POLY1305-SHA256 in TLS 1.3.	TLS-AES-128-CCM-SHA256	Enable TLS-AES-128-CCM-SHA256 in TLS 1.3.	TLS-AES-128-CCM-8-SHA256	Enable TLS-AES-128-CCM-8-SHA256 in TLS 1.3.			
	Option	Description															
	TLS-AES-128-GCM-SHA256	Enable TLS-AES-128-GCM-SHA256 in TLS 1.3.															
	TLS-AES-256-GCM-SHA384	Enable TLS-AES-256-GCM-SHA384 in TLS 1.3.															
	TLS-CHACHA20-POLY1305-SHA256	Enable TLS-CHACHA20-POLY1305-SHA256 in TLS 1.3.															
	TLS-AES-128-CCM-SHA256	Enable TLS-AES-128-CCM-SHA256 in TLS 1.3.															
TLS-AES-128-CCM-8-SHA256	Enable TLS-AES-128-CCM-8-SHA256 in TLS 1.3.																
admin-https-ssl-versions	Allowed TLS versions for web administration.	option	-	tlsv1-2 tlsv1-3													
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>tlsv1-1</td><td>TLS 1.1.</td></tr><tr><td>tlsv1-2</td><td>TLS 1.2.</td></tr><tr><td>tlsv1-3</td><td>TLS 1.3.</td></tr></table>		Option	Description	tlsv1-1	TLS 1.1.	tlsv1-2	TLS 1.2.	tlsv1-3	TLS 1.3.							
	Option	Description															
	tlsv1-1	TLS 1.1.															
	tlsv1-2	TLS 1.2.															
tlsv1-3	TLS 1.3.																
admin-lockout-duration	Amount of time in seconds that an administrator account is locked out after reaching the admin-lockout-threshold for repeated failed login attempts.	integer	Minimum value: 60 1 Maximum value: 2147483647														
admin-lockout-threshold	Number of failed login attempts before an administrator account is locked out for the admin-lockout-duration.	integer	Minimum value: 3 1 Maximum value: 10														

Parameter	Description	Type	Size	Default						
admin-login-max	Maximum number of administrators who can be logged in at the same time (1 - 100, default = 100).	integer	Minimum value: 1 Maximum value: 100	100						
admin-port	Administrative access port for HTTP. (1 - 65535, default = 80).	integer	Minimum value: 1 Maximum value: 65535	80						
admin-reset-button *	Press the reset button can reset to factory default.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>press the reset button can reset to factory default</td></tr><tr><td>disable</td><td>press the reset button cannot reset to factory default</td></tr></table>				Option	Description	enable	press the reset button can reset to factory default	disable	press the reset button cannot reset to factory default
Option	Description									
enable	press the reset button can reset to factory default									
disable	press the reset button cannot reset to factory default									
admin-restrict-local	Enable/disable local admin authentication restriction when remote authenticator is up and running (default = disable).	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable local admin authentication restriction.</td></tr><tr><td>disable</td><td>Disable local admin authentication restriction.</td></tr></table>				Option	Description	enable	Enable local admin authentication restriction.	disable	Disable local admin authentication restriction.
Option	Description									
enable	Enable local admin authentication restriction.									
disable	Disable local admin authentication restriction.									
admin-scp	Enable/disable using SCP to download the system configuration. You can use SCP as an alternative method for backing up the configuration.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable allow system configuration download by SCP.</td></tr><tr><td>disable</td><td>Disable allow system configuration download by SCP.</td></tr></table>				Option	Description	enable	Enable allow system configuration download by SCP.	disable	Disable allow system configuration download by SCP.
Option	Description									
enable	Enable allow system configuration download by SCP.									
disable	Disable allow system configuration download by SCP.									
admin-server-cert	Server certificate that the FortiGate uses for HTTPS administrative connections.	string	Maximum length: 35	Fortinet_GUI_Server						

Parameter	Description	Type	Size	Default						
admin-sport	Administrative access port for HTTPS. (1 - 65535, default = 443).	integer	Minimum value: 1 Maximum value: 65535	443						
admin-ssh-grace-time	Maximum time in seconds permitted between making an SSH connection to the FortiGate unit and authenticating (10 - 3600 sec (1 hour), default 120).	integer	Minimum value: 10 Maximum value: 3600	120						
admin-ssh-password	Enable/disable password authentication for SSH admin access.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable password authentication for SSH admin access.</td></tr><tr><td>disable</td><td>Disable password authentication for SSH admin access.</td></tr></table>				Option	Description	enable	Enable password authentication for SSH admin access.	disable	Disable password authentication for SSH admin access.
Option	Description									
enable	Enable password authentication for SSH admin access.									
disable	Disable password authentication for SSH admin access.									
admin-ssh-port	Administrative access port for SSH. (1 - 65535, default = 22).	integer	Minimum value: 1 Maximum value: 65535	22						
admin-ssh-v1	Enable/disable SSH v1 compatibility.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable SSH v1 compatibility.</td></tr><tr><td>disable</td><td>Disable SSH v1 compatibility.</td></tr></table>				Option	Description	enable	Enable SSH v1 compatibility.	disable	Disable SSH v1 compatibility.
Option	Description									
enable	Enable SSH v1 compatibility.									
disable	Disable SSH v1 compatibility.									
admin-telnet	Enable/disable TELNET service.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable TELNET service.</td></tr><tr><td>disable</td><td>Disable TELNET service.</td></tr></table>				Option	Description	enable	Enable TELNET service.	disable	Disable TELNET service.
Option	Description									
enable	Enable TELNET service.									
disable	Disable TELNET service.									
admin-telnet-port	Administrative access port for TELNET. (1 - 65535, default = 23).	integer	Minimum value: 1 Maximum value: 65535	23						

Parameter	Description	Type	Size	Default								
admintimeout	Number of minutes before an idle administrator session times out (1 - 480 minutes (8 hours), default = 5). A shorter idle timeout is more secure.	integer	Minimum value: 1 Maximum value: 480	5								
alias	Alias for your FortiGate unit.	string	Maximum length: 35									
allow-traffic-redirect	Disable to prevent traffic with same local ingress and egress interface from being forwarded without policy check.	option	-	enable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable allow traffic redirect.</td></tr><tr><td>disable</td><td>Disable allow traffic redirect.</td></tr></table>				Option	Description	enable	Enable allow traffic redirect.	disable	Disable allow traffic redirect.		
Option	Description											
enable	Enable allow traffic redirect.											
disable	Disable allow traffic redirect.											
anti-replay	Level of checking for packet replay and TCP sequence checking.	option	-	strict								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Disable anti-replay check.</td></tr><tr><td>loose</td><td>Loose anti-replay check.</td></tr><tr><td>strict</td><td>Strict anti-replay check.</td></tr></table>				Option	Description	disable	Disable anti-replay check.	loose	Loose anti-replay check.	strict	Strict anti-replay check.
Option	Description											
disable	Disable anti-replay check.											
loose	Loose anti-replay check.											
strict	Strict anti-replay check.											
arp-max-entry	Maximum number of dynamically learned MAC addresses that can be added to the ARP table (131072 - 2147483647, default = 131072).	integer	Minimum value: 131072 Maximum value: 2147483647	131072								
auth-cert	Server certificate that the FortiGate uses for HTTPS firewall authentication connections.	string	Maximum length: 35	Fortinet_Factory								

Parameter	Description	Type	Size	Default
auth-http-port	User authentication HTTP port. (1 - 65535, default = 1000).	integer	Minimum value: 1 Maximum value: 65535	1000
auth-https-port	User authentication HTTPS port. (1 - 65535, default = 1003).	integer	Minimum value: 1 Maximum value: 65535	1003
auth-ike-saml-port	User IKE SAML authentication port (0 - 65535, default = 1001).	integer	Minimum value: 0 Maximum value: 65535	1001
auth-keepalive	Enable to prevent user authentication sessions from timing out when idle.	option	-	disable
	Option		Description	
	<i>enable</i>		Enable use of keep alive to extend authentication.	
	<i>disable</i>		Disable use of keep alive to extend authentication.	
auth-session-limit	Action to take when the number of allowed user authenticated sessions is reached.	option	-	block-new
	Option		Description	
	<i>block-new</i>		Block new user authentication attempts.	
	<i>logout-inactive</i>		Logout the most inactive user authenticated sessions.	
auto-auth-extension-device	Enable/disable automatic authorization of dedicated Fortinet extension devices.	option	-	enable
	Option		Description	
	<i>enable</i>		Enable automatic authorization of dedicated Fortinet extension device globally.	
	<i>disable</i>		Disable automatic authorization of dedicated Fortinet extension device globally.	

Parameter	Description	Type	Size	Default								
autorun-log-fsck	Enable/disable automatic log partition check after ungraceful shutdown.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable automatic log partition check after ungraceful shutdown.</td></tr><tr><td><i>disable</i></td><td>Disable automatic log partition check after ungraceful shutdown.</td></tr></table>	Option	Description	<i>enable</i>	Enable automatic log partition check after ungraceful shutdown.	<i>disable</i>	Disable automatic log partition check after ungraceful shutdown.					
Option	Description											
<i>enable</i>	Enable automatic log partition check after ungraceful shutdown.											
<i>disable</i>	Disable automatic log partition check after ungraceful shutdown.											
av-affinity *	Affinity setting for AV scanning (hexadecimal value up to 256 bits in the format of xxxxxxxxxxxxxxxxx).	string	Maximum length: 79	0								
av-failopen	Set the action to take if the FortiGate is running low on memory or the proxy connection limit has been reached.	option	-	pass								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>pass</i></td><td>Bypass the antivirus system when memory is low. Antivirus scanning resumes when the low memory condition is resolved.</td></tr><tr><td><i>off</i></td><td>Stop accepting new AV sessions when entering conserve mode, but continue to process current active sessions.</td></tr><tr><td><i>one-shot</i></td><td>Bypass the antivirus system when memory is low.</td></tr></table>	Option	Description	<i>pass</i>	Bypass the antivirus system when memory is low. Antivirus scanning resumes when the low memory condition is resolved.	<i>off</i>	Stop accepting new AV sessions when entering conserve mode, but continue to process current active sessions.	<i>one-shot</i>	Bypass the antivirus system when memory is low.			
Option	Description											
<i>pass</i>	Bypass the antivirus system when memory is low. Antivirus scanning resumes when the low memory condition is resolved.											
<i>off</i>	Stop accepting new AV sessions when entering conserve mode, but continue to process current active sessions.											
<i>one-shot</i>	Bypass the antivirus system when memory is low.											
av-failopen-session	When enabled and a proxy for a protocol runs out of room in its session table, that protocol goes into failopen mode and enacts the action specified by av-failopen.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable AV fail open session option.</td></tr><tr><td><i>disable</i></td><td>Disable AV fail open session option.</td></tr></table>	Option	Description	<i>enable</i>	Enable AV fail open session option.	<i>disable</i>	Disable AV fail open session option.					
Option	Description											
<i>enable</i>	Enable AV fail open session option.											
<i>disable</i>	Disable AV fail open session option.											

Parameter	Description	Type	Size	Default								
batch-cmdb	Enable/disable batch mode, allowing you to enter a series of CLI commands that will execute as a group once they are loaded.	option	-	enable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable batch mode to execute in CMDB server.</td></tr><tr><td><i>disable</i></td><td>Disable batch mode to execute in CMDB server.</td></tr></table>	Option	Description	<i>enable</i>	Enable batch mode to execute in CMDB server.	<i>disable</i>	Disable batch mode to execute in CMDB server.					
Option	Description											
<i>enable</i>	Enable batch mode to execute in CMDB server.											
<i>disable</i>	Disable batch mode to execute in CMDB server.											
block-session-timer	Duration in seconds for blocked sessions (1 - 300 sec (5 minutes), default = 30).	integer	Minimum value: 1 Maximum value: 300	30								
br-fdb-max-entry	Maximum number of bridge forwarding database (FDB) entries.	integer	Minimum value: 8192 Maximum value: 2147483647	8192								
cert-chain-max	Maximum number of certificates that can be traversed in a certificate chain.	integer	Minimum value: 1 Maximum value: 2147483647	8								
cfg-revert-timeout	Time-out for reverting to the last saved configuration. (10 - 4294967295 seconds, default = 600).	integer	Minimum value: 10 Maximum value: 4294967295	600								
cfg-save	Configuration file save mode for CLI changes.	option	-	automatic								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>automatic</i></td><td>Automatically save config.</td></tr><tr><td><i>manual</i></td><td>Manually save config.</td></tr><tr><td><i>revert</i></td><td>Manually save config and revert the config when timeout.</td></tr></table>	Option	Description	<i>automatic</i>	Automatically save config.	<i>manual</i>	Manually save config.	<i>revert</i>	Manually save config and revert the config when timeout.			
Option	Description											
<i>automatic</i>	Automatically save config.											
<i>manual</i>	Manually save config.											
<i>revert</i>	Manually save config and revert the config when timeout.											

Parameter	Description	Type	Size	Default						
check-protocol-header	Level of checking performed on protocol headers. Strict checking is more thorough but may affect performance. Loose checking is OK in most cases.	option	-	loose						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>loose</i></td><td>Check protocol header loosely.</td></tr><tr><td><i>strict</i></td><td>Check protocol header strictly.</td></tr></table>	Option	Description	<i>loose</i>	Check protocol header loosely.	<i>strict</i>	Check protocol header strictly.			
Option	Description									
<i>loose</i>	Check protocol header loosely.									
<i>strict</i>	Check protocol header strictly.									
check-reset-range	Configure ICMP error message verification. You can either apply strict RST range checking or disable it.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>strict</i></td><td>Check RST range strictly.</td></tr><tr><td><i>disable</i></td><td>Disable RST range check.</td></tr></table>	Option	Description	<i>strict</i>	Check RST range strictly.	<i>disable</i>	Disable RST range check.			
Option	Description									
<i>strict</i>	Check RST range strictly.									
<i>disable</i>	Disable RST range check.									
cli-audit-log	Enable/disable CLI audit log.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable CLI audit log.</td></tr><tr><td><i>disable</i></td><td>Disable CLI audit log.</td></tr></table>	Option	Description	<i>enable</i>	Enable CLI audit log.	<i>disable</i>	Disable CLI audit log.			
Option	Description									
<i>enable</i>	Enable CLI audit log.									
<i>disable</i>	Disable CLI audit log.									
cloud-communication	Enable/disable all cloud communication.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Allow cloud communication.</td></tr><tr><td><i>disable</i></td><td>Disable all cloud-related settings.</td></tr></table>	Option	Description	<i>enable</i>	Allow cloud communication.	<i>disable</i>	Disable all cloud-related settings.			
Option	Description									
<i>enable</i>	Allow cloud communication.									
<i>disable</i>	Disable all cloud-related settings.									
clt-cert-req	Enable/disable requiring administrators to have a client certificate to log into the GUI using HTTPS.	option	-	disable						

Parameter	Description	Type	Size	Default
	Option Description			
	<i>enable</i>	Enable require client certificate for GUI login.		
	<i>disable</i>	Disable require client certificate for GUI login.		
cmdbsvr-affinity	Affinity setting for cmdbsvr (hexadecimal value up to 256 bits in the format of xxxxxxxxxxxxxxxx).	string	Maximum length: 79	1
cpu-use-threshold	Threshold at which CPU usage is reported (% of total CPU, default = 90).	integer	Minimum value: 50 Maximum value: 99	90
csr-ca-attribute	Enable/disable the CA attribute in certificates. Some CA servers reject CSRs that have the CA attribute.	option	-	enable
	Option Description			
	<i>enable</i>	Enable CA attribute in CSR.		
	<i>disable</i>	Disable CA attribute in CSR.		
daily-restart	Enable/disable daily restart of FortiGate unit. Use the restart-time option to set the time of day for the restart.	option	-	disable
	Option Description			
	<i>enable</i>	Enable daily reboot of the FortiGate.		
	<i>disable</i>	Disable daily reboot of the FortiGate.		
default-service-source-port	Default service source port range (default = 1 - 65535).	user	Not Specified	
device-idle-timeout	Time in seconds that a device must be idle to automatically log the device user out. (30 - 31536000 sec (30 sec to 1 year), default = 300).	integer	Minimum value: 30 Maximum value: 31536000	300

Parameter	Description	Type	Size	Default																
dh-params	Number of bits to use in the Diffie-Hellman exchange for HTTPS/SSH protocols.	option	-	2048																
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>1024</td><td>1024 bits.</td></tr><tr><td>1536</td><td>1536 bits.</td></tr><tr><td>2048</td><td>2048 bits.</td></tr><tr><td>3072</td><td>3072 bits.</td></tr><tr><td>4096</td><td>4096 bits.</td></tr><tr><td>6144</td><td>6144 bits.</td></tr><tr><td>8192</td><td>8192 bits.</td></tr></table>				Option	Description	1024	1024 bits.	1536	1536 bits.	2048	2048 bits.	3072	3072 bits.	4096	4096 bits.	6144	6144 bits.	8192	8192 bits.
	Option	Description																		
	1024	1024 bits.																		
	1536	1536 bits.																		
	2048	2048 bits.																		
	3072	3072 bits.																		
	4096	4096 bits.																		
	6144	6144 bits.																		
8192	8192 bits.																			
dnsproxy-worker-count	DNS proxy worker count. For a FortiGate with multiple logical CPUs, you can set the DNS process number from 1 to the number of logical CPUs.	integer	Minimum value: 1 Maximum value: 8 **	1																
early-tcp-npu-session	Enable/disable early TCP NPU session.	option	-	disable																
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable early TCP NPU session in order to guarantee packet order of 3-way handshake.</td></tr><tr><td>disable</td><td>Disable early TCP NPU session in order to guarantee packet order of 3-way handshake.</td></tr></table>				Option	Description	enable	Enable early TCP NPU session in order to guarantee packet order of 3-way handshake.	disable	Disable early TCP NPU session in order to guarantee packet order of 3-way handshake.										
	Option	Description																		
	enable	Enable early TCP NPU session in order to guarantee packet order of 3-way handshake.																		
disable	Disable early TCP NPU session in order to guarantee packet order of 3-way handshake.																			
edit-vdom-prompt *	Enable/disable edit new VDOM prompt.	option	-	disable																
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable edit new VDOM prompt.</td></tr><tr><td>disable</td><td>Disable edit new VDOM prompt.</td></tr></table>				Option	Description	enable	Enable edit new VDOM prompt.	disable	Disable edit new VDOM prompt.										
	Option	Description																		
	enable	Enable edit new VDOM prompt.																		
disable	Disable edit new VDOM prompt.																			

Parameter	Description	Type	Size	Default
extender-controller-reserved-network	Configure reserved network subnet for managed LAN extension FortiExtender units. This is available when the FortiExtender daemon is running.	ipv4-classnet-host	Not Specified	10.252.0.1 255.255.0.0
failtime	Fail-time for server lost.	integer	Minimum value: 0 Maximum value: 4294967295	5
faz-disk-buffer-size	Maximum disk buffer size to temporarily store logs destined for FortiAnalyzer. To be used in the event that FortiAnalyzer is unavailable.	integer	Not Specified	0
fds-statistics	Enable/disable sending IPS, Application Control, and AntiVirus data to FortiGuard. This data is used to improve FortiGuard services and is not shared with external parties and is protected by Fortinet's privacy policy.	option	-	enable
	Option		Description	
	enable		Enable FortiGuard statistics.	
	disable		Disable FortiGuard statistics.	
fds-statistics-period	FortiGuard statistics collection period in minutes. (1 - 1440 min (1 min to 24 hours), default = 60).	integer	Minimum value: 1 Maximum value: 1440	60
fgd-alert-subscription	Type of alert to retrieve from FortiGuard.	option	-	
	Option		Description	
	advisory		Retrieve FortiGuard advisories, report and news alerts.	

Parameter	Description	Type	Size	Default												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>latest-threat</i></td><td>Retrieve latest FortiGuard threats alerts.</td></tr><tr><td><i>latest-virus</i></td><td>Retrieve latest FortiGuard virus alerts.</td></tr><tr><td><i>latest-attack</i></td><td>Retrieve latest FortiGuard attack alerts.</td></tr><tr><td><i>new-antivirus-db</i></td><td>Retrieve FortiGuard AV database release alerts.</td></tr><tr><td><i>new-attack-db</i></td><td>Retrieve FortiGuard IPS database release alerts.</td></tr></table>	Option	Description	<i>latest-threat</i>	Retrieve latest FortiGuard threats alerts.	<i>latest-virus</i>	Retrieve latest FortiGuard virus alerts.	<i>latest-attack</i>	Retrieve latest FortiGuard attack alerts.	<i>new-antivirus-db</i>	Retrieve FortiGuard AV database release alerts.	<i>new-attack-db</i>	Retrieve FortiGuard IPS database release alerts.			
	Option	Description														
	<i>latest-threat</i>	Retrieve latest FortiGuard threats alerts.														
	<i>latest-virus</i>	Retrieve latest FortiGuard virus alerts.														
	<i>latest-attack</i>	Retrieve latest FortiGuard attack alerts.														
	<i>new-antivirus-db</i>	Retrieve FortiGuard AV database release alerts.														
<i>new-attack-db</i>	Retrieve FortiGuard IPS database release alerts.															
forticontroller-proxy *	Enable/disable FortiController proxy.	option	-	enable												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable setting.</td></tr><tr><td><i>disable</i></td><td>Disable setting.</td></tr></table>	Option	Description	<i>enable</i>	Enable setting.	<i>disable</i>	Disable setting.									
	Option	Description														
	<i>enable</i>	Enable setting.														
<i>disable</i>	Disable setting.															
forticontroller-proxy-port *	FortiController proxy port (1024 - 49150).	integer	Minimum value: 1024 Maximum value: 49150	11133												
fortiextender	Enable/disable FortiExtender.	option	-	disable **												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>disable</i></td><td>Disable FortiExtender controller.</td></tr><tr><td><i>enable</i></td><td>Enable FortiExtender controller.</td></tr></table>	Option	Description	<i>disable</i>	Disable FortiExtender controller.	<i>enable</i>	Enable FortiExtender controller.									
	Option	Description														
	<i>disable</i>	Disable FortiExtender controller.														
<i>enable</i>	Enable FortiExtender controller.															
fortiextender-data-port	FortiExtender data port (1024 - 49150, default = 25246).	integer	Minimum value: 1024 Maximum value: 49150	25246												
fortiextender-discovery-lockdown	Enable/disable FortiExtender CAPWAP lockdown.	option	-	disable												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>disable</i></td><td>Unlock down new FortiExtender device discovery.</td></tr><tr><td><i>enable</i></td><td>Lock down new FortiExtender device discovery.</td></tr></table>	Option	Description	<i>disable</i>	Unlock down new FortiExtender device discovery.	<i>enable</i>	Lock down new FortiExtender device discovery.									
	Option	Description														
	<i>disable</i>	Unlock down new FortiExtender device discovery.														
<i>enable</i>	Lock down new FortiExtender device discovery.															

Parameter	Description	Type	Size	Default
fortiextender-provision-on-authorization	Enable/disable automatic provisioning of latest FortiExtender firmware on authorization.	option	-	disable
	Option Description			
	<i>enable</i>	Enable FortiExtender firmware provision on authorization.		
	<i>disable</i>	Disable FortiExtender firmware provision on authorization.		
fortiextender-vlan-mode *	Enable/disable FortiExtender VLAN mode.	option	-	disable
	Option Description			
	<i>enable</i>	Enable FortiExtender VLAN mode.		
	<i>disable</i>	Disable FortiExtender VLAN mode.		
fortiservice-port	FortiService port (1 - 65535, default = 8013). Used by FortiClient endpoint compliance. Older versions of FortiClient used a different port.	integer	Minimum value: 1 Maximum value: 65535	8013
fortitoken-cloud	Enable/disable FortiToken Cloud service.	option	-	enable
	Option Description			
	<i>enable</i>	Enable FortiToken Cloud service.		
	<i>disable</i>	Disable FortiToken Cloud service.		
gui-allow-incompatible-fabric-fgt	Enable/disable Allow FGT with incompatible firmware to be treated as compatible in security fabric on the GUI. May cause unexpected error.	option	-	disable

Parameter	Description	Type	Size	Default
	Option Description			
	<i>enable</i>	Display the feature in GUI.		
	<i>disable</i>	Do not display the feature in GUI.		
gui-app-detection-sdwan	Enable/disable Allow app-detection based SD-WAN.	option	-	disable
	Option Description			
	<i>enable</i>	Display the feature in GUI.		
	<i>disable</i>	Do not display the feature in GUI.		
gui-auto-upgrade-setup-warning	Enable/disable the automatic patch upgrade setup prompt on the GUI.	option	-	enable
	Option Description			
	<i>enable</i>	Display the feature in GUI.		
	<i>disable</i>	Do not display the feature in GUI.		
gui-cdn-domain-override	Domain of CDN server.	string	Maximum length: 255	
gui-cdn-usage	Enable/disable Load GUI static files from a CDN.	option	-	disable
	Option Description			
	<i>enable</i>	Display the feature in GUI.		
	<i>disable</i>	Do not display the feature in GUI.		
gui-certificates	Enable/disable the System > Certificate GUI page, allowing you to add and configure certificates from the GUI.	option	-	enable **
	Option Description			
	<i>enable</i>	Display the feature in GUI.		
	<i>disable</i>	Do not display the feature in GUI.		

Parameter	Description	Type	Size	Default														
gui-custom-language	Enable/disable custom languages in GUI.	option	-	disable														
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Display the feature in GUI.</td></tr><tr><td><i>disable</i></td><td>Do not display the feature in GUI.</td></tr></table>	Option	Description	<i>enable</i>	Display the feature in GUI.	<i>disable</i>	Do not display the feature in GUI.											
Option	Description																	
<i>enable</i>	Display the feature in GUI.																	
<i>disable</i>	Do not display the feature in GUI.																	
gui-date-format	Default date format used throughout GUI.	option	-	yyyy/MM/dd														
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>yyyy/MM/dd</i></td><td>Year/Month/Day.</td></tr><tr><td><i>dd/MM/yyyy</i></td><td>Day/Month/Year.</td></tr><tr><td><i>MM/dd/yyyy</i></td><td>Month/Day/Year.</td></tr><tr><td><i>yyyy-MM-dd</i></td><td>Year-Month-Day.</td></tr><tr><td><i>dd-MM-yyyy</i></td><td>Day-Month-Year.</td></tr><tr><td><i>MM-dd-yyyy</i></td><td>Month-Day-Year.</td></tr></table>	Option	Description	<i>yyyy/MM/dd</i>	Year/Month/Day.	<i>dd/MM/yyyy</i>	Day/Month/Year.	<i>MM/dd/yyyy</i>	Month/Day/Year.	<i>yyyy-MM-dd</i>	Year-Month-Day.	<i>dd-MM-yyyy</i>	Day-Month-Year.	<i>MM-dd-yyyy</i>	Month-Day-Year.			
Option	Description																	
<i>yyyy/MM/dd</i>	Year/Month/Day.																	
<i>dd/MM/yyyy</i>	Day/Month/Year.																	
<i>MM/dd/yyyy</i>	Month/Day/Year.																	
<i>yyyy-MM-dd</i>	Year-Month-Day.																	
<i>dd-MM-yyyy</i>	Day-Month-Year.																	
<i>MM-dd-yyyy</i>	Month-Day-Year.																	
gui-date-time-source	Source from which the FortiGate GUI uses to display date and time entries.	option	-	system														
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>system</i></td><td>Use this FortiGate unit's configured timezone.</td></tr><tr><td><i>browser</i></td><td>Use the web browser's timezone.</td></tr></table>	Option	Description	<i>system</i>	Use this FortiGate unit's configured timezone.	<i>browser</i>	Use the web browser's timezone.											
Option	Description																	
<i>system</i>	Use this FortiGate unit's configured timezone.																	
<i>browser</i>	Use the web browser's timezone.																	
gui-device-latitude	Add the latitude of the location of this FortiGate to position it on the Threat Map.	string	Maximum length: 19															
gui-device-longitude	Add the longitude of the location of this FortiGate to position it on the Threat Map.	string	Maximum length: 19															
gui-display-hostname	Enable/disable displaying the FortiGate's hostname on the GUI login page.	option	-	disable														

Parameter	Description	Type	Size	Default
	Option Description			
	<i>enable</i>	Display the feature in GUI.		
	<i>disable</i>	Do not display the feature in GUI.		
gui-firmware-upgrade-warning	Enable/disable the firmware upgrade warning on the GUI.	option	-	enable
	Option Description			
	<i>enable</i>	Display the feature in GUI.		
	<i>disable</i>	Do not display the feature in GUI.		
gui-forticare-registration-setup-warning	Enable/disable the FortiCare registration setup warning on the GUI.	option	-	enable
	Option Description			
	<i>enable</i>	Display the feature in GUI.		
	<i>disable</i>	Do not display the feature in GUI.		
gui-fortigate-cloud-sandbox	Enable/disable displaying FortiGate Cloud Sandbox on the GUI.	option	-	disable
	Option Description			
	<i>enable</i>	Display the feature in GUI.		
	<i>disable</i>	Do not display the feature in GUI.		
gui-ipv6	Enable/disable IPv6 settings on the GUI.	option	-	disable
	Option Description			
	<i>enable</i>	Display the feature in GUI.		
	<i>disable</i>	Do not display the feature in GUI.		
gui-local-out	Enable/disable Local-out traffic on the GUI.	option	-	disable

Parameter	Description	Type	Size	Default
	Option Description			
	<i>enable</i>			Display the feature in GUI.
	<i>disable</i>			Do not display the feature in GUI.
gui-replacement-message-groups	Enable/disable replacement message groups on the GUI.	option	-	disable
	Option Description			
	<i>enable</i>			Display the feature in GUI.
	<i>disable</i>			Do not display the feature in GUI.
gui-rest-api-cache	Enable/disable REST API result caching on FortiGate.	option	-	enable **
	Option Description			
	<i>enable</i>			Enable REST API result caching on FortiGate.
	<i>disable</i>			Disable REST API result caching on FortiGate.
gui-theme	Color scheme for the administration GUI.	option	-	jade
	Option Description			
	<i>jade</i>			Jade theme.
	<i>neutrino</i>			Neutrino theme.
	<i>mariner</i>			Mariner theme.
	<i>graphite</i>			Graphite theme.
	<i>melongene</i>			Melongene theme.
	<i>retro</i>			FortiOS v3 Retro theme.
	<i>dark-matter</i>			Dark Matter theme.
	<i>onyx</i>			Onyx theme.
	<i>eclipse</i>			Eclipse theme.
gui-wireless-openssl	Enable/disable wireless open security option on the GUI.	option	-	disable

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>enable</i>	Display the feature in GUI.		
	<i>disable</i>	Do not display the feature in GUI.		
gui-workflow-management	Enable/disable Workflow management features on the GUI.	option	-	disable
	Option	Description		
	<i>enable</i>	Display the feature in GUI.		
	<i>disable</i>	Do not display the feature in GUI.		
ha-affinity	Affinity setting for HA daemons (hexadecimal value up to 256 bits in the format of xxxxxxxxxxxxxxxx).	string	Maximum length: 79	1
honor-df	Enable/disable honoring of Don't-Fragment (DF) flag.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable honoring of Don't-Fragment flag.		
	<i>disable</i>	Disable honoring of Don't-Fragment flag.		
hostname	FortiGate unit's hostname. Most models will truncate names longer than 24 characters. Some models support hostnames up to 35 characters.	string	Maximum length: 35	
hyper-scale-vdom-num *	Number of VDOMs for hyper scale license.	integer	Minimum value: 1 Maximum value: 250	250
igmp-state-limit	Maximum number of IGMP memberships (96 - 64000, default = 3200).	integer	Minimum value: 96 Maximum value: 128000	3200

Parameter	Description	Type	Size	Default														
interface-subnet-usage	Enable/disable allowing use of interface-subnet setting in firewall addresses (default = enable).	option	-	enable														
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Disallow use of the interface-subnet setting in firewall addresses. Use in conjunction with the FortiGate REST API and when a large number of firewall addresses exist in the configuration.</td></tr><tr><td>enable</td><td>Allow use of the interface-subnet setting in firewall addresses.</td></tr></table>	Option	Description	disable	Disallow use of the interface-subnet setting in firewall addresses. Use in conjunction with the FortiGate REST API and when a large number of firewall addresses exist in the configuration.	enable	Allow use of the interface-subnet setting in firewall addresses.											
Option	Description																	
disable	Disallow use of the interface-subnet setting in firewall addresses. Use in conjunction with the FortiGate REST API and when a large number of firewall addresses exist in the configuration.																	
enable	Allow use of the interface-subnet setting in firewall addresses.																	
internal-switch-speed *	Internal port speed.	option	-															
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>auto</td><td>auto</td></tr><tr><td>1000full</td><td>1000M Full</td></tr><tr><td>100full</td><td>100M full.</td></tr><tr><td>100half</td><td>100M half.</td></tr><tr><td>10full</td><td>10M full.</td></tr><tr><td>10half</td><td>10M half.</td></tr></table>	Option	Description	auto	auto	1000full	1000M Full	100full	100M full.	100half	100M half.	10full	10M full.	10half	10M half.			
Option	Description																	
auto	auto																	
1000full	1000M Full																	
100full	100M full.																	
100half	100M half.																	
10full	10M full.																	
10half	10M half.																	
internet-service-database	Configure which Internet Service database size to download from FortiGuard and use.	option	-	full **														
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>mini</td><td>Small sized Internet Service database with very limited IP addresses.</td></tr><tr><td>standard</td><td>Medium sized Internet Service database with most IP addresses.</td></tr><tr><td>full</td><td>Full sized Internet Service database with all IP addresses.</td></tr><tr><td>on-demand</td><td>Internet Service database with customer selected IP addresses.</td></tr></table>	Option	Description	mini	Small sized Internet Service database with very limited IP addresses.	standard	Medium sized Internet Service database with most IP addresses.	full	Full sized Internet Service database with all IP addresses.	on-demand	Internet Service database with customer selected IP addresses.							
Option	Description																	
mini	Small sized Internet Service database with very limited IP addresses.																	
standard	Medium sized Internet Service database with most IP addresses.																	
full	Full sized Internet Service database with all IP addresses.																	
on-demand	Internet Service database with customer selected IP addresses.																	
interval	Dead gateway detection interval.	integer	Minimum value: 5 0 Maximum value: 4294967295															

Parameter	Description	Type	Size	Default
ip-fragment-mem-thresholds	Maximum memory (MB) used to reassemble IPv4/IPv6 fragments.	integer	Minimum value: 32 Maximum value: 2047	32
ip-src-port-range	IP source port range used for traffic originating from the FortiGate unit.	user	Not Specified	1024-25000
ips-affinity *	Affinity setting for IPS (hexadecimal value up to 256 bits in the format of xxxxxxxxxxxxxxxx; allowed CPUs must be less than total number of IPS engine daemons).	string	Maximum length: 79	0
ipsec-asic-offload *	Enable/disable ASIC offloading (hardware acceleration) for IPsec VPN traffic. Hardware acceleration can offload IPsec VPN sessions and accelerate encryption and decryption.	option	-	enable
		Option	Description	
		<i>enable</i>	Enable ASIC offload for IPsec VPN.	
		<i>disable</i>	Disable ASIC offload for IPsec VPN.	
ipsec-ha-seqjump-rate	ESP jump ahead rate (1G - 10G pps equivalent).	integer	Minimum value: 1 Maximum value: 10	10
ipsec-hmac-offload *	Enable/disable offloading (hardware acceleration) of HMAC processing for IPsec VPN.	option	-	enable
		Option	Description	
		<i>enable</i>	Enable offload IPsec HMAC processing to hardware if possible.	
		<i>disable</i>	Disable offload IPsec HMAC processing to hardware.	

Parameter	Description	Type	Size	Default						
ipsec-qat-offload *	Enable/disable QAT offloading (Intel QuickAssist) for IPsec VPN traffic. QuickAssist can accelerate IPsec encryption and decryption.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable QAT offload for IPsec VPN.</td></tr><tr><td><i>disable</i></td><td>Disable QAT offload for IPsec VPN.</td></tr></table>	Option	Description	<i>enable</i>	Enable QAT offload for IPsec VPN.	<i>disable</i>	Disable QAT offload for IPsec VPN.			
Option	Description									
<i>enable</i>	Enable QAT offload for IPsec VPN.									
<i>disable</i>	Disable QAT offload for IPsec VPN.									
ipsec-round-robin *	Enable/disable round-robin redistribution to multiple CPUs for IPsec VPN traffic.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable round-robin redistribution for IPsec VPN.</td></tr><tr><td><i>disable</i></td><td>Disable round-robin redistribution for IPsec VPN.</td></tr></table>	Option	Description	<i>enable</i>	Enable round-robin redistribution for IPsec VPN.	<i>disable</i>	Disable round-robin redistribution for IPsec VPN.			
Option	Description									
<i>enable</i>	Enable round-robin redistribution for IPsec VPN.									
<i>disable</i>	Disable round-robin redistribution for IPsec VPN.									
ipsec-soft-dec-async	Enable/disable software decryption asynchronization (using multiple CPUs to do decryption) for IPsec VPN traffic.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable software decryption asynchronization for IPsec VPN.</td></tr><tr><td><i>disable</i></td><td>Disable software decryption asynchronization for IPsec VPN.</td></tr></table>	Option	Description	<i>enable</i>	Enable software decryption asynchronization for IPsec VPN.	<i>disable</i>	Disable software decryption asynchronization for IPsec VPN.			
Option	Description									
<i>enable</i>	Enable software decryption asynchronization for IPsec VPN.									
<i>disable</i>	Disable software decryption asynchronization for IPsec VPN.									
ipv6-accept-dad	Enable/disable acceptance of IPv6 Duplicate Address Detection (DAD).	integer	Minimum value: 1 0 Maximum value: 2							
ipv6-allow-anycast-probe	Enable/disable IPv6 address probe through Anycast.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable probing of IPv6 address space through Anycast</td></tr></table>	Option	Description	<i>enable</i>	Enable probing of IPv6 address space through Anycast					
Option	Description									
<i>enable</i>	Enable probing of IPv6 address space through Anycast									

Parameter	Description	Type	Size	Default
	Option Description			
	<i>disable</i>			Disable probing of IPv6 address space through Anycast
ipv6-allow-local-in-silent-drop	Enable/disable silent drop of IPv6 local-in traffic.	option	-	enable
	Option Description			
	<i>enable</i>			Enable silent drop of IPv6 local-in traffic.
	<i>disable</i>			Disable silent drop of IPv6 local-in traffic.
ipv6-allow-multicast-probe	Enable/disable IPv6 address probe through Multicast.	option	-	disable
	Option Description			
	<i>enable</i>			Enable probing of IPv6 address space through Multicast.
	<i>disable</i>			Disable probing of IPv6 address space through Multicast.
ipv6-allow-traffic-redirect	Disable to prevent IPv6 traffic with same local ingress and egress interface from being forwarded without policy check.	option	-	enable
	Option Description			
	<i>enable</i>			Enable allow traffic IPv6 redirect.
	<i>disable</i>			Disable allow traffic IPv6 redirect.
irq-time-accounting	Configure CPU IRQ time accounting mode.	option	-	auto
	Option Description			
	<i>auto</i>			Automatically switch CPU accounting mode.
	<i>force</i>			Force the use of CPU IRQ time accounting mode.
language	GUI display language.	option	-	english
	Option Description			
	<i>english</i>			English.

Parameter	Description	Type	Size	Default																
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>french</i></td><td>French.</td></tr><tr><td><i>spanish</i></td><td>Spanish.</td></tr><tr><td><i>portuguese</i></td><td>Portuguese.</td></tr><tr><td><i>japanese</i></td><td>Japanese.</td></tr><tr><td><i>trach</i></td><td>Traditional Chinese.</td></tr><tr><td><i>simch</i></td><td>Simplified Chinese.</td></tr><tr><td><i>korean</i></td><td>Korean.</td></tr></table>	Option	Description	<i>french</i>	French.	<i>spanish</i>	Spanish.	<i>portuguese</i>	Portuguese.	<i>japanese</i>	Japanese.	<i>trach</i>	Traditional Chinese.	<i>simch</i>	Simplified Chinese.	<i>korean</i>	Korean.			
	Option	Description																		
	<i>french</i>	French.																		
	<i>spanish</i>	Spanish.																		
	<i>portuguese</i>	Portuguese.																		
	<i>japanese</i>	Japanese.																		
	<i>trach</i>	Traditional Chinese.																		
<i>simch</i>	Simplified Chinese.																			
<i>korean</i>	Korean.																			
ldapconntimeout	Global timeout for connections with remote LDAP servers in milliseconds (1 - 300000, default 500).	integer	Minimum value: 500 1 Maximum value: 300000	500																
legacy-poe-device-support *	Enable/disable legacy POE device support.	option	-	disable																
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable legacy POE device support.</td></tr><tr><td><i>disable</i></td><td>Disable legacy POE device support.</td></tr></table>	Option	Description	<i>enable</i>	Enable legacy POE device support.	<i>disable</i>	Disable legacy POE device support.													
	Option	Description																		
	<i>enable</i>	Enable legacy POE device support.																		
<i>disable</i>	Disable legacy POE device support.																			
lldp-reception	Enable/disable Link Layer Discovery Protocol (LLDP) reception.	option	-	disable																
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable reception of Link Layer Discovery Protocol (LLDP).</td></tr><tr><td><i>disable</i></td><td>Disable reception of Link Layer Discovery Protocol (LLDP).</td></tr></table>	Option	Description	<i>enable</i>	Enable reception of Link Layer Discovery Protocol (LLDP).	<i>disable</i>	Disable reception of Link Layer Discovery Protocol (LLDP).													
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	<i>enable</i>	Enable reception of Link Layer Discovery Protocol (LLDP).																		
<i>disable</i>	Disable reception of Link Layer Discovery Protocol (LLDP).																			
lldp-transmission	Enable/disable Link Layer Discovery Protocol (LLDP) transmission.	option	-	disable																
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable transmission of Link Layer Discovery Protocol (LLDP).</td></tr><tr><td><i>disable</i></td><td>Disable transmission of Link Layer Discovery Protocol (LLDP).</td></tr></table>	Option	Description	<i>enable</i>	Enable transmission of Link Layer Discovery Protocol (LLDP).	<i>disable</i>	Disable transmission of Link Layer Discovery Protocol (LLDP).													
	Option	Description																		
	<i>enable</i>	Enable transmission of Link Layer Discovery Protocol (LLDP).																		
<i>disable</i>	Disable transmission of Link Layer Discovery Protocol (LLDP).																			

Parameter	Description	Type	Size	Default						
log-single-cpu-high	Enable/disable logging the event of a single CPU core reaching CPU usage threshold.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable logging the event of a single CPU core reaching CPU usage threshold.</td></tr><tr><td><i>disable</i></td><td>Disable logging the event of a single CPU core reaching CPU usage threshold.</td></tr></table>	Option	Description	<i>enable</i>	Enable logging the event of a single CPU core reaching CPU usage threshold.	<i>disable</i>	Disable logging the event of a single CPU core reaching CPU usage threshold.			
Option	Description									
<i>enable</i>	Enable logging the event of a single CPU core reaching CPU usage threshold.									
<i>disable</i>	Disable logging the event of a single CPU core reaching CPU usage threshold.									
log-ssl-connection	Enable/disable logging of SSL connection events.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable logging of SSL connection events.</td></tr><tr><td><i>disable</i></td><td>Disable logging of SSL connection events.</td></tr></table>	Option	Description	<i>enable</i>	Enable logging of SSL connection events.	<i>disable</i>	Disable logging of SSL connection events.			
Option	Description									
<i>enable</i>	Enable logging of SSL connection events.									
<i>disable</i>	Disable logging of SSL connection events.									
log-uuid-address	Enable/disable insertion of address UUIDs to traffic logs.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable insertion of address UUID to traffic logs.</td></tr><tr><td><i>disable</i></td><td>Disable insertion of address UUID to traffic logs.</td></tr></table>	Option	Description	<i>enable</i>	Enable insertion of address UUID to traffic logs.	<i>disable</i>	Disable insertion of address UUID to traffic logs.			
Option	Description									
<i>enable</i>	Enable insertion of address UUID to traffic logs.									
<i>disable</i>	Disable insertion of address UUID to traffic logs.									
login-timestamp	Enable/disable login time recording.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable login time recording.</td></tr><tr><td><i>disable</i></td><td>Disable login time recording.</td></tr></table>	Option	Description	<i>enable</i>	Enable login time recording.	<i>disable</i>	Disable login time recording.			
Option	Description									
<i>enable</i>	Enable login time recording.									
<i>disable</i>	Disable login time recording.									
long-vdom-name *	Enable/disable long VDOM name support.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable long VDOM name support.</td></tr><tr><td><i>disable</i></td><td>Disable long VDOM name support.</td></tr></table>	Option	Description	<i>enable</i>	Enable long VDOM name support.	<i>disable</i>	Disable long VDOM name support.			
Option	Description									
<i>enable</i>	Enable long VDOM name support.									
<i>disable</i>	Disable long VDOM name support.									

Parameter	Description	Type	Size	Default						
management-ip	Management IP address of this FortiGate. Used to log into this FortiGate from another FortiGate in the Security Fabric.	string	Maximum length: 255							
management-port	Overriding port for management connection (Overrides admin port).	integer	Minimum value: 443 1 Maximum value: 65535							
management-port-use-admin-sport	Enable/disable use of the admin-sport setting for the management port. If disabled, FortiGate will allow user to specify management-port.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable use of the admin-sport setting for the management port.</td></tr><tr><td>disable</td><td>Disable use of the admin-sport setting for the management port.</td></tr></table>				Option	Description	enable	Enable use of the admin-sport setting for the management port.	disable	Disable use of the admin-sport setting for the management port.
Option	Description									
enable	Enable use of the admin-sport setting for the management port.									
disable	Disable use of the admin-sport setting for the management port.									
management-vdom	Management virtual domain name.	string	Maximum length: 31	root						
max-route-cache-size	Maximum number of IP route cache entries (0 - 2147483647).	integer	Minimum value: 0 0 Maximum value: 2147483647	0						
memory-use-threshold-extreme	Threshold at which memory usage is considered extreme (new sessions are dropped) (% of total RAM, default = 95).	integer	Minimum value: 70 70 Maximum value: 97	95						
memory-use-threshold-green	Threshold at which memory usage forces the FortiGate to exit conserve mode (% of total RAM, default = 82).	integer	Minimum value: 70 70 Maximum value: 97	82						

Parameter	Description	Type	Size	Default						
memory-use-threshold-red	Threshold at which memory usage forces the FortiGate to enter conserve mode (% of total RAM, default = 88).	integer	Minimum value: 70 Maximum value: 97	88						
miglog-affinity *	Affinity setting for logging (hexadecimal value up to 256 bits in the format of xxxxxxxxxxxxxxxxx).	string	Maximum length: 79	0						
miglogd-children	Number of logging (miglogd) processes to be allowed to run. Higher number can reduce performance; lower number can slow log processing time. No logs will be dropped or lost if the number is changed.	integer	Minimum value: 0 Maximum value: 15	0						
multi-factor-authentication	Enforce all login methods to require an additional authentication factor (default = optional).	option	-	optional						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>optional</i></td><td>Do not enforce all login methods to require an additional authentication factor (controlled by user settings).</td></tr><tr><td><i>mandatory</i></td><td>Enforce all login methods to require an additional authentication factor.</td></tr></table>				Option	Description	<i>optional</i>	Do not enforce all login methods to require an additional authentication factor (controlled by user settings).	<i>mandatory</i>	Enforce all login methods to require an additional authentication factor.
Option	Description									
<i>optional</i>	Do not enforce all login methods to require an additional authentication factor (controlled by user settings).									
<i>mandatory</i>	Enforce all login methods to require an additional authentication factor.									
ndp-max-entry	Maximum number of NDP table entries (set to 65,536 or higher; if set to 0, kernel holds 65,536 entries).	integer	Minimum value: 65536 Maximum value: 2147483647	0						
npu-neighbor-update *	Enable/disable sending of ARP/ICMP6 probing packets to update neighbors for offloaded sessions.	option	-	disable						

Parameter	Description	Type	Size	Default						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable sending of ARP/ICMP6 probing packets to update neighbors for offloaded sessions.</td></tr><tr><td><i>disable</i></td><td>Disable sending of ARP/ICMP6 probing packets to update neighbors for offloaded sessions.</td></tr></table>	Option	Description	<i>enable</i>	Enable sending of ARP/ICMP6 probing packets to update neighbors for offloaded sessions.	<i>disable</i>	Disable sending of ARP/ICMP6 probing packets to update neighbors for offloaded sessions.			
	Option	Description								
	<i>enable</i>	Enable sending of ARP/ICMP6 probing packets to update neighbors for offloaded sessions.								
<i>disable</i>	Disable sending of ARP/ICMP6 probing packets to update neighbors for offloaded sessions.									
per-user-bal *	Enable/disable per-user block/allow list filter.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable per-user block/allow list filter.</td></tr><tr><td><i>disable</i></td><td>Disable per-user block/allow list filter.</td></tr></table>	Option	Description	<i>enable</i>	Enable per-user block/allow list filter.	<i>disable</i>	Disable per-user block/allow list filter.			
	Option	Description								
	<i>enable</i>	Enable per-user block/allow list filter.								
<i>disable</i>	Disable per-user block/allow list filter.									
pmtu-discovery	Enable/disable path MTU discovery.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable path MTU discovery.</td></tr><tr><td><i>disable</i></td><td>Disable path MTU discovery.</td></tr></table>	Option	Description	<i>enable</i>	Enable path MTU discovery.	<i>disable</i>	Disable path MTU discovery.			
	Option	Description								
	<i>enable</i>	Enable path MTU discovery.								
<i>disable</i>	Disable path MTU discovery.									
policy-auth-concurrent	Number of concurrent firewall use logins from the same user (1 - 100, default = 0 means no limit).	integer	Minimum value: 0 Maximum value: 100	0						
post-login-banner	Enable/disable displaying the administrator access disclaimer message after an administrator successfully logs in.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>disable</i></td><td>Disable post-login banner.</td></tr><tr><td><i>enable</i></td><td>Enable post-login banner.</td></tr></table>	Option	Description	<i>disable</i>	Disable post-login banner.	<i>enable</i>	Enable post-login banner.			
	Option	Description								
	<i>disable</i>	Disable post-login banner.								
<i>enable</i>	Enable post-login banner.									
pre-login-banner	Enable/disable displaying the administrator access disclaimer message on the login page before an administrator logs in.	option	-	disable						

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>enable</i>	Enable pre-login banner.		
	<i>disable</i>	Disable pre-login banner.		
private-data-encryption	Enable/disable private data encryption using an AES 128-bit key or passphrase.	option	-	disable
	Option	Description		
	<i>disable</i>	Disable private data encryption using an AES 128-bit key.		
	<i>enable</i>	Enable private data encryption using an AES 128-bit key.		
proxy-auth-lifetime	Enable/disable authenticated users lifetime control. This is a cap on the total time a proxy user can be authenticated for after which re-authentication will take place.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable authenticated users lifetime control.		
	<i>disable</i>	Disable authenticated users lifetime control.		
proxy-auth-lifetime-timeout	Lifetime timeout in minutes for authenticated users (5 - 65535 min, default=480 (8 hours)).	integer	Minimum value: 5 Maximum value: 65535	480
proxy-auth-timeout	Authentication timeout in minutes for authenticated users (1 - 300 min, default = 10).	integer	Minimum value: 1 Maximum value: 300	10
proxy-cert-use-mgmt-vdom	Enable/disable using management VDOM to send requests.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable setting.		

Parameter	Description	Type	Size	Default								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>disable</i></td><td>Disable setting.</td></tr></table>	Option	Description	<i>disable</i>	Disable setting.							
Option	Description											
<i>disable</i>	Disable setting.											
proxy-hardware-acceleration *	Enable/disable email proxy hardware acceleration.	option	-	enable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>disable</i></td><td>Disable email proxy hardware acceleration.</td></tr><tr><td><i>enable</i></td><td>Enable email proxy hardware acceleration.</td></tr></table>	Option	Description	<i>disable</i>	Disable email proxy hardware acceleration.	<i>enable</i>	Enable email proxy hardware acceleration.					
Option	Description											
<i>disable</i>	Disable email proxy hardware acceleration.											
<i>enable</i>	Enable email proxy hardware acceleration.											
proxy-keep-alive-mode	Control if users must re-authenticate after a session is closed, traffic has been idle, or from the point at which the user was authenticated.	option	-	session								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>session</i></td><td>Proxy keep-alive timeout begins at the closure of the session.</td></tr><tr><td><i>traffic</i></td><td>Proxy keep-alive timeout begins after traffic has not been received.</td></tr><tr><td><i>re-authentication</i></td><td>Proxy keep-alive timeout begins when the user was authenticated.</td></tr></table>	Option	Description	<i>session</i>	Proxy keep-alive timeout begins at the closure of the session.	<i>traffic</i>	Proxy keep-alive timeout begins after traffic has not been received.	<i>re-authentication</i>	Proxy keep-alive timeout begins when the user was authenticated.			
Option	Description											
<i>session</i>	Proxy keep-alive timeout begins at the closure of the session.											
<i>traffic</i>	Proxy keep-alive timeout begins after traffic has not been received.											
<i>re-authentication</i>	Proxy keep-alive timeout begins when the user was authenticated.											
proxy-re-authentication-time	The time limit that users must re-authenticate if proxy-keep-alive-mode is set to re-authenticate (1 - 86400 sec, default=30s.	integer	Minimum value: 30 1 Maximum value: 86400									
proxy-resource-mode	Enable/disable use of the maximum memory usage on the FortiGate unit's proxy processing of resources, such as block lists, allow lists, and external resources.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable use of the maximum memory usage.</td></tr><tr><td><i>disable</i></td><td>Disable use of the maximum memory usage.</td></tr></table>	Option	Description	<i>enable</i>	Enable use of the maximum memory usage.	<i>disable</i>	Disable use of the maximum memory usage.					
Option	Description											
<i>enable</i>	Enable use of the maximum memory usage.											
<i>disable</i>	Disable use of the maximum memory usage.											

Parameter	Description	Type	Size	Default
proxy-worker-count	Proxy worker count.	integer	Minimum value: 1 Maximum value: 8 **	0
radius-port	RADIUS service port number.	integer	Minimum value: 1 Maximum value: 65535	1812
reboot-upon-config-restore	Enable/disable reboot of system upon restoring configuration.	option	-	enable
	Option		Description	
	enable		Enable reboot of system upon restoring configuration.	
	disable		Disable reboot of system upon restoring configuration.	
refresh	Statistics refresh interval second(s) in GUI.	integer	Minimum value: 0 Maximum value: 4294967295	0
remoteauthtimeout	Number of seconds that the FortiGate waits for responses from remote RADIUS, LDAP, or TACACS+ authentication servers. (1-300 sec, default = 5).	integer	Minimum value: 1 Maximum value: 300	5
reset-sessionless-tcp	Action to perform if the FortiGate receives a TCP packet but cannot find a corresponding session in its session table. NAT/Route mode only.	option	-	disable
	Option		Description	
	enable		Enable reset session-less TCP.	
	disable		Disable reset session-less TCP.	
restart-time	Daily restart time (hh:mm).	user	Not Specified	

Parameter	Description	Type	Size	Default						
revision-backup-on-logout	Enable/disable back-up of the latest configuration revision when an administrator logs out of the CLI or GUI.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable revision config backup automatically when logout.</td></tr><tr><td><i>disable</i></td><td>Disable revision config backup automatically when logout.</td></tr></table>	Option	Description	<i>enable</i>	Enable revision config backup automatically when logout.	<i>disable</i>	Disable revision config backup automatically when logout.			
Option	Description									
<i>enable</i>	Enable revision config backup automatically when logout.									
<i>disable</i>	Disable revision config backup automatically when logout.									
revision-image-auto-backup	Enable/disable back-up of the latest image revision after the firmware is upgraded.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable revision image backup automatically when upgrading image.</td></tr><tr><td><i>disable</i></td><td>Disable revision image backup automatically when upgrading image.</td></tr></table>	Option	Description	<i>enable</i>	Enable revision image backup automatically when upgrading image.	<i>disable</i>	Disable revision image backup automatically when upgrading image.			
Option	Description									
<i>enable</i>	Enable revision image backup automatically when upgrading image.									
<i>disable</i>	Disable revision image backup automatically when upgrading image.									
scanunit-count	Number of scanunits. The range and the default depend on the number of CPUs. Only available on FortiGate units with multiple CPUs.	integer	Minimum value: 0 1 Maximum value: 8 **							
security-rating-result-submission	Enable/disable the submission of Security Rating results to FortiGuard.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable submission of Security Rating results to FortiGuard.</td></tr><tr><td><i>disable</i></td><td>Disable submission of Security Rating results to FortiGuard.</td></tr></table>	Option	Description	<i>enable</i>	Enable submission of Security Rating results to FortiGuard.	<i>disable</i>	Disable submission of Security Rating results to FortiGuard.			
Option	Description									
<i>enable</i>	Enable submission of Security Rating results to FortiGuard.									
<i>disable</i>	Disable submission of Security Rating results to FortiGuard.									
security-rating-run-on-schedule	Enable/disable scheduled runs of Security Rating.	option	-	enable						

Parameter	Description	Type	Size	Default
	Option Description			
	<i>enable</i>	Enable scheduled runs of Security Rating.		
	<i>disable</i>	Disable scheduled runs of Security Rating.		
send-pmtu-icmp	Enable/disable sending of path maximum transmission unit (PMTU) - ICMP destination unreachable packet and to support PMTUD protocol on your network to reduce fragmentation of packets.	option	-	enable
	Option Description			
	<i>enable</i>	Enable sending of PMTU ICMP destination unreachable packet.		
	<i>disable</i>	Disable sending of PMTU ICMP destination unreachable packet.		
sflowd-max-children-num	Maximum number of sflowd child processes allowed to run.	integer	Minimum value: 0 Maximum value: 6 **	6 **
show-backplane-intf *	show/hide backplane interfaces	option	-	disable
	Option Description			
	<i>enable</i>	show backplane interfaces		
	<i>disable</i>	hide backplane interfaces		
snat-route-change	Enable/disable the ability to change the source NAT route.	option	-	disable
	Option Description			
	<i>enable</i>	Enable SNAT route change.		
	<i>disable</i>	Disable SNAT route change.		

Parameter	Description	Type	Size	Default												
special-file-23-support	Enable/disable detection of those special format files when using Data Leak Prevention.	option	-	disable												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Disable detection of those special format files when using Data Leak Prevention.</td></tr><tr><td>enable</td><td>Enable detection of those special format files when using Data Leak Prevention.</td></tr></table>	Option	Description	disable	Disable detection of those special format files when using Data Leak Prevention.	enable	Enable detection of those special format files when using Data Leak Prevention.									
Option	Description															
disable	Disable detection of those special format files when using Data Leak Prevention.															
enable	Enable detection of those special format files when using Data Leak Prevention.															
speedtest-server	Enable/disable speed test server.	option	-	disable												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable speed test server service.</td></tr><tr><td>disable</td><td>Disable speed test server service.</td></tr></table>	Option	Description	enable	Enable speed test server service.	disable	Disable speed test server service.									
Option	Description															
enable	Enable speed test server service.															
disable	Disable speed test server service.															
split-port *	Split port(s) to multiple 10Gbps ports.	string	Maximum length: 15													
ssd-trim-date *	Date within a month to run ssd trim.	integer	Minimum value: 1 Maximum value: 31													
ssd-trim-freq *	How often to run SSD Trim (default = weekly). SSD Trim prevents SSD drive data loss by finding and isolating errors.	option	-	weekly												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>never</td><td>Never Run SSD Trim.</td></tr><tr><td>hourly</td><td>Run SSD Trim Hourly.</td></tr><tr><td>daily</td><td>Run SSD Trim Daily.</td></tr><tr><td>weekly</td><td>Run SSD Trim Weekly.</td></tr><tr><td>monthly</td><td>Run SSD Trim Monthly.</td></tr></table>	Option	Description	never	Never Run SSD Trim.	hourly	Run SSD Trim Hourly.	daily	Run SSD Trim Daily.	weekly	Run SSD Trim Weekly.	monthly	Run SSD Trim Monthly.			
Option	Description															
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hourly	Run SSD Trim Hourly.															
daily	Run SSD Trim Daily.															
weekly	Run SSD Trim Weekly.															
monthly	Run SSD Trim Monthly.															
ssd-trim-hour *	Hour of the day on which to run SSD Trim (0 - 23, default = 1).	integer	Minimum value: 0 Maximum value: 23													

Parameter	Description	Type	Size	Default																														
ssd-trim-min *	Minute of the hour on which to run SSD Trim (0 - 59, 60 for random).	integer	Minimum value: 0 Maximum value: 60	60																														
ssd-trim-weekday *	Day of week to run SSD Trim.	option	-	sunday																														
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>sunday</td><td>Sunday</td></tr><tr><td>monday</td><td>Monday</td></tr><tr><td>tuesday</td><td>Tuesday</td></tr><tr><td>wednesday</td><td>Wednesday</td></tr><tr><td>thursday</td><td>Thursday</td></tr><tr><td>friday</td><td>Friday</td></tr><tr><td>saturday</td><td>Saturday</td></tr></table>				Option	Description	sunday	Sunday	monday	Monday	tuesday	Tuesday	wednesday	Wednesday	thursday	Thursday	friday	Friday	saturday	Saturday														
Option	Description																																	
sunday	Sunday																																	
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ssh-enc-algo	Select one or more SSH ciphers.	option	-	aes256-ctr aes256-gcm@openssh.com																														
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>chacha20-poly1305@openssh.com</td><td>chacha20-poly1305@openssh.com</td></tr><tr><td>aes128-ctr</td><td>aes128-ctr</td></tr><tr><td>aes192-ctr</td><td>aes192-ctr</td></tr><tr><td>aes256-ctr</td><td>aes256-ctr</td></tr><tr><td>arcfour256</td><td>arcfour256</td></tr><tr><td>arcfour128</td><td>arcfour128</td></tr><tr><td>aes128-cbc</td><td>aes128-cbc</td></tr><tr><td>3des-cbc</td><td>3des-cbc</td></tr><tr><td>blowfish-cbc</td><td>blowfish-cbc</td></tr><tr><td>cast128-cbc</td><td>cast128-cbc</td></tr><tr><td>aes192-cbc</td><td>aes192-cbc</td></tr><tr><td>aes256-cbc</td><td>aes256-cbc</td></tr><tr><td>arcfour</td><td>arcfour</td></tr><tr><td>rijndael-cbc@lysator.liu.se</td><td>rijndael-cbc@lysator.liu.se</td></tr></table>				Option	Description	chacha20-poly1305@openssh.com	chacha20-poly1305@openssh.com	aes128-ctr	aes128-ctr	aes192-ctr	aes192-ctr	aes256-ctr	aes256-ctr	arcfour256	arcfour256	arcfour128	arcfour128	aes128-cbc	aes128-cbc	3des-cbc	3des-cbc	blowfish-cbc	blowfish-cbc	cast128-cbc	cast128-cbc	aes192-cbc	aes192-cbc	aes256-cbc	aes256-cbc	arcfour	arcfour	rijndael-cbc@lysator.liu.se	rijndael-cbc@lysator.liu.se
Option	Description																																	
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aes128-cbc	aes128-cbc																																	
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rijndael-cbc@lysator.liu.se	rijndael-cbc@lysator.liu.se																																	

Parameter	Description	Type	Size	Default																		
				<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>aes128-gcm@openssh.com</i></td><td>aes128-gcm@openssh.com</td></tr><tr><td><i>aes256-gcm@openssh.com</i></td><td>aes256-gcm@openssh.com</td></tr></table>	Option	Description	<i>aes128-gcm@openssh.com</i>	aes128-gcm@openssh.com	<i>aes256-gcm@openssh.com</i>	aes256-gcm@openssh.com												
	Option	Description																				
	<i>aes128-gcm@openssh.com</i>	aes128-gcm@openssh.com																				
<i>aes256-gcm@openssh.com</i>	aes256-gcm@openssh.com																					
ssh-kex-algo	Select one or more SSH kex algorithms.	option	-	diffie-hellman-group14-sha256 diffie-hellman-group16-sha512 diffie-hellman-group18-sha512 diffie-hellman-group-exchange-sha256 curve25519-sha256@libssh.org ecdh-sha2-nistp256 ecdh-sha2-nistp384 ecdh-sha2-nistp521																		
				<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>diffie-hellman-group1-sha1</i></td><td>diffie-hellman-group1-sha1</td></tr><tr><td><i>diffie-hellman-group14-sha1</i></td><td>diffie-hellman-group14-sha1</td></tr><tr><td><i>diffie-hellman-group14-sha256</i></td><td>diffie-hellman-group14-sha256</td></tr><tr><td><i>diffie-hellman-group16-sha512</i></td><td>diffie-hellman-group16-sha512</td></tr><tr><td><i>diffie-hellman-group18-sha512</i></td><td>diffie-hellman-group18-sha512</td></tr><tr><td><i>diffie-hellman-group-exchange-sha1</i></td><td>diffie-hellman-group-exchange-sha1</td></tr><tr><td><i>diffie-hellman-group-exchange-sha256</i></td><td>diffie-hellman-group-exchange-sha256</td></tr><tr><td><i>curve25519-sha256@libssh.org</i></td><td>curve25519-sha256@libssh.org</td></tr></table>	Option	Description	<i>diffie-hellman-group1-sha1</i>	diffie-hellman-group1-sha1	<i>diffie-hellman-group14-sha1</i>	diffie-hellman-group14-sha1	<i>diffie-hellman-group14-sha256</i>	diffie-hellman-group14-sha256	<i>diffie-hellman-group16-sha512</i>	diffie-hellman-group16-sha512	<i>diffie-hellman-group18-sha512</i>	diffie-hellman-group18-sha512	<i>diffie-hellman-group-exchange-sha1</i>	diffie-hellman-group-exchange-sha1	<i>diffie-hellman-group-exchange-sha256</i>	diffie-hellman-group-exchange-sha256	<i>curve25519-sha256@libssh.org</i>	curve25519-sha256@libssh.org
	Option	Description																				
	<i>diffie-hellman-group1-sha1</i>	diffie-hellman-group1-sha1																				
	<i>diffie-hellman-group14-sha1</i>	diffie-hellman-group14-sha1																				
	<i>diffie-hellman-group14-sha256</i>	diffie-hellman-group14-sha256																				
	<i>diffie-hellman-group16-sha512</i>	diffie-hellman-group16-sha512																				
	<i>diffie-hellman-group18-sha512</i>	diffie-hellman-group18-sha512																				
	<i>diffie-hellman-group-exchange-sha1</i>	diffie-hellman-group-exchange-sha1																				
	<i>diffie-hellman-group-exchange-sha256</i>	diffie-hellman-group-exchange-sha256																				
	<i>curve25519-sha256@libssh.org</i>	curve25519-sha256@libssh.org																				

Parameter	Description	Type	Size	Default
ssh-mac-algo	Select one or more SSH MAC algorithms.	option	-	hmac-sha2-256 hmac-sha2-256-etm@openssh.com hmac-sha2-512 hmac-sha2-512-etm@openssh.com

Parameter	Description	Type	Size	Default												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>umac-64-etm@openssh.com</i></td><td>umac-64-etm@openssh.com</td></tr><tr><td><i>umac-128-etm@openssh.com</i></td><td>umac-128-etm@openssh.com</td></tr></table>	Option	Description	<i>umac-64-etm@openssh.com</i>	umac-64-etm@openssh.com	<i>umac-128-etm@openssh.com</i>	umac-128-etm@openssh.com									
	Option	Description														
	<i>umac-64-etm@openssh.com</i>	umac-64-etm@openssh.com														
<i>umac-128-etm@openssh.com</i>	umac-128-etm@openssh.com															
ssl-min-protocol-version	Minimum supported protocol version for SSL/TLS connections (default = TLSv1.2).	option	-	TLSv1-2												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>SSLv3</i></td><td>SSLv3.</td></tr><tr><td><i>TLSv1</i></td><td>TLSv1.</td></tr><tr><td><i>TLSv1-1</i></td><td>TLSv1.1.</td></tr><tr><td><i>TLSv1-2</i></td><td>TLSv1.2.</td></tr><tr><td><i>TLSv1-3</i></td><td>TLSv1.3.</td></tr></table>	Option	Description	<i>SSLv3</i>	SSLv3.	<i>TLSv1</i>	TLSv1.	<i>TLSv1-1</i>	TLSv1.1.	<i>TLSv1-2</i>	TLSv1.2.	<i>TLSv1-3</i>	TLSv1.3.			
	Option	Description														
	<i>SSLv3</i>	SSLv3.														
	<i>TLSv1</i>	TLSv1.														
	<i>TLSv1-1</i>	TLSv1.1.														
	<i>TLSv1-2</i>	TLSv1.2.														
<i>TLSv1-3</i>	TLSv1.3.															
ssl-static-key-ciphers	Enable/disable static key ciphers in SSL/TLS connections (e.g. AES128-SHA, AES256-SHA, AES128-SHA256, AES256-SHA256).	option	-	enable												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable static key ciphers in SSL/TLS connections.</td></tr><tr><td><i>disable</i></td><td>Disable static key ciphers in SSL/TLS connections.</td></tr></table>	Option	Description	<i>enable</i>	Enable static key ciphers in SSL/TLS connections.	<i>disable</i>	Disable static key ciphers in SSL/TLS connections.									
	Option	Description														
	<i>enable</i>	Enable static key ciphers in SSL/TLS connections.														
<i>disable</i>	Disable static key ciphers in SSL/TLS connections.															
sslvpn-ems-sn-check	Enable/disable verification of EMS serial number in SSL-VPN connection.	option	-	disable												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable verification of EMS serial number in SSL-VPN connection.</td></tr><tr><td><i>disable</i></td><td>Disable verification of EMS serial number in SSL-VPN connection.</td></tr></table>	Option	Description	<i>enable</i>	Enable verification of EMS serial number in SSL-VPN connection.	<i>disable</i>	Disable verification of EMS serial number in SSL-VPN connection.									
	Option	Description														
	<i>enable</i>	Enable verification of EMS serial number in SSL-VPN connection.														
<i>disable</i>	Disable verification of EMS serial number in SSL-VPN connection.															

Parameter	Description	Type	Size	Default						
sslvpn-max-worker-count	Maximum number of SSL-VPN processes. Upper limit for this value is the number of CPUs and depends on the model. Default value of zero means the SSLVPN daemon decides the number of worker processes.	integer	Minimum value: 0 Maximum value: 8 **	0						
strict-dirty-session-check	Enable to check the session against the original policy when revalidating. This can prevent dropping of redirected sessions when web-filtering and authentication are enabled together. If this option is enabled, the FortiGate unit deletes a session if a routing or policy change causes the session to no longer match the policy that originally allowed the session.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable strict dirty-session check.</td></tr><tr><td>disable</td><td>Disable strict dirty-session check.</td></tr></table>				Option	Description	enable	Enable strict dirty-session check.	disable	Disable strict dirty-session check.
Option	Description									
enable	Enable strict dirty-session check.									
disable	Disable strict dirty-session check.									
strong-crypto	Enable to use strong encryption and only allow strong ciphers and digest for HTTPS/SSH/TLS/SSL functions.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable strong crypto for HTTPS/SSH/TLS/SSL.</td></tr><tr><td>disable</td><td>Disable strong crypto for HTTPS/SSH/TLS/SSL.</td></tr></table>				Option	Description	enable	Enable strong crypto for HTTPS/SSH/TLS/SSL.	disable	Disable strong crypto for HTTPS/SSH/TLS/SSL.
Option	Description									
enable	Enable strong crypto for HTTPS/SSH/TLS/SSL.									
disable	Disable strong crypto for HTTPS/SSH/TLS/SSL.									

Parameter	Description	Type	Size	Default						
switch-controller *	Enable/disable switch controller feature. Switch controller allows you to manage FortiSwitch from the FortiGate itself.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Disable switch controller feature.</td></tr><tr><td>enable</td><td>Enable switch controller feature.</td></tr></table>	Option	Description	disable	Disable switch controller feature.	enable	Enable switch controller feature.			
Option	Description									
disable	Disable switch controller feature.									
enable	Enable switch controller feature.									
switch-controller-reserved-network *	Configure reserved network subnet for managed switches. This is available when the switch controller is enabled.	ipv4-classnet-host	Not Specified	10.255.0.1 255.255.0.0						
sys-perf-log-interval	Time in minutes between updates of performance statistics logging. (1 - 15 min, default = 5, 0 = disabled).	integer	Minimum value: 0 Maximum value: 15	5						
syslog-affinity *	Affinity setting for syslog (hexadecimal value up to 256 bits in the format of xxxxxxxxxxxxxxxxx).	string	Maximum length: 79	0						
tcp-halfclose-timer	Number of seconds the FortiGate unit should wait to close a session after one peer has sent a FIN packet but the other has not responded (1 - 86400 sec (1 day), default = 120).	integer	Minimum value: 1 Maximum value: 86400	120						

Parameter	Description	Type	Size	Default						
tcp-halfopen-timer	Number of seconds the FortiGate unit should wait to close a session after one peer has sent an open session packet but the other has not responded (1 - 86400 sec (1 day), default = 10).	integer	Minimum value: 1 Maximum value: 86400	10						
tcp-option	Enable SACK, timestamp and MSS TCP options.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable TCP option.</td></tr><tr><td>disable</td><td>Disable TCP option.</td></tr></table>				Option	Description	enable	Enable TCP option.	disable	Disable TCP option.
Option	Description									
enable	Enable TCP option.									
disable	Disable TCP option.									
tcp-rst-timer	Length of the TCP CLOSE state in seconds (5 - 300 sec, default = 5).	integer	Minimum value: 5 Maximum value: 300	5						
tcp-timewait-timer	Length of the TCP TIME-WAIT state in seconds (1 - 300 sec, default = 1).	integer	Minimum value: 0 Maximum value: 300	1						
tftp	Enable/disable TFTP.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable TFTP.</td></tr><tr><td>disable</td><td>Disable TFTP.</td></tr></table>				Option	Description	enable	Enable TFTP.	disable	Disable TFTP.
Option	Description									
enable	Enable TFTP.									
disable	Disable TFTP.									
timezone	Number corresponding to your time zone from 00 to 86. Enter set timezone ? to view the list of time zones and the numbers that represent them.	option	-	00						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>01</td><td>(GMT-11:00) Midway Island, Samoa</td></tr></table>				Option	Description	01	(GMT-11:00) Midway Island, Samoa		
Option	Description									
01	(GMT-11:00) Midway Island, Samoa									

Parameter	Description	Type	Size	Default

Option	Description
02	(GMT-10:00) Hawaii
03	(GMT-9:00) Alaska
04	(GMT-8:00) Pacific Time (US & Canada)
05	(GMT-7:00) Arizona
81	(GMT-7:00) Baja California Sur, Chihuahua
06	(GMT-7:00) Mountain Time (US & Canada)
07	(GMT-6:00) Central America
08	(GMT-6:00) Central Time (US & Canada)
09	(GMT-6:00) Mexico City
10	(GMT-6:00) Saskatchewan
11	(GMT-5:00) Bogota, Lima, Quito
12	(GMT-5:00) Eastern Time (US & Canada)
13	(GMT-5:00) Indiana (East)
74	(GMT-4:00) Caracas
14	(GMT-4:00) Atlantic Time (Canada)
77	(GMT-4:00) Georgetown
15	(GMT-4:00) La Paz
87	(GMT-4:00) Paraguay
16	(GMT-3:00) Santiago
17	(GMT-3:30) Newfoundland
18	(GMT-3:00) Brasilia
19	(GMT-3:00) Buenos Aires
20	(GMT-3:00) Nuuk (Greenland)
75	(GMT-3:00) Uruguay
21	(GMT-2:00) Mid-Atlantic
22	(GMT-1:00) Azores
23	(GMT-1:00) Cape Verde Is.
24	(GMT) Monrovia
80	(GMT) Greenwich Mean Time

Parameter	Description	Type	Size	Default
	Option	Description		
	79	(GMT) Casablanca		
	25	(GMT) Dublin, Edinburgh, Lisbon, London, Canary Is.		
	26	(GMT+1:00) Amsterdam, Berlin, Bern, Rome, Stockholm, Vienna		
	27	(GMT+1:00) Belgrade, Bratislava, Budapest, Ljubljana, Prague		
	28	(GMT+1:00) Brussels, Copenhagen, Madrid, Paris		
	78	(GMT+1:00) Namibia		
	29	(GMT+1:00) Sarajevo, Skopje, Warsaw, Zagreb		
	30	(GMT+1:00) West Central Africa		
	31	(GMT+2:00) Kyiv, Athens, Sofia, Vilnius		
	32	(GMT+2:00) Bucharest		
	33	(GMT+2:00) Cairo		
	34	(GMT+2:00) Harare, Pretoria		
	35	(GMT+2:00) Helsinki, Riga, Tallinn		
	36	(GMT+2:00) Jerusalem		
	37	(GMT+3:00) Baghdad		
	38	(GMT+3:00) Kuwait, Riyadh		
	83	(GMT+3:00) Moscow		
	84	(GMT+3:00) Minsk		
	40	(GMT+3:00) Nairobi		
	85	(GMT+3:00) Istanbul		
	39	(GMT+3:00) St. Petersburg, Volgograd		
	41	(GMT+3:30) Tehran		
	42	(GMT+4:00) Abu Dhabi, Muscat		
	43	(GMT+4:00) Baku		
	44	(GMT+4:30) Kabul		
	45	(GMT+5:00) Ekaterinburg		
	46	(GMT+5:00) Islamabad, Karachi, Tashkent		
	47	(GMT+5:30) Kolkata, Chennai, Mumbai, New Delhi		
	51	(GMT+5:30) Sri Jayawardenepara		

Parameter	Description	Type	Size	Default

Option	Description
48	(GMT+5:45) Kathmandu
49	(GMT+5:00) Almaty, Astana
50	(GMT+6:00) Dhaka
52	(GMT+6:30) Rangoon
53	(GMT+7:00) Bangkok, Hanoi, Jakarta, Novosibirsk
54	(GMT+7:00) Krasnoyarsk
55	(GMT+8:00) Beijing, ChongQing, HongKong, Urumgi, Irkutsk
56	(GMT+8:00) Ulaan Bataar
57	(GMT+8:00) Kuala Lumpur, Singapore
58	(GMT+8:00) Perth
59	(GMT+8:00) Taipei
60	(GMT+9:00) Osaka, Sapporo, Tokyo, Seoul
61	(GMT+9:00) Yakutsk
62	(GMT+9:30) Adelaide
63	(GMT+9:30) Darwin
64	(GMT+10:00) Brisbane
65	(GMT+10:00) Canberra, Melbourne, Sydney
66	(GMT+10:00) Guam, Port Moresby
67	(GMT+10:00) Hobart
68	(GMT+10:00) Vladivostok
69	(GMT+10:00) Magadan
70	(GMT+11:00) Solomon Is., New Caledonia
71	(GMT+12:00) Auckland, Wellington
72	(GMT+12:00) Fiji, Kamchatka, Marshall Is.
00	(GMT+12:00) Eniwetok, Kwajalein
82	(GMT+12:45) Chatham Islands
73	(GMT+13:00) Nuku'alofa
86	(GMT+13:00) Samoa
76	(GMT+14:00) Kiritimati

Parameter	Description	Type	Size	Default								
traffic-priority	Choose Type of Service (ToS) or Differentiated Services Code Point (DSCP) for traffic prioritization in traffic shaping.	option	-	tos								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>tos</td><td>IP TOS.</td></tr><tr><td>dscp</td><td>DSCP (DiffServ) DS.</td></tr></table>	Option	Description	tos	IP TOS.	dscp	DSCP (DiffServ) DS.					
Option	Description											
tos	IP TOS.											
dscp	DSCP (DiffServ) DS.											
traffic-priority-level	Default system-wide level of priority for traffic prioritization.	option	-	medium								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>low</td><td>Low priority.</td></tr><tr><td>medium</td><td>Medium priority.</td></tr><tr><td>high</td><td>High priority.</td></tr></table>	Option	Description	low	Low priority.	medium	Medium priority.	high	High priority.			
Option	Description											
low	Low priority.											
medium	Medium priority.											
high	High priority.											
two-factor-email-expiry	Email-based two-factor authentication session timeout (30 - 300 seconds (5 minutes), default = 60).	integer	Minimum value: 30 Maximum value: 300	60								
two-factor-fac-expiry	FortiAuthenticator token authentication session timeout (10 - 3600 seconds (1 hour), default = 60).	integer	Minimum value: 10 Maximum value: 3600	60								
two-factor-ftk-expiry	FortiToken authentication session timeout (60 - 600 sec (10 minutes), default = 60).	integer	Minimum value: 60 Maximum value: 600	60								
two-factor-ftm-expiry	FortiToken Mobile session timeout (1 - 168 hours (7 days), default = 72).	integer	Minimum value: 1 Maximum value: 168	72								

Parameter	Description	Type	Size	Default
two-factor-sms-expiry	SMS-based two-factor authentication session timeout (30 - 300 sec, default = 60).	integer	Minimum value: 30 Maximum value: 300	60
udp-idle-timer	UDP connection session timeout. This command can be useful in managing CPU and memory resources (1 - 86400 seconds (1 day), default = 60).	integer	Minimum value: 1 Maximum value: 86400	180
url-filter-affinity *	URL filter CPU affinity.	string	Maximum length: 79	0
url-filter-count	URL filter daemon count.	integer	Minimum value: 1 Maximum value: 1 **	1
user-device-store-max-devices	Maximum number of devices allowed in user device store.	integer	Minimum value: 84219 Maximum value: 240627 **	168438 **
user-device-store-max-unified-mem	Maximum unified memory allowed in user device store.	integer	Minimum value: 168438906 Maximum value: 1684389068 **	842194534 **
user-device-store-max-users	Maximum number of users allowed in user device store.	integer	Minimum value: 84219 Maximum value: 240627 **	168438 **
vdom-mode *	Enable/disable support for multiple virtual domains (VDOMs).	option	-	no-vdom
		Option	Description	
		<i>no-vdom</i>	Disable multiple VDOMs mode.	
		<i>multi-vdom</i>	Enable multiple VDOMs mode.	

Parameter	Description	Type	Size	Default						
vip-arp-range	Controls the number of ARPs that the FortiGate sends for a Virtual IP (VIP) address range.	option	-	restricted						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>unlimited</i></td><td>Send ARPs for all addresses in VIP range.</td></tr><tr><td><i>restricted</i></td><td>Send ARPs for the first 8192 addresses in VIP range.</td></tr></table>	Option	Description	<i>unlimited</i>	Send ARPs for all addresses in VIP range.	<i>restricted</i>	Send ARPs for the first 8192 addresses in VIP range.			
Option	Description									
<i>unlimited</i>	Send ARPs for all addresses in VIP range.									
<i>restricted</i>	Send ARPs for the first 8192 addresses in VIP range.									
virtual-switch-vlan *	Enable/disable virtual switch VLAN.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable virtual switch VLAN.</td></tr><tr><td><i>disable</i></td><td>Disable virtual switch VLAN.</td></tr></table>	Option	Description	<i>enable</i>	Enable virtual switch VLAN.	<i>disable</i>	Disable virtual switch VLAN.			
Option	Description									
<i>enable</i>	Enable virtual switch VLAN.									
<i>disable</i>	Disable virtual switch VLAN.									
wad-affinity *	Affinity setting for wad (hexadecimal value up to 256 bits in the format of xxxxxxxxxxxxxxxxx).	string	Maximum length: 79	0						
wad-csvc-cs-count	Number of concurrent WAD-cache-service object-cache processes.	integer	Minimum value: 1 Maximum value: 1	1						
wad-csvc-db-count	Number of concurrent WAD-cache-service byte-cache processes.	integer	Minimum value: 0 Maximum value: 8 **	0						
wad-memory-change-granularity	Minimum percentage change in system memory usage detected by the wad daemon prior to adjusting TCP window size for any active connection.	integer	Minimum value: 5 Maximum value: 25	10						
wad-restart-end-time	WAD workers daily restart end time (hh:mm).	user	Not Specified							
wad-restart-mode	WAD worker restart mode (default = none).	option	-	none						

Parameter	Description	Type	Size	Default
	Option		Description	
	<i>none</i>	Disable restart of WAD workers.		
	<i>time</i>	Enable daily restart of WAD workers.		
	<i>memory</i>	Enable restart of WAD workers based on memory usage.		
wad-restart-start-time	WAD workers daily restart time (hh:mm).	user	Not Specified	
wad-source-affinity	Enable/disable dispatching traffic to WAD workers based on source affinity.	option	-	enable
	Option		Description	
	<i>disable</i>	Disable dispatching traffic to WAD workers based on source affinity.		
	<i>enable</i>	Enable dispatching traffic to WAD workers based on source affinity.		
wad-worker-count	Number of explicit proxy WAN optimization daemon (WAD) processes. By default WAN optimization, explicit proxy, and web caching is handled by all of the CPU cores in a FortiGate unit.	integer	Minimum value: 0 Maximum value: 8 **	
wifi-ca-certificate	CA certificate that verifies the WiFi certificate.	string	Maximum length: 79	Fortinet_Wifi_CA
wifi-certificate	Certificate to use for WiFi authentication.	string	Maximum length: 35	Fortinet_Wifi
wimax-4g-usb	Enable/disable comparability with WiMAX 4G USB devices.	option	-	disable
	Option		Description	
	<i>enable</i>	Enable WiMax 4G.		
	<i>disable</i>	Disable WiMax 4G.		

Parameter	Description	Type	Size	Default								
wireless-controller	Enable/disable the wireless controller feature to use the FortiGate unit to manage FortiAPs.	option	-	enable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable wireless controller.</td></tr><tr><td><i>disable</i></td><td>Disable wireless controller.</td></tr></table>	Option	Description	<i>enable</i>	Enable wireless controller.	<i>disable</i>	Disable wireless controller.					
Option	Description											
<i>enable</i>	Enable wireless controller.											
<i>disable</i>	Disable wireless controller.											
wireless-controller-port	Port used for the control channel in wireless controller mode (wireless-mode is ac). The data channel port is the control channel port number plus one (1024 - 49150, default = 5246).	integer	Minimum value: 1024 Maximum value: 49150	5246								
wireless-mode *	Wireless mode setting.	option	-	ac								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>ac</i></td><td>Wireless controller with local wireless.</td></tr><tr><td><i>client</i></td><td>Wireless client mode.</td></tr><tr><td><i>fwfap</i></td><td>Obsolete wireless AP mode.</td></tr></table>	Option	Description	<i>ac</i>	Wireless controller with local wireless.	<i>client</i>	Wireless client mode.	<i>fwfap</i>	Obsolete wireless AP mode.			
Option	Description											
<i>ac</i>	Wireless controller with local wireless.											
<i>client</i>	Wireless client mode.											
<i>fwfap</i>	Obsolete wireless AP mode.											

* This parameter may not exist in some models.

** Values may differ between models.

config split-port-mode

Parameter	Description	Type	Size	Default						
interface	Split port interface.	string	Maximum length: 15							
split-mode	The configuration mode for the split port interface.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Disable split.</td></tr><tr><td>4x10G</td><td>Split the port into four 10G ports.</td></tr></table>				Option	Description	disable	Disable split.	4x10G	Split the port into four 10G ports.
Option	Description									
disable	Disable split.									
4x10G	Split the port into four 10G ports.									

Parameter	Description	Type	Size	Default
	Option	Description		
	4x25G	Split the port into four 25G ports.		
	4x50G	Split the port into four 50G ports.		
	8x25G	Split the port into eight 25G ports.		
	8x50G	Split the port into eight 50G ports.		
	4x100G	Split the port into four 100G ports.		
	2x200G	Split the port into two 200G ports.		

config system gre-tunnel

Configure GRE tunnel.

```

config system gre-tunnel
  Description: Configure GRE tunnel.
  edit <name>
    set auto-asic-offload [enable|disable]
    set checksum-reception [disable|enable]
    set checksum-transmission [disable|enable]
    set diffservcode {user}
    set dscp-copying [disable|enable]
    set interface {string}
    set ip-version [4|6]
    set keepalive-failtimes {integer}
    set keepalive-interval {integer}
    set key-inbound {integer}
    set key-outbound {integer}
    set local-gw {ipv4-address-any}
    set local-gw6 {ipv6-address}
    set remote-gw {ipv4-address}
    set remote-gw6 {ipv6-address}
    set sequence-number-reception [disable|enable]
    set sequence-number-transmission [disable|enable]
    set use-sdwan [disable|enable]
  next
end

```

config system gre-tunnel

Parameter	Description	Type	Size	Default						
auto-asic-offload *	Enable/disable automatic ASIC offloading.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable automatic ASIC offloading.</td></tr><tr><td>disable</td><td>Disable automatic ASIC offloading.</td></tr></table>	Option	Description	enable	Enable automatic ASIC offloading.	disable	Disable automatic ASIC offloading.			
Option	Description									
enable	Enable automatic ASIC offloading.									
disable	Disable automatic ASIC offloading.									
checksum-reception *	Enable/disable validating checksums in received GRE packets.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Do not validate checksums in received GRE packets.</td></tr><tr><td>enable</td><td>Validate checksums in received GRE packets.</td></tr></table>	Option	Description	disable	Do not validate checksums in received GRE packets.	enable	Validate checksums in received GRE packets.			
Option	Description									
disable	Do not validate checksums in received GRE packets.									
enable	Validate checksums in received GRE packets.									
checksum-transmission *	Enable/disable including checksums in transmitted GRE packets.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Do not include checksums in transmitted GRE packets.</td></tr><tr><td>enable</td><td>Include checksums in transmitted GRE packets.</td></tr></table>	Option	Description	disable	Do not include checksums in transmitted GRE packets.	enable	Include checksums in transmitted GRE packets.			
Option	Description									
disable	Do not include checksums in transmitted GRE packets.									
enable	Include checksums in transmitted GRE packets.									
diffservcode	DiffServ setting to be applied to GRE tunnel outer IP header.	user	Not Specified							
dscp-copying	Enable/disable DSCP copying.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Disable DSCP copying.</td></tr><tr><td>enable</td><td>Enable DSCP copying.</td></tr></table>	Option	Description	disable	Disable DSCP copying.	enable	Enable DSCP copying.			
Option	Description									
disable	Disable DSCP copying.									
enable	Enable DSCP copying.									
interface	Interface name.	string	Maximum length: 15							
ip-version	IP version to use for VPN interface.	option	-	4						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>4</td><td>Use IPv4 addressing for gateways.</td></tr><tr><td>6</td><td>Use IPv6 addressing for gateways.</td></tr></table>	Option	Description	4	Use IPv4 addressing for gateways.	6	Use IPv6 addressing for gateways.			
Option	Description									
4	Use IPv4 addressing for gateways.									
6	Use IPv6 addressing for gateways.									

Parameter	Description	Type	Size	Default						
keepalive-failtimes	Number of consecutive unreturned keepalive messages before a GRE connection is considered down (1 - 255).	integer	Minimum value: 1 Maximum value: 255	10						
keepalive-interval	Keepalive message interval (0 - 32767, 0 = disabled).	integer	Minimum value: 0 Maximum value: 32767	0						
key-inbound *	Require received GRE packets contain this key (0 - 4294967295).	integer	Minimum value: 0 Maximum value: 4294967295	0						
key-outbound *	Include this key in transmitted GRE packets (0 - 4294967295).	integer	Minimum value: 0 Maximum value: 4294967295	0						
local-gw	IP address of the local gateway.	ipv4-address-any	Not Specified	0.0.0.0						
local-gw6	IPv6 address of the local gateway.	ipv6-address	Not Specified	::						
name	Tunnel name.	string	Maximum length: 15							
remote-gw	IP address of the remote gateway.	ipv4-address	Not Specified	0.0.0.0						
remote-gw6	IPv6 address of the remote gateway.	ipv6-address	Not Specified	::						
sequence-number-reception *	Enable/disable validating sequence numbers in received GRE packets.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Do not validate sequence number in received GRE packets.</td></tr><tr><td>enable</td><td>Validate sequence numbers in received GRE packets.</td></tr></table>				Option	Description	disable	Do not validate sequence number in received GRE packets.	enable	Validate sequence numbers in received GRE packets.
Option	Description									
disable	Do not validate sequence number in received GRE packets.									
enable	Validate sequence numbers in received GRE packets.									
sequence-number-transmission *	Enable/disable including of sequence numbers in transmitted GRE packets.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Include sequence numbers in transmitted GRE packets.</td></tr><tr><td>enable</td><td>Do not include sequence numbers in transmitted GRE packets.</td></tr></table>				Option	Description	disable	Include sequence numbers in transmitted GRE packets.	enable	Do not include sequence numbers in transmitted GRE packets.
Option	Description									
disable	Include sequence numbers in transmitted GRE packets.									
enable	Do not include sequence numbers in transmitted GRE packets.									

Parameter	Description	Type	Size	Default
use-sdwan	Enable/disable use of SD-WAN to reach remote gateway.	option	-	disable
	Option	Description		
	<i>disable</i>	Disable use of SD-WAN to reach remote gateway.		
	<i>enable</i>	Enable use of SD-WAN to reach remote gateway.		

* This parameter may not exist in some models.

config system ha

Configure HA.

```

config system ha
  Description: Configure HA.
  set arps {integer}
  set arps-interval {integer}
  set authentication [enable|disable]
  set cpu-threshold {user}
  set encryption [enable|disable]
  set failover-hold-time {integer}
  set ftp-proxy-threshold {user}
  set gratuitous-arps [enable|disable]
  set group-id {integer}
  set group-name {string}
  set ha-direct [enable|disable]
  set ha-eth-type {string}
  config ha-mgmt-interfaces
    Description: Reserve interfaces to manage individual cluster units.
    edit <id>
      set dst {ipv4-classnet}
      set gateway {ipv4-address}
      set gateway6 {ipv6-address}
      set interface {string}
    next
  end
  set ha-mgmt-status [enable|disable]
  set ha-uptime-diff-margin {integer}
  set hb-interval {integer}
  set hb-interval-in-milliseconds [100ms|10ms]
  set hb-lost-threshold {integer}
  set hbdev {user}
  set hc-eth-type {string}
  set hello-holddown {integer}
  set http-proxy-threshold {user}
  set imap-proxy-threshold {user}
  set key {password}

```

```

set l2ep-eth-type {string}
set link-failed-signal [enable|disable]
set load-balance-all [enable|disable]
set logical-sn [enable|disable]
set memory-based-failover [enable|disable]
set memory-compatible-mode [enable|disable]
set memory-failover-flip-timeout {integer}
set memory-failover-monitor-period {integer}
set memory-failover-sample-rate {integer}
set memory-failover-threshold {integer}
set memory-threshold {user}
set mode [standalone|a-a|...]
set monitor {user}
set multicast-ttl {integer}
set nntp-proxy-threshold {user}
set override [enable|disable]
set override-wait-time {integer}
set password {password}
set pingserver-failover-threshold {integer}
set pingserver-flip-timeout {integer}
set pingserver-monitor-interface {user}
set pingserver-secondary-force-reset [enable|disable]
set pop3-proxy-threshold {user}
set priority {integer}
set route-hold {integer}
set route-ttl {integer}
set route-wait {integer}
set schedule [none|leastconnection|...]
set session-pickup [enable|disable]
set session-pickup-connectionless [enable|disable]
set session-pickup-delay [enable|disable]
set session-pickup-expectation [enable|disable]
set session-pickup-nat [enable|disable]
set session-sync-dev {user}
set smtp-proxy-threshold {user}
set ssd-failover [enable|disable]
set standalone-config-sync [enable|disable]
set standalone-mgmt-vdom [enable|disable]
set sync-config [enable|disable]
set sync-packet-balance [enable|disable]
set unicast-gateway {ipv4-address}
set unicast-hb [enable|disable]
set unicast-hb-netmask {ipv4-netmask}
set unicast-hb-peerip {ipv4-address}
config unicast-peers
    Description: Number of unicast peers.
    edit <id>
        set peer-ip {ipv4-address}
    next
end
set unicast-status [enable|disable]
set uninterruptible-primary-wait {integer}

```



```

set uninterruptible-upgrade [enable|disable]
config vcluster
    Description: Virtual cluster table.
    edit <vcluster-id>
        set monitor {user}
        set override [enable|disable]
        set override-wait-time {integer}
        set pingserver-failover-threshold {integer}
        set pingserver-monitor-interface {user}
        set pingserver-secondary-force-reset [enable|disable]
        set priority {integer}
        set vdom <name1>, <name2>, ...
    next
end
set vcluster-status [enable|disable]
set weight {user}
end

```

config system ha

Parameter	Description	Type	Size	Default						
arps	Number of gratuitous ARPs (1 - 60). Lower to reduce traffic. Higher to reduce failover time.	integer	Minimum value: 1 Maximum value: 60	5						
arps-interval	Time between gratuitous ARPs (1 - 20 sec). Lower to reduce failover time. Higher to reduce traffic.	integer	Minimum value: 1 Maximum value: 20	8						
authentication	Enable/disable heartbeat message authentication.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable heartbeat message authentication.</td></tr><tr><td><i>disable</i></td><td>Disable heartbeat message authentication.</td></tr></table>				Option	Description	<i>enable</i>	Enable heartbeat message authentication.	<i>disable</i>	Disable heartbeat message authentication.
Option	Description									
<i>enable</i>	Enable heartbeat message authentication.									
<i>disable</i>	Disable heartbeat message authentication.									
cpu-threshold	Dynamic weighted load balancing CPU usage weight and high and low thresholds.	user	Not Specified							
encryption	Enable/disable heartbeat message encryption.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable heartbeat message encryption.</td></tr></table>				Option	Description	<i>enable</i>	Enable heartbeat message encryption.		
Option	Description									
<i>enable</i>	Enable heartbeat message encryption.									

Parameter	Description	Type	Size	Default						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>disable</i></td><td>Disable heartbeat message encryption.</td></tr></table>	Option	Description	<i>disable</i>	Disable heartbeat message encryption.					
	Option	Description								
<i>disable</i>	Disable heartbeat message encryption.									
failover-hold-time	Time to wait before failover (0 - 300 sec, default = 0), to avoid flip.	integer	Minimum value: 0 Maximum value: 300	0						
ftp-proxy-threshold	Dynamic weighted load balancing weight and high and low number of FTP proxy sessions.	user	Not Specified							
gratuitous-arps	Enable/disable gratuitous ARPs. Disable if link-failed-signal enabled.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable gratuitous ARPs.</td></tr><tr><td><i>disable</i></td><td>Disable gratuitous ARPs.</td></tr></table>	Option	Description	<i>enable</i>	Enable gratuitous ARPs.	<i>disable</i>	Disable gratuitous ARPs.			
	Option	Description								
	<i>enable</i>	Enable gratuitous ARPs.								
<i>disable</i>	Disable gratuitous ARPs.									
group-id	HA group ID (0 - 1023; or 0 - 7 when there are more than 2 vclusters). Must be the same for all members.	integer	Minimum value: 0 Maximum value: 1023	0						
group-name	Cluster group name. Must be the same for all members.	string	Maximum length: 32							
ha-direct	Enable/disable using ha-mgmt interface for syslog, remote authentication (RADIUS), FortiAnalyzer, FortiSandbox, sFlow, and Netflow.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable using ha-mgmt interface for syslog, remote authentication (RADIUS), FortiAnalyzer, FortiSandbox, sFlow, and Netflow.</td></tr><tr><td><i>disable</i></td><td>Disable using ha-mgmt interface for syslog, remote authentication (RADIUS), FortiAnalyzer, FortiSandbox, sFlow, and Netflow.</td></tr></table>	Option	Description	<i>enable</i>	Enable using ha-mgmt interface for syslog, remote authentication (RADIUS), FortiAnalyzer, FortiSandbox, sFlow, and Netflow.	<i>disable</i>	Disable using ha-mgmt interface for syslog, remote authentication (RADIUS), FortiAnalyzer, FortiSandbox, sFlow, and Netflow.			
	Option	Description								
	<i>enable</i>	Enable using ha-mgmt interface for syslog, remote authentication (RADIUS), FortiAnalyzer, FortiSandbox, sFlow, and Netflow.								
<i>disable</i>	Disable using ha-mgmt interface for syslog, remote authentication (RADIUS), FortiAnalyzer, FortiSandbox, sFlow, and Netflow.									
ha-eth-type	HA heartbeat packet Ethertype (4-digit hex).	string	Maximum length: 4	8890						
ha-mgmt-status	Enable to reserve interfaces to manage individual cluster units.	option	-	disable						

Parameter	Description	Type	Size	Default						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable setting.</td></tr><tr><td><i>disable</i></td><td>Disable setting.</td></tr></table>	Option	Description	<i>enable</i>	Enable setting.	<i>disable</i>	Disable setting.			
	Option	Description								
	<i>enable</i>	Enable setting.								
<i>disable</i>	Disable setting.									
ha-uptime-diff-margin	Normally you would only reduce this value for failover testing.	integer	Minimum value: 1 Maximum value: 65535	300						
hb-interval	Time between sending heartbeat packets (1 - 20). Increase to reduce false positives.	integer	Minimum value: 1 Maximum value: 20	2						
hb-interval-in-milliseconds	Number of milliseconds for each heartbeat interval: 100ms or 10ms.	option	-	100ms						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>100ms</i></td><td>Each heartbeat interval is 100ms.</td></tr><tr><td><i>10ms</i></td><td>Each heartbeat interval is 10ms.</td></tr></table>	Option	Description	<i>100ms</i>	Each heartbeat interval is 100ms.	<i>10ms</i>	Each heartbeat interval is 10ms.			
	Option	Description								
	<i>100ms</i>	Each heartbeat interval is 100ms.								
<i>10ms</i>	Each heartbeat interval is 10ms.									
hb-lost-threshold	Number of lost heartbeats to signal a failure (1 - 60). Increase to reduce false positives.	integer	Minimum value: 1 Maximum value: 60	6 **						
hbdev	Heartbeat interfaces. Must be the same for all members. Enter <interface> <priority> pairs to specify the priority of each heartbeat interface. Higher priority takes precedence.	user	Not Specified							
hc-eth-type	Transparent mode HA heartbeat packet Ethertype (4-digit hex).	string	Maximum length: 4	8891						
hello-holddown	Time to wait before changing from hello to work state (5 - 300 sec).	integer	Minimum value: 5 Maximum value: 300	20						
http-proxy-threshold	Dynamic weighted load balancing weight and high and low number of HTTP proxy sessions.	user	Not Specified							
imap-proxy-threshold	Dynamic weighted load balancing weight and high and low number of IMAP proxy sessions.	user	Not Specified							

Parameter	Description	Type	Size	Default						
key	Key.	password	Not Specified							
l2ep-eth-type	Telnet session HA heartbeat packet Ethertype (4-digit hex).	string	Maximum length: 4	8893						
link-failed-signal	Enable to shut down all interfaces for 1 sec after a failover. Use if gratuitous ARPs do not update network.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable setting.</td></tr><tr><td><i>disable</i></td><td>Disable setting.</td></tr></table>	Option	Description	<i>enable</i>	Enable setting.	<i>disable</i>	Disable setting.			
Option	Description									
<i>enable</i>	Enable setting.									
<i>disable</i>	Disable setting.									
load-balance-all	Enable to load balance TCP sessions. Disable to load balance proxy sessions only.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable load balance.</td></tr><tr><td><i>disable</i></td><td>Disable load balance.</td></tr></table>	Option	Description	<i>enable</i>	Enable load balance.	<i>disable</i>	Disable load balance.			
Option	Description									
<i>enable</i>	Enable load balance.									
<i>disable</i>	Disable load balance.									
logical-sn *	Enable/disable usage of the logical serial number.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable usage of the logical serial number.</td></tr><tr><td><i>disable</i></td><td>Disable usage of the logical serial number.</td></tr></table>	Option	Description	<i>enable</i>	Enable usage of the logical serial number.	<i>disable</i>	Disable usage of the logical serial number.			
Option	Description									
<i>enable</i>	Enable usage of the logical serial number.									
<i>disable</i>	Disable usage of the logical serial number.									
memory-based-failover	Enable/disable memory based failover.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable setting.</td></tr><tr><td><i>disable</i></td><td>Disable setting.</td></tr></table>	Option	Description	<i>enable</i>	Enable setting.	<i>disable</i>	Disable setting.			
Option	Description									
<i>enable</i>	Enable setting.									
<i>disable</i>	Disable setting.									
memory-compatible-mode	Enable/disable memory compatible mode.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable setting.</td></tr><tr><td><i>disable</i></td><td>Disable setting.</td></tr></table>	Option	Description	<i>enable</i>	Enable setting.	<i>disable</i>	Disable setting.			
Option	Description									
<i>enable</i>	Enable setting.									
<i>disable</i>	Disable setting.									

Parameter	Description	Type	Size	Default								
memory-failover-flip-timeout	Time to wait between subsequent memory based failovers in minutes (6 - 2147483647, default = 6).	integer	Minimum value: 6 Maximum value: 2147483647	6								
memory-failover-monitor-period	Duration of high memory usage before memory based failover is triggered in seconds (1 - 300, default = 60).	integer	Minimum value: 1 Maximum value: 300	60								
memory-failover-sample-rate	Rate at which memory usage is sampled in order to measure memory usage in seconds (1 - 60, default = 1).	integer	Minimum value: 1 Maximum value: 60	1								
memory-failover-threshold	Memory usage threshold to trigger memory based failover (0 means using conserve mode threshold in system.global).	integer	Minimum value: 0 Maximum value: 95	0								
memory-threshold	Dynamic weighted load balancing memory usage weight and high and low thresholds.	user	Not Specified									
mode	HA mode. Must be the same for all members. FGSP requires standalone.	option	-	standalone								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>standalone</i></td><td>Standalone mode.</td></tr><tr><td><i>a-a</i></td><td>Active-active mode.</td></tr><tr><td><i>a-p</i></td><td>Active-passive mode.</td></tr></table>				Option	Description	<i>standalone</i>	Standalone mode.	<i>a-a</i>	Active-active mode.	<i>a-p</i>	Active-passive mode.
Option	Description											
<i>standalone</i>	Standalone mode.											
<i>a-a</i>	Active-active mode.											
<i>a-p</i>	Active-passive mode.											
monitor	Interfaces to check for port monitoring (or link failure).	user	Not Specified									
multicast-ttl	HA multicast TTL on primary (5 - 3600 sec).	integer	Minimum value: 5 Maximum value: 3600	600								
nntp-proxy-threshold	Dynamic weighted load balancing weight and high and low number of NNTP proxy sessions.	user	Not Specified									
override	Enable and increase the priority of the unit that should always be primary (master).	option	-	disable								

Parameter	Description	Type	Size	Default						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable setting.</td></tr><tr><td><i>disable</i></td><td>Disable setting.</td></tr></table>	Option	Description	<i>enable</i>	Enable setting.	<i>disable</i>	Disable setting.			
	Option	Description								
	<i>enable</i>	Enable setting.								
<i>disable</i>	Disable setting.									
override-wait-time	Delay negotiating if override is enabled (0 - 3600 sec). Reduces how often the cluster negotiates.	integer	Minimum value: 0 Maximum value: 3600	0						
password	Cluster password. Must be the same for all members.	password	Not Specified							
pingserver-failover-threshold	Remote IP monitoring failover threshold (0 - 50).	integer	Minimum value: 0 Maximum value: 50	0						
pingserver-flip-timeout	Time to wait in minutes before renegotiating after a remote IP monitoring failover.	integer	Minimum value: 6 Maximum value: 2147483647	60						
pingserver-monitor-interface	Interfaces to check for remote IP monitoring.	user	Not Specified							
pingserver-secondary-force-reset	Enable to force the cluster to negotiate after a remote IP monitoring failover.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable force reset of secondary member after PING server failure.</td></tr><tr><td><i>disable</i></td><td>Disable force reset of secondary member after PING server failure.</td></tr></table>	Option	Description	<i>enable</i>	Enable force reset of secondary member after PING server failure.	<i>disable</i>	Disable force reset of secondary member after PING server failure.			
	Option	Description								
	<i>enable</i>	Enable force reset of secondary member after PING server failure.								
<i>disable</i>	Disable force reset of secondary member after PING server failure.									
pop3-proxy-threshold	Dynamic weighted load balancing weight and high and low number of POP3 proxy sessions.	user	Not Specified							
priority	Increase the priority to select the primary unit (0 - 255).	integer	Minimum value: 0 Maximum value: 255	128						
route-hold	Time to wait between routing table updates to the cluster (0 - 3600 sec).	integer	Minimum value: 0 Maximum value: 3600	10						

Parameter	Description	Type	Size	Default																
route-ttl	TTL for primary unit routes (5 - 3600 sec). Increase to maintain active routes during failover.	integer	Minimum value: 5 Maximum value: 3600	10																
route-wait	Time to wait before sending new routes to the cluster (0 - 3600 sec).	integer	Minimum value: 0 Maximum value: 3600	0																
schedule	Type of A-A load balancing. Use none if you have external load balancers.	option	-	round-robin																
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>none</i></td><td>None.</td></tr><tr><td><i>leastconnection</i></td><td>Least connection.</td></tr><tr><td><i>round-robin</i></td><td>Round robin.</td></tr><tr><td><i>weight-round-robin</i></td><td>Weight round robin.</td></tr><tr><td><i>random</i></td><td>Random.</td></tr><tr><td><i>ip</i></td><td>IP.</td></tr><tr><td><i>ipport</i></td><td>IP port.</td></tr></table>	Option	Description	<i>none</i>	None.	<i>leastconnection</i>	Least connection.	<i>round-robin</i>	Round robin.	<i>weight-round-robin</i>	Weight round robin.	<i>random</i>	Random.	<i>ip</i>	IP.	<i>ipport</i>	IP port.			
Option	Description																			
<i>none</i>	None.																			
<i>leastconnection</i>	Least connection.																			
<i>round-robin</i>	Round robin.																			
<i>weight-round-robin</i>	Weight round robin.																			
<i>random</i>	Random.																			
<i>ip</i>	IP.																			
<i>ipport</i>	IP port.																			
session-pickup	Enable/disable session pickup. Enabling it can reduce session down time when fail over happens.	option	-	disable																
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable session pickup.</td></tr><tr><td><i>disable</i></td><td>Disable session pickup.</td></tr></table>	Option	Description	<i>enable</i>	Enable session pickup.	<i>disable</i>	Disable session pickup.													
Option	Description																			
<i>enable</i>	Enable session pickup.																			
<i>disable</i>	Disable session pickup.																			
session-pickup-connectionless	Enable/disable UDP and ICMP session sync.	option	-	disable																
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable setting.</td></tr><tr><td><i>disable</i></td><td>Disable setting.</td></tr></table>	Option	Description	<i>enable</i>	Enable setting.	<i>disable</i>	Disable setting.													
Option	Description																			
<i>enable</i>	Enable setting.																			
<i>disable</i>	Disable setting.																			
session-pickup-delay	Enable to sync sessions longer than 30 sec. Only longer lived sessions need to be synced.	option	-	disable																

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		
session-pickup-expectation	Enable/disable session helper expectation session sync for FGSP.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		
session-pickup-nat	Enable/disable NAT session sync for FGSP.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		
session-sync-dev	Offload session-sync process to kernel and sync sessions using connected interface(s) directly.	user	Not Specified	
smtp-proxy-threshold	Dynamic weighted load balancing weight and high and low number of SMTP proxy sessions.	user	Not Specified	
ssd-failover *	Enable/disable automatic HA failover on SSD disk failure.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		
standalone-config-sync	Enable/disable FGSP configuration synchronization.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		
standalone-mgmt-vdom	Enable/disable standalone management VDOM.	option	-	disable

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		
sync-config	Enable/disable configuration synchronization.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable configuration synchronization.		
	<i>disable</i>	Disable configuration synchronization.		
sync-packet-balance	Enable/disable HA packet distribution to multiple CPUs.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable HA packet distribution to multiple CPUs.		
	<i>disable</i>	Disable HA packet distribution to multiple CPUs.		
unicast-gateway *	Default route gateway for unicast interface.	ipv4-address	Not Specified	0.0.0.0
unicast-hb *	Enable/disable unicast heartbeat.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		
unicast-hb-netmask *	Unicast heartbeat netmask.	ipv4-netmask	Not Specified	0.0.0.0
unicast-hb-peerip *	Unicast heartbeat peer IP.	ipv4-address	Not Specified	0.0.0.0
unicast-status *	Enable/disable unicast connection.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		

Parameter	Description	Type	Size	Default
uninterruptible-primary-wait	Number of minutes the primary HA unit waits before the secondary HA unit is considered upgraded and the system is started before starting its own upgrade (15 - 300, default = 30).	integer	Minimum value: 15 Maximum value: 300	30
uninterruptible-upgrade	Enable to upgrade a cluster without blocking network traffic.	option	-	enable
	Option		Description	
	<i>enable</i>		Enable setting.	
	<i>disable</i>		Disable setting.	
vcluster-status	Enable/disable virtual cluster for virtual clustering.	option	-	disable
	Option		Description	
	<i>enable</i>		Enable setting.	
	<i>disable</i>		Disable setting.	
weight	Weight-round-robin weight for each cluster unit. Syntax <priority> <weight>.	user	Not Specified	0 40

* This parameter may not exist in some models.

** Values may differ between models.

config ha-mgmt-interfaces

Parameter	Description	Type	Size	Default
dst	Default route destination for reserved HA management interface.	ipv4-classnet	Not Specified	0.0.0.0 0.0.0.0
gateway	Default route gateway for reserved HA management interface.	ipv4-address	Not Specified	0.0.0.0
gateway6	Default IPv6 gateway for reserved HA management interface.	ipv6-address	Not Specified	::
id	Table ID.	integer	Minimum value: 0 Maximum value: 4294967295	0
interface	Interface to reserve for HA management.	string	Maximum length: 15	

config unicast-peers

Parameter	Description	Type	Size	Default
id	Table ID.	integer	Minimum value: 0 Maximum value: 4294967295	0
peer-ip	Unicast peer IP.	ipv4-address	Not Specified	0.0.0.0

config vcluster

Parameter	Description	Type	Size	Default						
monitor	Interfaces to check for port monitoring (or link failure).	user	Not Specified							
override	Enable and increase the priority of the unit that should always be primary (master).	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable setting.</td></tr><tr><td><i>disable</i></td><td>Disable setting.</td></tr></table>	Option	Description	<i>enable</i>	Enable setting.	<i>disable</i>	Disable setting.			
Option	Description									
<i>enable</i>	Enable setting.									
<i>disable</i>	Disable setting.									
override-wait-time	Delay negotiating if override is enabled (0 - 3600 sec). Reduces how often the cluster negotiates.	integer	Minimum value: 0 Maximum value: 3600	0						
pingserver-failover-threshold	Remote IP monitoring failover threshold (0 - 50).	integer	Minimum value: 0 Maximum value: 50	0						
pingserver-monitor-interface	Interfaces to check for remote IP monitoring.	user	Not Specified							
pingserver-secondary-force-reset	Enable to force the cluster to negotiate after a remote IP monitoring failover.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable force reset of secondary member after PING server failure.</td></tr><tr><td><i>disable</i></td><td>Disable force reset of secondary member after PING server failure.</td></tr></table>	Option	Description	<i>enable</i>	Enable force reset of secondary member after PING server failure.	<i>disable</i>	Disable force reset of secondary member after PING server failure.			
Option	Description									
<i>enable</i>	Enable force reset of secondary member after PING server failure.									
<i>disable</i>	Disable force reset of secondary member after PING server failure.									

Parameter	Description	Type	Size	Default
priority	Increase the priority to select the primary unit (0 - 255).	integer	Minimum value: 0 Maximum value: 255	128
vcluster-id	ID.	integer	Minimum value: 1 Maximum value: 30	1
vdom <name>	Virtual domain(s) in the virtual cluster. Virtual domain name.	string	Maximum length: 79	

config system ha-monitor

Configure HA monitor.

```
config system ha-monitor
    Description: Configure HA monitor.
    set monitor-vlan [enable|disable]
    set vlan-hb-interval {integer}
    set vlan-hb-lost-threshold {integer}
end
```

config system ha-monitor

Parameter	Description	Type	Size	Default						
monitor-vlan	Enable/disable monitor VLAN interfaces.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable monitor VLAN interfaces.</td></tr><tr><td><i>disable</i></td><td>Disable monitor VLAN interfaces.</td></tr></table>	Option	Description	<i>enable</i>	Enable monitor VLAN interfaces.	<i>disable</i>	Disable monitor VLAN interfaces.			
Option	Description									
<i>enable</i>	Enable monitor VLAN interfaces.									
<i>disable</i>	Disable monitor VLAN interfaces.									
vlan-hb-interval	Configure heartbeat interval (seconds).	integer	Minimum value: 1 Maximum value: 30	5						
vlan-hb-lost-threshold	VLAN lost heartbeat threshold (1 - 60).	integer	Minimum value: 1 Maximum value: 60	3						

config system ike

Configure IKE global attributes.

```
config system ike
  Description: Configure IKE global attributes.
  config dh-group-1
    Description: Diffie-Hellman group 1 (MODP-768).
    set keypair-cache [global|custom]
    set keypair-count {integer}
    set mode [software|hardware|...]
  end
  config dh-group-14
    Description: Diffie-Hellman group 14 (MODP-2048).
    set keypair-cache [global|custom]
    set keypair-count {integer}
    set mode [software|hardware|...]
  end
  config dh-group-15
    Description: Diffie-Hellman group 15 (MODP-3072).
    set keypair-cache [global|custom]
    set keypair-count {integer}
    set mode [software|hardware|...]
  end
  config dh-group-16
    Description: Diffie-Hellman group 16 (MODP-4096).
    set keypair-cache [global|custom]
    set keypair-count {integer}
    set mode [software|hardware|...]
  end
  config dh-group-17
    Description: Diffie-Hellman group 17 (MODP-6144).
    set keypair-cache [global|custom]
    set keypair-count {integer}
    set mode [software|hardware|...]
  end
  config dh-group-18
    Description: Diffie-Hellman group 18 (MODP-8192).
    set keypair-cache [global|custom]
    set keypair-count {integer}
    set mode [software|hardware|...]
  end
  config dh-group-19
    Description: Diffie-Hellman group 19 (EC-P256).
    set keypair-cache [global|custom]
    set keypair-count {integer}
    set mode [software|hardware|...]
  end
  config dh-group-2
    Description: Diffie-Hellman group 2 (MODP-1024).
    set keypair-cache [global|custom]
```

```

        set keypair-count {integer}
        set mode [software|hardware|...]
    end
    config dh-group-20
        Description: Diffie-Hellman group 20 (EC-P384).
        set keypair-cache [global|custom]
        set keypair-count {integer}
        set mode [software|hardware|...]
    end
    config dh-group-21
        Description: Diffie-Hellman group 21 (EC-P521).
        set keypair-cache [global|custom]
        set keypair-count {integer}
        set mode [software|hardware|...]
    end
    config dh-group-27
        Description: Diffie-Hellman group 27 (EC-P224BP).
        set keypair-cache [global|custom]
        set keypair-count {integer}
        set mode [software|hardware|...]
    end
    config dh-group-28
        Description: Diffie-Hellman group 28 (EC-P256BP).
        set keypair-cache [global|custom]
        set keypair-count {integer}
        set mode [software|hardware|...]
    end
    config dh-group-29
        Description: Diffie-Hellman group 29 (EC-P384BP).
        set keypair-cache [global|custom]
        set keypair-count {integer}
        set mode [software|hardware|...]
    end
    config dh-group-30
        Description: Diffie-Hellman group 30 (EC-P512BP).
        set keypair-cache [global|custom]
        set keypair-count {integer}
        set mode [software|hardware|...]
    end
    config dh-group-31
        Description: Diffie-Hellman group 31 (EC-X25519).
        set keypair-cache [global|custom]
        set keypair-count {integer}
        set mode [software|hardware|...]
    end
    config dh-group-32
        Description: Diffie-Hellman group 32 (EC-X448).
        set keypair-cache [global|custom]
        set keypair-count {integer}
        set mode [software|hardware|...]
    end
    config dh-group-5

```

```

        Description: Diffie-Hellman group 5 (MODP-1536).
        set keypair-cache [global|custom]
        set keypair-count {integer}
        set mode [software|hardware|...]
    end
    set dh-keypair-cache [enable|disable]
    set dh-keypair-count {integer}
    set dh-keypair-throttle [enable|disable]
    set dh-mode [software|hardware]
    set dh-multiprocess [enable|disable]
    set dh-worker-count {integer}
    set embryonic-limit {integer}
end

```

config system ike

Parameter	Description	Type	Size	Default						
dh-keypair-cache	Enable/disable Diffie-Hellman key pair cache.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable Diffie-Hellman key pair cache.</td></tr><tr><td>disable</td><td>Disable Diffie-Hellman key pair cache.</td></tr></table>	Option	Description	enable	Enable Diffie-Hellman key pair cache.	disable	Disable Diffie-Hellman key pair cache.			
Option	Description									
enable	Enable Diffie-Hellman key pair cache.									
disable	Disable Diffie-Hellman key pair cache.									
dh-keypair-count	Number of key pairs to pre-generate for each Diffie-Hellman group (per-worker).	integer	Minimum value: 0 Maximum value: 50000	100 **						
dh-keypair-throttle	Enable/disable Diffie-Hellman key pair cache CPU throttling.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable Diffie-Hellman key pair cache CPU throttling.</td></tr><tr><td>disable</td><td>Disable Diffie-Hellman key pair cache CPU throttling.</td></tr></table>	Option	Description	enable	Enable Diffie-Hellman key pair cache CPU throttling.	disable	Disable Diffie-Hellman key pair cache CPU throttling.			
Option	Description									
enable	Enable Diffie-Hellman key pair cache CPU throttling.									
disable	Disable Diffie-Hellman key pair cache CPU throttling.									
dh-mode	Use software (CPU) or hardware (CPX) to perform Diffie-Hellman calculations.	option	-	hardware **						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>software</td><td>Prefer CPU to perform Diffie-Hellman calculations.</td></tr><tr><td>hardware</td><td>Prefer CPX to perform Diffie-Hellman calculations.</td></tr></table>	Option	Description	software	Prefer CPU to perform Diffie-Hellman calculations.	hardware	Prefer CPX to perform Diffie-Hellman calculations.			
Option	Description									
software	Prefer CPU to perform Diffie-Hellman calculations.									
hardware	Prefer CPX to perform Diffie-Hellman calculations.									

Parameter	Description	Type	Size	Default
dh-multiprocess	Enable/disable multiprocess Diffie-Hellman daemon for IKE.	option	-	enable
	Option Description			
	<i>enable</i>	Enable multiprocess Diffie-Hellman for IKE.		
	<i>disable</i>	Disable multiprocess Diffie-Hellman for IKE.		
dh-worker-count	Number of Diffie-Hellman workers to start.	integer	Minimum value: 1 Maximum value: 8 **	0
embryonic-limit	Maximum number of IPsec tunnels to negotiate simultaneously.	integer	Minimum value: 50 Maximum value: 20000	5000 **

** Values may differ between models.

config dh-group-1

Parameter	Description	Type	Size	Default
keypair-cache	Configure custom key pair cache size for this Diffie-Hellman group.	option	-	global
	Option Description			
	<i>global</i>	Use global Diffie-Hellman key pair cache setting.		
	<i>custom</i>	Use custom Diffie-Hellman key pair cache setting.		
keypair-count	Number of key pairs to pre-generate for this Diffie-Hellman group (per-worker).	integer	Minimum value: 0 Maximum value: 50000	0
mode	Use software (CPU) or hardware (CPX) to perform calculations for this Diffie-Hellman group.	option	-	global
	Option Description			
	<i>software</i>	Prefer CPU to perform Diffie-Hellman calculations.		
	<i>hardware</i>	Prefer CPX to perform Diffie-Hellman calculations.		
	<i>global</i>	Use global dh-mode setting.		

config dh-group-14

Parameter	Description	Type	Size	Default								
keypair-cache	Configure custom key pair cache size for this Diffie-Hellman group.	option	-	global								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>global</i></td><td>Use global Diffie-Hellman key pair cache setting.</td></tr><tr><td><i>custom</i></td><td>Use custom Diffie-Hellman key pair cache setting.</td></tr></table>	Option	Description	<i>global</i>	Use global Diffie-Hellman key pair cache setting.	<i>custom</i>	Use custom Diffie-Hellman key pair cache setting.					
Option	Description											
<i>global</i>	Use global Diffie-Hellman key pair cache setting.											
<i>custom</i>	Use custom Diffie-Hellman key pair cache setting.											
keypair-count	Number of key pairs to pre-generate for this Diffie-Hellman group (per-worker).	integer	Minimum value: 0 Maximum value: 50000	0								
mode	Use software (CPU) or hardware (CPX) to perform calculations for this Diffie-Hellman group.	option	-	global								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>software</i></td><td>Prefer CPU to perform Diffie-Hellman calculations.</td></tr><tr><td><i>hardware</i></td><td>Prefer CPX to perform Diffie-Hellman calculations.</td></tr><tr><td><i>global</i></td><td>Use global dh-mode setting.</td></tr></table>	Option	Description	<i>software</i>	Prefer CPU to perform Diffie-Hellman calculations.	<i>hardware</i>	Prefer CPX to perform Diffie-Hellman calculations.	<i>global</i>	Use global dh-mode setting.			
Option	Description											
<i>software</i>	Prefer CPU to perform Diffie-Hellman calculations.											
<i>hardware</i>	Prefer CPX to perform Diffie-Hellman calculations.											
<i>global</i>	Use global dh-mode setting.											

config dh-group-15

Parameter	Description	Type	Size	Default						
keypair-cache	Configure custom key pair cache size for this Diffie-Hellman group.	option	-	global						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>global</i></td><td>Use global Diffie-Hellman key pair cache setting.</td></tr><tr><td><i>custom</i></td><td>Use custom Diffie-Hellman key pair cache setting.</td></tr></table>	Option	Description	<i>global</i>	Use global Diffie-Hellman key pair cache setting.	<i>custom</i>	Use custom Diffie-Hellman key pair cache setting.			
Option	Description									
<i>global</i>	Use global Diffie-Hellman key pair cache setting.									
<i>custom</i>	Use custom Diffie-Hellman key pair cache setting.									
keypair-count	Number of key pairs to pre-generate for this Diffie-Hellman group (per-worker).	integer	Minimum value: 0 Maximum value: 50000	0						
mode	Use software (CPU) or hardware (CPX) to perform calculations for this Diffie-Hellman group.	option	-	global						

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>software</i>	Prefer CPU to perform Diffie-Hellman calculations.		
	<i>hardware</i>	Prefer CPX to perform Diffie-Hellman calculations.		
	<i>global</i>	Use global dh-mode setting.		

config dh-group-16

Parameter	Description	Type	Size	Default
keypair-cache	Configure custom key pair cache size for this Diffie-Hellman group.	option	-	global
	Option	Description		
	<i>global</i>	Use global Diffie-Hellman key pair cache setting.		
	<i>custom</i>	Use custom Diffie-Hellman key pair cache setting.		
keypair-count	Number of key pairs to pre-generate for this Diffie-Hellman group (per-worker).	integer	Minimum value: 0 Maximum value: 50000	0
mode	Use software (CPU) or hardware (CPX) to perform calculations for this Diffie-Hellman group.	option	-	global
	Option	Description		
	<i>software</i>	Prefer CPU to perform Diffie-Hellman calculations.		
	<i>hardware</i>	Prefer CPX to perform Diffie-Hellman calculations.		
	<i>global</i>	Use global dh-mode setting.		

config dh-group-17

Parameter	Description	Type	Size	Default
keypair-cache	Configure custom key pair cache size for this Diffie-Hellman group.	option	-	global
	Option	Description		
	<i>global</i>	Use global Diffie-Hellman key pair cache setting.		
	<i>custom</i>	Use custom Diffie-Hellman key pair cache setting.		

Parameter	Description	Type	Size	Default								
keypair-count	Number of key pairs to pre-generate for this Diffie-Hellman group (per-worker).	integer	Minimum value: 0 Maximum value: 50000	0								
mode	Use software (CPU) or hardware (CPX) to perform calculations for this Diffie-Hellman group.	option	-	global								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>software</i></td><td>Prefer CPU to perform Diffie-Hellman calculations.</td></tr><tr><td><i>hardware</i></td><td>Prefer CPX to perform Diffie-Hellman calculations.</td></tr><tr><td><i>global</i></td><td>Use global dh-mode setting.</td></tr></table>				Option	Description	<i>software</i>	Prefer CPU to perform Diffie-Hellman calculations.	<i>hardware</i>	Prefer CPX to perform Diffie-Hellman calculations.	<i>global</i>	Use global dh-mode setting.
Option	Description											
<i>software</i>	Prefer CPU to perform Diffie-Hellman calculations.											
<i>hardware</i>	Prefer CPX to perform Diffie-Hellman calculations.											
<i>global</i>	Use global dh-mode setting.											

config dh-group-18

Parameter	Description	Type	Size	Default								
keypair-cache	Configure custom key pair cache size for this Diffie-Hellman group.	option	-	global								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>global</i></td><td>Use global Diffie-Hellman key pair cache setting.</td></tr><tr><td><i>custom</i></td><td>Use custom Diffie-Hellman key pair cache setting.</td></tr></table>	Option	Description	<i>global</i>	Use global Diffie-Hellman key pair cache setting.	<i>custom</i>	Use custom Diffie-Hellman key pair cache setting.					
Option	Description											
<i>global</i>	Use global Diffie-Hellman key pair cache setting.											
<i>custom</i>	Use custom Diffie-Hellman key pair cache setting.											
keypair-count	Number of key pairs to pre-generate for this Diffie-Hellman group (per-worker).	integer	Minimum value: 0 Maximum value: 50000	0								
mode	Use software (CPU) or hardware (CPX) to perform calculations for this Diffie-Hellman group.	option	-	global								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>software</i></td><td>Prefer CPU to perform Diffie-Hellman calculations.</td></tr><tr><td><i>hardware</i></td><td>Prefer CPX to perform Diffie-Hellman calculations.</td></tr><tr><td><i>global</i></td><td>Use global dh-mode setting.</td></tr></table>	Option	Description	<i>software</i>	Prefer CPU to perform Diffie-Hellman calculations.	<i>hardware</i>	Prefer CPX to perform Diffie-Hellman calculations.	<i>global</i>	Use global dh-mode setting.			
Option	Description											
<i>software</i>	Prefer CPU to perform Diffie-Hellman calculations.											
<i>hardware</i>	Prefer CPX to perform Diffie-Hellman calculations.											
<i>global</i>	Use global dh-mode setting.											

config dh-group-19

Parameter	Description	Type	Size	Default								
keypair-cache	Configure custom key pair cache size for this Diffie-Hellman group.	option	-	global								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>global</i></td><td>Use global Diffie-Hellman key pair cache setting.</td></tr><tr><td><i>custom</i></td><td>Use custom Diffie-Hellman key pair cache setting.</td></tr></table>	Option	Description	<i>global</i>	Use global Diffie-Hellman key pair cache setting.	<i>custom</i>	Use custom Diffie-Hellman key pair cache setting.					
Option	Description											
<i>global</i>	Use global Diffie-Hellman key pair cache setting.											
<i>custom</i>	Use custom Diffie-Hellman key pair cache setting.											
keypair-count	Number of key pairs to pre-generate for this Diffie-Hellman group (per-worker).	integer	Minimum value: 0 Maximum value: 50000	0								
mode	Use software (CPU) or hardware (CPX) to perform calculations for this Diffie-Hellman group.	option	-	global								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>software</i></td><td>Prefer CPU to perform Diffie-Hellman calculations.</td></tr><tr><td><i>hardware</i></td><td>Prefer CPX to perform Diffie-Hellman calculations.</td></tr><tr><td><i>global</i></td><td>Use global dh-mode setting.</td></tr></table>	Option	Description	<i>software</i>	Prefer CPU to perform Diffie-Hellman calculations.	<i>hardware</i>	Prefer CPX to perform Diffie-Hellman calculations.	<i>global</i>	Use global dh-mode setting.			
Option	Description											
<i>software</i>	Prefer CPU to perform Diffie-Hellman calculations.											
<i>hardware</i>	Prefer CPX to perform Diffie-Hellman calculations.											
<i>global</i>	Use global dh-mode setting.											

config dh-group-2

Parameter	Description	Type	Size	Default
keypair-cache	Configure custom key pair cache size for this Diffie-Hellman group.	option	-	global
	Option	Description		
	<i>global</i>	Use global Diffie-Hellman key pair cache setting.		
	<i>custom</i>	Use custom Diffie-Hellman key pair cache setting.		
keypair-count	Number of key pairs to pre-generate for this Diffie-Hellman group (per-worker).	integer	Minimum value: 0 Maximum value: 50000	0
mode	Use software (CPU) or hardware (CPX) to perform calculations for this Diffie-Hellman group.	option	-	global

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>software</i>	Prefer CPU to perform Diffie-Hellman calculations.		
	<i>hardware</i>	Prefer CPX to perform Diffie-Hellman calculations.		
	<i>global</i>	Use global dh-mode setting.		

config dh-group-20

Parameter	Description	Type	Size	Default
keypair-cache	Configure custom key pair cache size for this Diffie-Hellman group.	option	-	global
	Option	Description		
	<i>global</i>	Use global Diffie-Hellman key pair cache setting.		
	<i>custom</i>	Use custom Diffie-Hellman key pair cache setting.		
keypair-count	Number of key pairs to pre-generate for this Diffie-Hellman group (per-worker).	integer	Minimum value: 0 Maximum value: 50000	0
mode	Use software (CPU) or hardware (CPX) to perform calculations for this Diffie-Hellman group.	option	-	global
	Option	Description		
	<i>software</i>	Prefer CPU to perform Diffie-Hellman calculations.		
	<i>hardware</i>	Prefer CPX to perform Diffie-Hellman calculations.		
	<i>global</i>	Use global dh-mode setting.		

config dh-group-21

Parameter	Description	Type	Size	Default
keypair-cache	Configure custom key pair cache size for this Diffie-Hellman group.	option	-	global
	Option	Description		
	<i>global</i>	Use global Diffie-Hellman key pair cache setting.		
	<i>custom</i>	Use custom Diffie-Hellman key pair cache setting.		

Parameter	Description	Type	Size	Default								
keypair-count	Number of key pairs to pre-generate for this Diffie-Hellman group (per-worker).	integer	Minimum value: 0 Maximum value: 50000	0								
mode	Use software (CPU) or hardware (CPX) to perform calculations for this Diffie-Hellman group.	option	-	global								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>software</i></td><td>Prefer CPU to perform Diffie-Hellman calculations.</td></tr><tr><td><i>hardware</i></td><td>Prefer CPX to perform Diffie-Hellman calculations.</td></tr><tr><td><i>global</i></td><td>Use global dh-mode setting.</td></tr></table>				Option	Description	<i>software</i>	Prefer CPU to perform Diffie-Hellman calculations.	<i>hardware</i>	Prefer CPX to perform Diffie-Hellman calculations.	<i>global</i>	Use global dh-mode setting.
Option	Description											
<i>software</i>	Prefer CPU to perform Diffie-Hellman calculations.											
<i>hardware</i>	Prefer CPX to perform Diffie-Hellman calculations.											
<i>global</i>	Use global dh-mode setting.											

config dh-group-27

Parameter	Description	Type	Size	Default								
keypair-cache	Configure custom key pair cache size for this Diffie-Hellman group.	option	-	global								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>global</i></td><td>Use global Diffie-Hellman key pair cache setting.</td></tr><tr><td><i>custom</i></td><td>Use custom Diffie-Hellman key pair cache setting.</td></tr></table>	Option	Description	<i>global</i>	Use global Diffie-Hellman key pair cache setting.	<i>custom</i>	Use custom Diffie-Hellman key pair cache setting.					
Option	Description											
<i>global</i>	Use global Diffie-Hellman key pair cache setting.											
<i>custom</i>	Use custom Diffie-Hellman key pair cache setting.											
keypair-count	Number of key pairs to pre-generate for this Diffie-Hellman group (per-worker).	integer	Minimum value: 0 Maximum value: 50000	0								
mode	Use software (CPU) or hardware (CPX) to perform calculations for this Diffie-Hellman group.	option	-	global								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>software</i></td><td>Prefer CPU to perform Diffie-Hellman calculations.</td></tr><tr><td><i>hardware</i></td><td>Prefer CPX to perform Diffie-Hellman calculations.</td></tr><tr><td><i>global</i></td><td>Use global dh-mode setting.</td></tr></table>	Option	Description	<i>software</i>	Prefer CPU to perform Diffie-Hellman calculations.	<i>hardware</i>	Prefer CPX to perform Diffie-Hellman calculations.	<i>global</i>	Use global dh-mode setting.			
Option	Description											
<i>software</i>	Prefer CPU to perform Diffie-Hellman calculations.											
<i>hardware</i>	Prefer CPX to perform Diffie-Hellman calculations.											
<i>global</i>	Use global dh-mode setting.											

config dh-group-28

Parameter	Description	Type	Size	Default
keypair-cache	Configure custom key pair cache size for this Diffie-Hellman group.	option	-	global
	Option	Description		
	<i>global</i>	Use global Diffie-Hellman key pair cache setting.		
	<i>custom</i>	Use custom Diffie-Hellman key pair cache setting.		
keypair-count	Number of key pairs to pre-generate for this Diffie-Hellman group (per-worker).	integer	Minimum value: 0 Maximum value: 50000	0
mode	Use software (CPU) or hardware (CPX) to perform calculations for this Diffie-Hellman group.	option	-	global
	Option	Description		
	<i>software</i>	Prefer CPU to perform Diffie-Hellman calculations.		
	<i>hardware</i>	Prefer CPX to perform Diffie-Hellman calculations.		
	<i>global</i>	Use global dh-mode setting.		

config dh-group-29

Parameter	Description	Type	Size	Default
keypair-cache	Configure custom key pair cache size for this Diffie-Hellman group.	option	-	global
	Option	Description		
	<i>global</i>	Use global Diffie-Hellman key pair cache setting.		
	<i>custom</i>	Use custom Diffie-Hellman key pair cache setting.		
keypair-count	Number of key pairs to pre-generate for this Diffie-Hellman group (per-worker).	integer	Minimum value: 0 Maximum value: 50000	0
mode	Use software (CPU) or hardware (CPX) to perform calculations for this Diffie-Hellman group.	option	-	global

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>software</i>	Prefer CPU to perform Diffie-Hellman calculations.		
	<i>hardware</i>	Prefer CPX to perform Diffie-Hellman calculations.		
	<i>global</i>	Use global dh-mode setting.		

config dh-group-30

Parameter	Description	Type	Size	Default
keypair-cache	Configure custom key pair cache size for this Diffie-Hellman group.	option	-	global
	Option	Description		
	<i>global</i>	Use global Diffie-Hellman key pair cache setting.		
	<i>custom</i>	Use custom Diffie-Hellman key pair cache setting.		
keypair-count	Number of key pairs to pre-generate for this Diffie-Hellman group (per-worker).	integer	Minimum value: 0 Maximum value: 50000	0
mode	Use software (CPU) or hardware (CPX) to perform calculations for this Diffie-Hellman group.	option	-	global
	Option	Description		
	<i>software</i>	Prefer CPU to perform Diffie-Hellman calculations.		
	<i>hardware</i>	Prefer CPX to perform Diffie-Hellman calculations.		
	<i>global</i>	Use global dh-mode setting.		

config dh-group-31

Parameter	Description	Type	Size	Default
keypair-cache	Configure custom key pair cache size for this Diffie-Hellman group.	option	-	global
	Option	Description		
	<i>global</i>	Use global Diffie-Hellman key pair cache setting.		
	<i>custom</i>	Use custom Diffie-Hellman key pair cache setting.		

Parameter	Description	Type	Size	Default								
keypair-count	Number of key pairs to pre-generate for this Diffie-Hellman group (per-worker).	integer	Minimum value: 0 Maximum value: 50000	0								
mode	Use software (CPU) or hardware (CPX) to perform calculations for this Diffie-Hellman group.	option	-	global								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>software</td><td>Prefer CPU to perform Diffie-Hellman calculations.</td></tr><tr><td>hardware</td><td>Prefer CPX to perform Diffie-Hellman calculations.</td></tr><tr><td>global</td><td>Use global dh-mode setting.</td></tr></table>				Option	Description	software	Prefer CPU to perform Diffie-Hellman calculations.	hardware	Prefer CPX to perform Diffie-Hellman calculations.	global	Use global dh-mode setting.
Option	Description											
software	Prefer CPU to perform Diffie-Hellman calculations.											
hardware	Prefer CPX to perform Diffie-Hellman calculations.											
global	Use global dh-mode setting.											

config dh-group-32

Parameter	Description	Type	Size	Default
keypair-cache	Configure custom key pair cache size for this Diffie-Hellman group.	option	-	global
	Option	Description		
	<i>global</i>	Use global Diffie-Hellman key pair cache setting.		
	<i>custom</i>	Use custom Diffie-Hellman key pair cache setting.		
keypair-count	Number of key pairs to pre-generate for this Diffie-Hellman group (per-worker).	integer	Minimum value: 0 Maximum value: 50000	0
mode	Use software (CPU) or hardware (CPX) to perform calculations for this Diffie-Hellman group.	option	-	global
	Option	Description		
	<i>software</i>	Prefer CPU to perform Diffie-Hellman calculations.		
	<i>hardware</i>	Prefer CPX to perform Diffie-Hellman calculations.		
	<i>global</i>	Use global dh-mode setting.		

config dh-group-5

Parameter	Description	Type	Size	Default								
keypair-cache	Configure custom key pair cache size for this Diffie-Hellman group.	option	-	global								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>global</i></td><td>Use global Diffie-Hellman key pair cache setting.</td></tr><tr><td><i>custom</i></td><td>Use custom Diffie-Hellman key pair cache setting.</td></tr></table>	Option	Description	<i>global</i>	Use global Diffie-Hellman key pair cache setting.	<i>custom</i>	Use custom Diffie-Hellman key pair cache setting.					
Option	Description											
<i>global</i>	Use global Diffie-Hellman key pair cache setting.											
<i>custom</i>	Use custom Diffie-Hellman key pair cache setting.											
keypair-count	Number of key pairs to pre-generate for this Diffie-Hellman group (per-worker).	integer	Minimum value: 0 Maximum value: 50000	0								
mode	Use software (CPU) or hardware (CPX) to perform calculations for this Diffie-Hellman group.	option	-	global								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>software</i></td><td>Prefer CPU to perform Diffie-Hellman calculations.</td></tr><tr><td><i>hardware</i></td><td>Prefer CPX to perform Diffie-Hellman calculations.</td></tr><tr><td><i>global</i></td><td>Use global dh-mode setting.</td></tr></table>	Option	Description	<i>software</i>	Prefer CPU to perform Diffie-Hellman calculations.	<i>hardware</i>	Prefer CPX to perform Diffie-Hellman calculations.	<i>global</i>	Use global dh-mode setting.			
Option	Description											
<i>software</i>	Prefer CPU to perform Diffie-Hellman calculations.											
<i>hardware</i>	Prefer CPX to perform Diffie-Hellman calculations.											
<i>global</i>	Use global dh-mode setting.											

config system interface

Configure interfaces.

```
config system interface
  Description: Configure interfaces.
  edit <name>
    set ac-name {string}
    set aggregate {string}
    set aggregate-type [physical|vxlan]
    set algorithm [L2|L3|...]
    set alias {string}
    set allowaccess {option1}, {option2}, ...
    set annex [a|b|...]
    set ap-discover [enable|disable]
    set arpforward [enable|disable]
    set atm-protocol [none|ipoa]
    set auth-cert {string}
    set auth-portal-addr {string}
    set auth-type [auto|pap|...]
    set auto-auth-extension-device [enable|disable]
    set bandwidth-measure-time {integer}
```

```

set bfd [global|enable|...]
set bfd-desired-min-tx {integer}
set bfd-detect-mult {integer}
set bfd-required-min-rx {integer}
set broadcast-forward [enable|disable]
set cli-conn-status {integer}
config client-options
    Description: DHCP client options.
    edit <id>
        set code {integer}
        set ip {user}
        set type [hex|string|...]
        set value {string}
    next
end
set color {integer}
set dedicated-to [none|management]
set defaultgw [enable|disable]
set description {var-string}
set detected-peer-mtu {integer}
set detectprotocol {option1}, {option2}, ...
set detectserver {user}
set device-identification [enable|disable]
set device-user-identification [enable|disable]
set devindex {integer}
set dhcp-classless-route-addition [enable|disable]
set dhcp-client-identifier {string}
set dhcp-relay-agent-option [enable|disable]
set dhcp-relay-interface {string}
set dhcp-relay-interface-select-method [auto|sdwan|...]
set dhcp-relay-ip {user}
set dhcp-relay-link-selection {ipv4-address}
set dhcp-relay-request-all-server [disable|enable]
set dhcp-relay-service [disable|enable]
set dhcp-relay-type [regular|ipsec]
set dhcp-renew-time {integer}
config dhcp-snooping-server-list
    Description: Configure DHCP server access list.
    edit <name>
        set server-ip {ipv4-address}
    next
end
set disc-retry-timeout {integer}
set disconnect-threshold {integer}
set distance {integer}
set dns-server-override [enable|disable]
set dns-server-protocol {option1}, {option2}, ...
set drop-fragment [enable|disable]
set drop-overlapped-fragment [enable|disable]
set eap-ca-cert {string}
set eap-identity {string}
set eap-method [tls|peap]

```

```

set eap-password {password}
set eap-supPLICant [enable|disable]
set eap-user-cert {string}
set egress-cos [disable|cos0|...]
config egress-queues
    Description: Configure queues of NP port on egress path.
    set cos0 {string}
    set cos1 {string}
    set cos2 {string}
    set cos3 {string}
    set cos4 {string}
    set cos5 {string}
    set cos6 {string}
    set cos7 {string}
end
set egress-shaping-profile {string}
set eip {ipv4-address-any}
set estimated-downstream-bandwidth {integer}
set estimated-upstream-bandwidth {integer}
set explicit-ftp-proxy [enable|disable]
set explicit-web-proxy [enable|disable]
set external [enable|disable]
set fail-action-on-extender [soft-restart|hard-restart|...]
set fail-alert-interfaces <name1>, <name2>, ...
set fail-alert-method [link-failed-signal|link-down]
set fail-detect [enable|disable]
set fail-detect-option {option1}, {option2}, ...
set fortilink [enable|disable]
set fortilink-backup-link {integer}
set fortilink-neighbor-detect [lldp|fortilink]
set fortilink-split-interface [enable|disable]
set forward-domain {integer}
set forward-error-correction [none|disable|...]
set gateway-address {ipv4-address}
set gwaddr {ipv4-address}
set gwdetect [enable|disable]
set ha-priority {integer}
set icmp-accept-redirect [enable|disable]
set icmp-send-redirect [enable|disable]
set ident-accept [enable|disable]
set idle-timeout {integer}
set ike-saml-server {string}
set inbandwidth {integer}
set ingress-cos [disable|cos0|...]
set ingress-shaping-profile {string}
set ingress-spillover-threshold {integer}
set interconnect-profile [default|profile1|...]
set interface {string}
set internal {integer}
set ip {ipv4-classnet-host}
set ip-managed-by-fortiipam [enable|disable]
set ipmac [enable|disable]

```

```

set ips-sniffer-mode [enable|disable]
set ipunnumbered {ipv4-address}
config ipv6
    Description: IPv6 of interface.
    set autoconf [enable|disable]
    set cli-conn6-status {integer}
    set dhcp6-client-options {option1}, {option2}, ...
    config dhcp6-iapd-list
        Description: DHCPv6 IA-PD list.
        edit <iaid>
            set prefix-hint {ipv6-network}
            set prefix-hint-plt {integer}
            set prefix-hint-vlt {integer}
        next
    end
    set dhcp6-information-request [enable|disable]
    set dhcp6-prefix-delegation [enable|disable]
    set dhcp6-relay-ip {user}
    set dhcp6-relay-service [disable|enable]
    set dhcp6-relay-source-interface [disable|enable]
    set dhcp6-relay-type {option}
    set icmp6-send-redirect [enable|disable]
    set interface-identifier {ipv6-address}
    set ip6-address {ipv6-prefix}
    set ip6-allowaccess {option1}, {option2}, ...
    set ip6-default-life {integer}
    set ip6-delegated-prefix-iaid {integer}
    config ip6-delegated-prefix-list
        Description: Advertised IPv6 delegated prefix list.
        edit <prefix-id>
            set autonomous-flag [enable|disable]
            set delegated-prefix-iaid {integer}
            set onlink-flag [enable|disable]
            set rdns {user}
            set rdns-service [delegated|default|...]
            set subnet {ipv6-network}
            set upstream-interface {string}
        next
    end
    set ip6-dns-server-override [enable|disable]
    config ip6-extra-addr
        Description: Extra IPv6 address prefixes of interface.
        edit <prefix>
            next
        end
    set ip6-hop-limit {integer}
    set ip6-link-mtu {integer}
    set ip6-manage-flag [enable|disable]
    set ip6-max-interval {integer}
    set ip6-min-interval {integer}
    set ip6-mode [static|dhcp|...]
    set ip6-other-flag [enable|disable]

```

```

config ip6-prefix-list
    Description: Advertised prefix list.
    edit <prefix>
        set autonomous-flag [enable|disable]
        set dnssl <domain1>, <domain2>, ...
        set onlink-flag [enable|disable]
        set preferred-life-time {integer}
        set rdns {user}
        set valid-life-time {integer}
    next
end
set ip6-prefix-mode [dhcp6|ra]
set ip6-reachable-time {integer}
set ip6-retrans-time {integer}
set ip6-send-adv [enable|disable]
set ip6-subnet {ipv6-prefix}
set ip6-upstream-interface {string}
set nd-cert {string}
set nd-cga-modifier {user}
set nd-mode [basic|SEND-compatible]
set nd-security-level {integer}
set nd-timestamp-delta {integer}
set nd-timestamp-fuzz {integer}
set ra-send-mtu [enable|disable]
set unique-autoconf-addr [enable|disable]
set vrip6_link_local {ipv6-address}
set vrrp-virtual-mac6 [enable|disable]
config vrrp6
    Description: IPv6 VRRP configuration.
    edit <vrid>
        set accept-mode [enable|disable]
        set adv-interval {integer}
        set preempt [enable|disable]
        set priority {integer}
        set start-time {integer}
        set status [enable|disable]
        set vrdst6 {ipv6-address}
        set vrgrp {integer}
        set vrip6 {ipv6-address}
    next
end
end
set l2forward [enable|disable]
set l2tp-client [enable|disable]
config l2tp-client-settings
    Description: L2TP client settings.
    set auth-type [auto|pap|...]
    set defaultgw [enable|disable]
    set distance {integer}
    set hello-interval {integer}
    set ip {ipv4-classnet-host}
    set mtu {integer}

```

```

    set password {password}
    set peer-host {string}
    set peer-mask {ipv4-netmask}
    set peer-port {integer}
    set priority {integer}
    set user {string}
end
set lacp-ha-secondary [enable|disable]
set lacp-mode [static|passive|...]
set lacp-speed [slow|fast]
set lcp-echo-interval {integer}
set lcp-max-echo-fails {integer}
set link-up-delay {integer}
set lldp-network-policy {string}
set lldp-reception [enable|disable|...]
set lldp-transmission [enable|disable|...]
set macaddr {mac-address}
set managed-subnetwork-size [32|64|...]
set management-ip {ipv4-classnet-host}
set measured-downstream-bandwidth {integer}
set measured-upstream-bandwidth {integer}
set mediatype [serdes-sfp|sgmii-sfp|...]
set member <interface-name1>, <interface-name2>, ...
set min-links {integer}
set min-links-down [operational|administrative]
set mode [static|dhcp|...]
set monitor-bandwidth [enable|disable]
set mtu {integer}
set mtu-override [enable|disable]
set mux-type [llc-encaps|vc-encaps]
set ndiscforward [enable|disable]
set netbios-forward [disable|enable]
set netflow-sampler [disable|tx|...]
set np-qos-profile {integer}
set outbandwidth {integer}
set padt-retry-timeout {integer}
set password {password}
set phy-mode {option}
set ping-serv-status {integer}
set poe [enable|disable]
set polling-interval {integer}
set pppoe-unnumbered-negotiate [enable|disable]
set pptp-auth-type [auto|pap|...]
set pptp-client [enable|disable]
set pptp-password {password}
set pptp-server-ip {ipv4-address}
set pptp-timeout {integer}
set pptp-user {string}
set preserve-session-route [enable|disable]
set priority {integer}
set priority-override [enable|disable]
set proxy-captive-portal [enable|disable]

```

```

set pvc-atm-qos [cbr|rt-vbr|...]
set pvc-chan {integer}
set pvc-crc {integer}
set pvc-pcr {integer}
set pvc-scr {integer}
set pvc-vlan-id {integer}
set pvc-vlan-rx-id {integer}
set pvc-vlan-rx-op [pass-through|replace|...]
set pvc-vlan-tx-id {integer}
set pvc-vlan-tx-op [pass-through|replace|...]
set reachable-time {integer}
set redundant-interface {string}
set remote-ip {ipv4-classnet-host}
set replacemsg-override-group {string}
set retransmission [disable|enable]
set ring-rx {integer}
set ring-tx {integer}
set role [lan|wan|...]
set sample-direction [tx|rx|...]
set sample-rate {integer}
set secondary-IP [enable|disable]
config secondaryip
    Description: Second IP address of interface.
    edit <id>
        set allowaccess {option1}, {option2}, ...
        set detectprotocol {option1}, {option2}, ...
        set detectserver {user}
        set gwdetect [enable|disable]
        set ha-priority {integer}
        set ip {ipv4-classnet-host}
        set ping-serv-status {integer}
    next
end
set security-8021x-dynamic-vlan-id {integer}
set security-8021x-master {string}
set security-8021x-mode [default|dynamic-vlan|...]
set security-exempt-list {string}
set security-external-logout {string}
set security-external-web {var-string}
set security-groups <name1>, <name2>, ...
set security-mac-auth-bypass [mac-auth-only|enable|...]
set security-mode [none|captive-portal|...]
set security-redirect-url {var-string}
set select-profile-30a-35b [30A|35B]
set service-name {string}
set sflow-sampler [enable|disable]
set sfp-dsl [disable|enable]
set sfp-dsl-adsl-fallback [disable|enable]
set sfp-dsl-autodetect [disable|enable]
set sfp-dsl-mac {mac-address}
set snmp-index {integer}
set speed [auto|10full|...]

```



```

set spillover-threshold {integer}
set src-check [enable|disable]
set status [up|down]
set stp [disable|enable]
set stp-ha-secondary [disable|enable|...]
set stpforward [enable|disable]
set stpforward-mode [rpl-all-ext-id|rpl-bridge-ext-id|...]
set subst [enable|disable]
set substitute-dst-mac {mac-address}
set sw-algorithm [12|13|...]
set swc-first-create {integer}
set swc-vlan {integer}
set switch {string}
set switch-controller-access-vlan [enable|disable]
set switch-controller-arp-inspection [enable|disable]
set switch-controller-dhcp-snooping [enable|disable]
set switch-controller-dhcp-snooping-option82 [enable|disable]
set switch-controller-dhcp-snooping-verify-mac [enable|disable]
set switch-controller-dynamic {string}
set switch-controller-feature [none|default-vlan|...]
set switch-controller-igmp-snooping [enable|disable]
set switch-controller-igmp-snooping-fast-leave [enable|disable]
set switch-controller-igmp-snooping-proxy [enable|disable]
set switch-controller-iot-scanning [enable|disable]
set switch-controller-learning-limit {integer}
set switch-controller-mgmt-vlan {integer}
set switch-controller-nac {string}
set switch-controller-netflow-collect [disable|enable]
set switch-controller-rspan-mode [disable|enable]
set switch-controller-source-ip [outbound|fixed]
set switch-controller-traffic-policy {string}
set system-id {mac-address}
set system-id-type [auto|user]
config tagging
    Description: Config object tagging.
    edit <name>
        set category {string}
        set tags <name1>, <name2>, ...
    next
end
set tc-mode {option}
set tcp-mss {integer}
set trunk [enable|disable]
set trust-ip-1 {ipv4-classnet-any}
set trust-ip-2 {ipv4-classnet-any}
set trust-ip-3 {ipv4-classnet-any}
set trust-ip6-1 {ipv6-prefix}
set trust-ip6-2 {ipv6-prefix}
set trust-ip6-3 {ipv6-prefix}
set type [physical|vlan|...]
set username {string}
set vci {integer}

```

```

set vdom {string}
set vectoring [disable|enable]
set vindex {integer}
set vlan-id {integer}
set vlan-op-mode [tag|untag|...]
set vlan-protocol [8021q|8021ad]
set vlanforward [enable|disable]
set vlanid {integer}
set vpi {integer}
set vrf {integer}
config vrrp
    Description: VRRP configuration.
    edit <vrid>
        set accept-mode [enable|disable]
        set adv-interval {integer}
        set ignore-default-route [enable|disable]
        set preempt [enable|disable]
        set priority {integer}
        config proxy-arp
            Description: VRRP Proxy ARP configuration.
            edit <id>
                set ip {user}
            next
        end
        set start-time {integer}
        set status [enable|disable]
        set version [2|3]
        set vrdest {ipv4-address-any}
        set vrdest-priority {integer}
        set vrgrp {integer}
        set vrip {ipv4-address-any}
    next
end
set vrrp-virtual-mac [enable|disable]
set wccp [enable|disable]
set weight {integer}
set wifi-5g-threshold {string}
set wifi-acl [allow|deny]
set wifi-ap-band [any|5g-preferred|...]
set wifi-auth [PSK|radius|...]
set wifi-auto-connect [enable|disable]
set wifi-auto-save [enable|disable]
set wifi-broadcast-ssid [enable|disable]
set wifi-dns-server1 {ipv4-address}
set wifi-dns-server2 {ipv4-address}
set wifi-encrypt [TKIP|AES]
set wifi-fragment-threshold {integer}
set wifi-gateway {ipv4-address}
set wifi-key {password}
set wifi-keyindex {integer}
set wifi-mac-filter [enable|disable]
config wifi-mac-list

```

```

        Description: MAC filter list.
        edit <id>
            set mac {mac-address}
        next
    end
    config wifi-networks
        Description: WiFi network table.
        edit <id>
            set wifi-encrypt [TKIP|AES]
            set wifi-key {password}
            set wifi-keyindex {integer}
            set wifi-passphrase {password}
            set wifi-security [open|wep64|...]
            set wifi-ssid {string}
        next
    end
    set wifi-passphrase {password}
    set wifi-radius-server {string}
    set wifi-rts-threshold {integer}
    set wifi-security [open|wep64|...]
    set wifi-ssid {string}
    set wifi-usergroup {string}
    set wins-ip {ipv4-address}
next
end

```

config system interface

Parameter	Description	Type	Size	Default						
ac-name	PPPoE server name.	string	Maximum length: 63							
aggregate	Aggregate interface. Read-only.	string	Maximum length: 15							
aggregate-type	Type of aggregation.	option	-	physical						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>physical</i></td><td>Physical interface aggregation.</td></tr><tr><td><i>vlan</i></td><td>VXLAN interface aggregation.</td></tr></table>				Option	Description	<i>physical</i>	Physical interface aggregation.	<i>vlan</i>	VXLAN interface aggregation.
Option	Description									
<i>physical</i>	Physical interface aggregation.									
<i>vlan</i>	VXLAN interface aggregation.									
algorithm	Frame distribution algorithm.	option	-	L4						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>L2</i></td><td>Use layer 2 address for distribution.</td></tr><tr><td><i>L3</i></td><td>Use layer 3 address for distribution.</td></tr></table>				Option	Description	<i>L2</i>	Use layer 2 address for distribution.	<i>L3</i>	Use layer 3 address for distribution.
Option	Description									
<i>L2</i>	Use layer 2 address for distribution.									
<i>L3</i>	Use layer 3 address for distribution.									

Parameter	Description	Type	Size	Default																										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>L4</td><td>Use layer 4 information for distribution.</td></tr><tr><td>Source-MAC</td><td>Use source MAC address for distribution.</td></tr></table>	Option	Description	L4	Use layer 4 information for distribution.	Source-MAC	Use source MAC address for distribution.																							
	Option	Description																												
	L4	Use layer 4 information for distribution.																												
Source-MAC	Use source MAC address for distribution.																													
alias	Alias will be displayed with the interface name to make it easier to distinguish.	string	Maximum length: 25																											
allowaccess	Permitted types of management access to this interface.	option	-																											
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>ping</td><td>PING access.</td></tr><tr><td>https</td><td>HTTPS access.</td></tr><tr><td>ssh</td><td>SSH access.</td></tr><tr><td>snmp</td><td>SNMP access.</td></tr><tr><td>http</td><td>HTTP access.</td></tr><tr><td>telnet</td><td>TELNET access.</td></tr><tr><td>fgfm</td><td>FortiManager access.</td></tr><tr><td>radius-acct</td><td>RADIUS accounting access.</td></tr><tr><td>probe-response</td><td>Probe access.</td></tr><tr><td>fabric</td><td>Security Fabric access.</td></tr><tr><td>ftm</td><td>FTM access.</td></tr><tr><td>speed-test</td><td>Speed test access.</td></tr></table>	Option	Description	ping	PING access.	https	HTTPS access.	ssh	SSH access.	snmp	SNMP access.	http	HTTP access.	telnet	TELNET access.	fgfm	FortiManager access.	radius-acct	RADIUS accounting access.	probe-response	Probe access.	fabric	Security Fabric access.	ftm	FTM access.	speed-test	Speed test access.			
	Option	Description																												
	ping	PING access.																												
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ftm	FTM access.																													
speed-test	Speed test access.																													
annex *	Configure xDSL annex type.	option	-	a																										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>a</td><td>xDSL Annex A</td></tr><tr><td>b</td><td>xDSL Annex B</td></tr><tr><td>j</td><td>xDSL Annex J</td></tr><tr><td>bjm</td><td>xDSL Annex BJM</td></tr><tr><td>i</td><td>xDSL Annex I</td></tr><tr><td>al</td><td>xDSL Annex AL</td></tr></table>	Option	Description	a	xDSL Annex A	b	xDSL Annex B	j	xDSL Annex J	bjm	xDSL Annex BJM	i	xDSL Annex I	al	xDSL Annex AL															
	Option	Description																												
	a	xDSL Annex A																												
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	bjm	xDSL Annex BJM																												
i	xDSL Annex I																													
al	xDSL Annex AL																													

Parameter	Description	Type	Size	Default
	Option Description			
	<i>m</i>	xDSL Annex M		
	<i>aijlm</i>	xDSL Annex AIJLM		
ap-discover	Enable/disable automatic registration of unknown FortiAP devices.	option	-	enable
	Option Description			
	<i>enable</i>	Enable automatic registration of unknown FortiAP devices.		
	<i>disable</i>	Disable automatic registration of unknown FortiAP devices.		
arpforward	Enable/disable ARP forwarding.	option	-	enable
	Option Description			
	<i>enable</i>	Enable ARP forwarding.		
	<i>disable</i>	Disable ARP forwarding.		
atm-protocol *	ATM protocol.	option	-	none
	Option Description			
	<i>none</i>	Not over ATM.		
	<i>ipoa</i>	IPoA RFC2684.		
auth-cert	HTTPS server certificate.	string	Maximum length: 35	
auth-portal-addr	Address of captive portal.	string	Maximum length: 63	
auth-type	PPP authentication type to use.	option	-	auto
	Option Description			
	<i>auto</i>	Automatically choose authentication.		
	<i>pap</i>	PAP authentication.		
	<i>chap</i>	CHAP authentication.		
	<i>mschapv1</i>	MS-CHAPv1 authentication.		
	<i>mschapv2</i>	MS-CHAPv2 authentication.		

Parameter	Description	Type	Size	Default								
auto-auth-extension-device	Enable/disable automatic authorization of dedicated Fortinet extension device on this interface.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable automatic authorization of dedicated Fortinet extension device on this interface.</td></tr><tr><td>disable</td><td>Disable automatic authorization of dedicated Fortinet extension device on this interface.</td></tr></table>	Option	Description	enable	Enable automatic authorization of dedicated Fortinet extension device on this interface.	disable	Disable automatic authorization of dedicated Fortinet extension device on this interface.					
Option	Description											
enable	Enable automatic authorization of dedicated Fortinet extension device on this interface.											
disable	Disable automatic authorization of dedicated Fortinet extension device on this interface.											
bandwidth-measure-time	Bandwidth measure time.	integer	Minimum value: 0 0 Maximum value: 4294967295									
bfd	Bidirectional Forwarding Detection (BFD) settings.	option	-	global								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>global</td><td>BFD behavior of this interface will be based on global configuration.</td></tr><tr><td>enable</td><td>Enable BFD on this interface and ignore global configuration.</td></tr><tr><td>disable</td><td>Disable BFD on this interface and ignore global configuration.</td></tr></table>	Option	Description	global	BFD behavior of this interface will be based on global configuration.	enable	Enable BFD on this interface and ignore global configuration.	disable	Disable BFD on this interface and ignore global configuration.			
Option	Description											
global	BFD behavior of this interface will be based on global configuration.											
enable	Enable BFD on this interface and ignore global configuration.											
disable	Disable BFD on this interface and ignore global configuration.											
bfd-desired-min-tx	BFD desired minimal transmit interval.	integer	Minimum value: 250 1 Maximum value: 100000									
bfd-detect-mult	BFD detection multiplier.	integer	Minimum value: 3 1 Maximum value: 50									
bfd-required-min-rx	BFD required minimal receive interval.	integer	Minimum value: 250 1 Maximum value: 100000									
broadcast-forward	Enable/disable broadcast forwarding.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable broadcast forwarding.</td></tr><tr><td>disable</td><td>Disable broadcast forwarding.</td></tr></table>	Option	Description	enable	Enable broadcast forwarding.	disable	Disable broadcast forwarding.					
Option	Description											
enable	Enable broadcast forwarding.											
disable	Disable broadcast forwarding.											

Parameter	Description	Type	Size	Default								
cli-conn-status	CLI connection status. Read-only.	integer	Minimum value: 0 0 Maximum value: 4294967295	0								
color	Color of icon on the GUI.	integer	Minimum value: 0 0 Maximum value: 32	0								
dedicated-to	Configure interface for single purpose.	option	-	none								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>none</td><td>Interface not dedicated for any purpose.</td></tr><tr><td>management</td><td>Dedicate this interface for management purposes only.</td></tr></table>	Option	Description	none	Interface not dedicated for any purpose.	management	Dedicate this interface for management purposes only.					
Option	Description											
none	Interface not dedicated for any purpose.											
management	Dedicate this interface for management purposes only.											
defaultgw	Enable to get the gateway IP from the DHCP or PPPoE server.	option	-	enable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable default gateway.</td></tr><tr><td>disable</td><td>Disable default gateway.</td></tr></table>	Option	Description	enable	Enable default gateway.	disable	Disable default gateway.					
Option	Description											
enable	Enable default gateway.											
disable	Disable default gateway.											
description	Description.	var-string	Maximum length: 255									
detected-peer-mtu	MTU of detected peer (0 - 4294967295). Read-only.	integer	Minimum value: 0 0 Maximum value: 4294967295	0								
detectprotocol	Protocols used to detect the server.	option	-	ping								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>ping</td><td>PING.</td></tr><tr><td>tcp-echo</td><td>TCP echo.</td></tr><tr><td>udp-echo</td><td>UDP echo.</td></tr></table>	Option	Description	ping	PING.	tcp-echo	TCP echo.	udp-echo	UDP echo.			
Option	Description											
ping	PING.											
tcp-echo	TCP echo.											
udp-echo	UDP echo.											
detectserver	Gateway's ping server for this IP.	user	Not Specified									
device-identification	Enable/disable passively gathering of device identity information about the devices on the network connected to this interface.	option	-	disable								

Parameter	Description	Type	Size	Default
	Option Description			
	<i>enable</i>	Enable passive gathering of identity information about hosts.		
	<i>disable</i>	Disable passive gathering of identity information about hosts.		
device-user-identification	Enable/disable passive gathering of user identity information about users on this interface.	option	-	enable
	Option Description			
	<i>enable</i>	Enable passive gathering of user identity information about users.		
	<i>disable</i>	Disable passive gathering of user identity information about users.		
devindex	Device Index. Read-only.	integer	Minimum value: 0 0 Maximum value: 4294967295	
dhcp-classless-route-addition	Enable/disable addition of classless static routes retrieved from DHCP server.	option	-	disable
	Option Description			
	<i>enable</i>	Enable addition of classless static routes retrieved from DHCP server.		
	<i>disable</i>	Disable addition of classless static routes retrieved from DHCP server.		
dhcp-client-identifier	DHCP client identifier.	string	Maximum length: 48	
dhcp-relay-agent-option	Enable/disable DHCP relay agent option.	option	-	enable
	Option Description			
	<i>enable</i>	Enable DHCP relay agent option.		
	<i>disable</i>	Disable DHCP relay agent option.		
dhcp-relay-interface	Specify outgoing interface to reach server.	string	Maximum length: 15	
dhcp-relay-interface-select-method	Specify how to select outgoing interface to reach server.	option	-	auto

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>auto</i>	Set outgoing interface automatically.		
	<i>sdwan</i>	Set outgoing interface by SD-WAN or policy routing rules.		
	<i>specify</i>	Set outgoing interface manually.		
dhcp-relay-ip	DHCP relay IP address.	user	Not Specified	
dhcp-relay-link-selection	DHCP relay link selection.	ipv4-address	Not Specified	0.0.0.0
dhcp-relay-request-all-server	Enable/disable sending of DHCP requests to all servers.	option	-	disable
	Option	Description		
	<i>disable</i>	Send DHCP requests only to a matching server.		
	<i>enable</i>	Send DHCP requests to all servers.		
dhcp-relay-service	Enable/disable allowing this interface to act as a DHCP relay.	option	-	disable
	Option	Description		
	<i>disable</i>	None.		
	<i>enable</i>	DHCP relay agent.		
dhcp-relay-type	DHCP relay type (regular or IPsec).	option	-	regular
	Option	Description		
	<i>regular</i>	Regular DHCP relay.		
	<i>ipsec</i>	DHCP relay for IPsec.		
dhcp-renew-time	DHCP renew time in seconds (300-604800), 0 means use the renew time provided by the server.	integer	Minimum value: 300 Maximum value: 604800	0
disc-retry-timeout	Time in seconds to wait before retrying to start a PPPoE discovery, 0 means no timeout.	integer	Minimum value: 0 Maximum value: 4294967295	1

Parameter	Description	Type	Size	Default								
disconnect-threshold	Time in milliseconds to wait before sending a notification that this interface is down or disconnected.	integer	Minimum value: 0 0 Maximum value: 10000									
distance	Distance for routes learned through PPPoE or DHCP, lower distance indicates preferred route.	integer	Minimum value: 1 1 Maximum value: 255	5								
dns-server-override	Enable/disable use DNS acquired by DHCP or PPPoE.	option	-	enable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Use DNS acquired by DHCP or PPPoE.</td></tr><tr><td>disable</td><td>No not use DNS acquired by DHCP or PPPoE.</td></tr></table>	Option	Description	enable	Use DNS acquired by DHCP or PPPoE.	disable	No not use DNS acquired by DHCP or PPPoE.					
Option	Description											
enable	Use DNS acquired by DHCP or PPPoE.											
disable	No not use DNS acquired by DHCP or PPPoE.											
dns-server-protocol	DNS transport protocols.	option	-	cleartext								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>cleartext</td><td>DNS over UDP/53, DNS over TCP/53.</td></tr><tr><td>dot</td><td>DNS over TLS/853.</td></tr><tr><td>doh</td><td>DNS over HTTPS/443.</td></tr></table>	Option	Description	cleartext	DNS over UDP/53, DNS over TCP/53.	dot	DNS over TLS/853.	doh	DNS over HTTPS/443.			
Option	Description											
cleartext	DNS over UDP/53, DNS over TCP/53.											
dot	DNS over TLS/853.											
doh	DNS over HTTPS/443.											
drop-fragment	Enable/disable drop fragment packets.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable/disable drop fragment packets.</td></tr><tr><td>disable</td><td>Do not drop fragment packets.</td></tr></table>	Option	Description	enable	Enable/disable drop fragment packets.	disable	Do not drop fragment packets.					
Option	Description											
enable	Enable/disable drop fragment packets.											
disable	Do not drop fragment packets.											
drop-overlapped-fragment	Enable/disable drop overlapped fragment packets.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable drop of overlapped fragment packets.</td></tr><tr><td>disable</td><td>Disable drop of overlapped fragment packets.</td></tr></table>	Option	Description	enable	Enable drop of overlapped fragment packets.	disable	Disable drop of overlapped fragment packets.					
Option	Description											
enable	Enable drop of overlapped fragment packets.											
disable	Disable drop of overlapped fragment packets.											
eap-ca-cert	EAP CA certificate name.	string	Maximum length: 79									

Parameter	Description	Type	Size	Default																				
eap-identity	EAP identity.	string	Maximum length: 35																					
eap-method	EAP method.	option	-																					
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>tls</i></td><td>TLS.</td></tr><tr><td><i>peap</i></td><td>PEAP.</td></tr></table>				Option	Description	<i>tls</i>	TLS.	<i>peap</i>	PEAP.														
	Option	Description																						
	<i>tls</i>	TLS.																						
<i>peap</i>	PEAP.																							
eap-password	EAP password.	password	Not Specified																					
eap-suppliant	Enable/disable EAP-Suppliant.	option	-	disable																				
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable EAP Suppliant.</td></tr><tr><td><i>disable</i></td><td>Disable EAP Suppliant.</td></tr></table>				Option	Description	<i>enable</i>	Enable EAP Suppliant.	<i>disable</i>	Disable EAP Suppliant.														
	Option	Description																						
	<i>enable</i>	Enable EAP Suppliant.																						
<i>disable</i>	Disable EAP Suppliant.																							
eap-user-cert	EAP user certificate name.	string	Maximum length: 35																					
egress-cos *	Override outgoing CoS in user VLAN tag.	option	-	disable																				
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>disable</i></td><td>Disable.</td></tr><tr><td><i>cos0</i></td><td>CoS 0.</td></tr><tr><td><i>cos1</i></td><td>CoS 1.</td></tr><tr><td><i>cos2</i></td><td>CoS 2.</td></tr><tr><td><i>cos3</i></td><td>CoS 3.</td></tr><tr><td><i>cos4</i></td><td>CoS 4.</td></tr><tr><td><i>cos5</i></td><td>CoS 5.</td></tr><tr><td><i>cos6</i></td><td>CoS 6.</td></tr><tr><td><i>cos7</i></td><td>CoS 7.</td></tr></table>				Option	Description	<i>disable</i>	Disable.	<i>cos0</i>	CoS 0.	<i>cos1</i>	CoS 1.	<i>cos2</i>	CoS 2.	<i>cos3</i>	CoS 3.	<i>cos4</i>	CoS 4.	<i>cos5</i>	CoS 5.	<i>cos6</i>	CoS 6.	<i>cos7</i>	CoS 7.
	Option	Description																						
	<i>disable</i>	Disable.																						
	<i>cos0</i>	CoS 0.																						
	<i>cos1</i>	CoS 1.																						
	<i>cos2</i>	CoS 2.																						
	<i>cos3</i>	CoS 3.																						
	<i>cos4</i>	CoS 4.																						
	<i>cos5</i>	CoS 5.																						
<i>cos6</i>	CoS 6.																							
<i>cos7</i>	CoS 7.																							
egress-shaping-profile	Outgoing traffic shaping profile.	string	Maximum length: 35																					
eip *	External IP. Read-only.	ipv4-address-any	Not Specified	0.0.0.0																				

Parameter	Description	Type	Size	Default								
estimated-downstream-bandwidth	Estimated maximum downstream bandwidth (kbps). Used to estimate link utilization.	integer	Minimum value: 0 0 Maximum value: 4294967295	0								
estimated-upstream-bandwidth	Estimated maximum upstream bandwidth (kbps). Used to estimate link utilization.	integer	Minimum value: 0 0 Maximum value: 4294967295	0								
explicit-ftp-proxy	Enable/disable the explicit FTP proxy on this interface.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable explicit FTP proxy on this interface.</td></tr><tr><td><i>disable</i></td><td>Disable explicit FTP proxy on this interface.</td></tr></table>	Option	Description	<i>enable</i>	Enable explicit FTP proxy on this interface.	<i>disable</i>	Disable explicit FTP proxy on this interface.					
Option	Description											
<i>enable</i>	Enable explicit FTP proxy on this interface.											
<i>disable</i>	Disable explicit FTP proxy on this interface.											
explicit-web-proxy	Enable/disable the explicit web proxy on this interface.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable explicit Web proxy on this interface.</td></tr><tr><td><i>disable</i></td><td>Disable explicit Web proxy on this interface.</td></tr></table>	Option	Description	<i>enable</i>	Enable explicit Web proxy on this interface.	<i>disable</i>	Disable explicit Web proxy on this interface.					
Option	Description											
<i>enable</i>	Enable explicit Web proxy on this interface.											
<i>disable</i>	Disable explicit Web proxy on this interface.											
external	Enable/disable identifying the interface as an external interface (which usually means it's connected to the Internet).	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable identifying the interface as an external interface.</td></tr><tr><td><i>disable</i></td><td>Disable identifying the interface as an external interface.</td></tr></table>	Option	Description	<i>enable</i>	Enable identifying the interface as an external interface.	<i>disable</i>	Disable identifying the interface as an external interface.					
Option	Description											
<i>enable</i>	Enable identifying the interface as an external interface.											
<i>disable</i>	Disable identifying the interface as an external interface.											
fail-action-on-extender	Action on FortiExtender when interface fail.	option	-	soft-restart								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>soft-restart</i></td><td>Soft-restart-on-extender.</td></tr><tr><td><i>hard-restart</i></td><td>Hard-restart-on-extender.</td></tr><tr><td><i>reboot</i></td><td>Reboot-on-extender.</td></tr></table>	Option	Description	<i>soft-restart</i>	Soft-restart-on-extender.	<i>hard-restart</i>	Hard-restart-on-extender.	<i>reboot</i>	Reboot-on-extender.			
Option	Description											
<i>soft-restart</i>	Soft-restart-on-extender.											
<i>hard-restart</i>	Hard-restart-on-extender.											
<i>reboot</i>	Reboot-on-extender.											
fail-alert-interfaces <name>	Names of the FortiGate interfaces to which the link failure alert is sent.	string	Maximum length: 15									

Parameter	Description	Type	Size	Default						
	Names of the non-virtual interface.									
fail-alert-method	Select link-failed-signal or link-down method to alert about a failed link.	option	-	link-down						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>link-failed-signal</td><td>Link-failed-signal.</td></tr><tr><td>link-down</td><td>Link-down.</td></tr></table>	Option	Description	link-failed-signal	Link-failed-signal.	link-down	Link-down.			
Option	Description									
link-failed-signal	Link-failed-signal.									
link-down	Link-down.									
fail-detect	Enable/disable fail detection features for this interface.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable interface failed option status.</td></tr><tr><td>disable</td><td>Disable interface failed option status.</td></tr></table>	Option	Description	enable	Enable interface failed option status.	disable	Disable interface failed option status.			
Option	Description									
enable	Enable interface failed option status.									
disable	Disable interface failed option status.									
fail-detect-option	Options for detecting that this interface has failed.	option	-	link-down						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>detectserver</td><td>Use a ping server to determine if the interface has failed.</td></tr><tr><td>link-down</td><td>Use port detection to determine if the interface has failed.</td></tr></table>	Option	Description	detectserver	Use a ping server to determine if the interface has failed.	link-down	Use port detection to determine if the interface has failed.			
Option	Description									
detectserver	Use a ping server to determine if the interface has failed.									
link-down	Use port detection to determine if the interface has failed.									
fortilink *	Enable FortiLink to dedicate this interface to manage other Fortinet devices.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable FortiLink to dedicated interface for managing FortiSwitch devices.</td></tr><tr><td>disable</td><td>Disable FortiLink to dedicated interface for managing FortiSwitch devices.</td></tr></table>	Option	Description	enable	Enable FortiLink to dedicated interface for managing FortiSwitch devices.	disable	Disable FortiLink to dedicated interface for managing FortiSwitch devices.			
Option	Description									
enable	Enable FortiLink to dedicated interface for managing FortiSwitch devices.									
disable	Disable FortiLink to dedicated interface for managing FortiSwitch devices.									
fortilink-backup-link	FortiLink split interface backup link. Read-only.	integer	Minimum value: 0 0 Maximum value: 255							
fortilink-neighbor-detect	Protocol for FortiGate neighbor discovery.	option	-	fortilink						

Parameter	Description	Type	Size	Default												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>lldp</i></td><td>Detect FortiLink neighbors using LLDP protocol.</td></tr><tr><td><i>fortilink</i></td><td>Detect FortiLink neighbors using FortiLink protocol.</td></tr></table>	Option	Description	<i>lldp</i>	Detect FortiLink neighbors using LLDP protocol.	<i>fortilink</i>	Detect FortiLink neighbors using FortiLink protocol.									
	Option	Description														
	<i>lldp</i>	Detect FortiLink neighbors using LLDP protocol.														
<i>fortilink</i>	Detect FortiLink neighbors using FortiLink protocol.															
fortilink-split-interface	Enable/disable FortiLink split interface to connect member link to different FortiSwitch in stack for uplink redundancy.	option	-	enable												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable FortiLink split interface to connect member link to different FortiSwitch in stack for uplink redundancy.</td></tr><tr><td><i>disable</i></td><td>Disable FortiLink split interface.</td></tr></table>	Option	Description	<i>enable</i>	Enable FortiLink split interface to connect member link to different FortiSwitch in stack for uplink redundancy.	<i>disable</i>	Disable FortiLink split interface.									
	Option	Description														
	<i>enable</i>	Enable FortiLink split interface to connect member link to different FortiSwitch in stack for uplink redundancy.														
<i>disable</i>	Disable FortiLink split interface.															
forward-domain	Transparent mode forward domain.	integer	Minimum value: 0 0 Maximum value: 2147483647	0												
forward-error-correction *	Enable/disable forward error correction (FEC).	option	-	none												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>none</i></td><td>none</td></tr><tr><td><i>disable</i></td><td>Disable forward error correction (FEC).</td></tr><tr><td><i>cl91-rs-fec</i></td><td>Reed-Solomon (FEC CL91).</td></tr><tr><td><i>cl74-fc-fec</i></td><td>Fire-Code (FEC CL74).</td></tr><tr><td><i>auto</i></td><td>Negotiate forward error correction (FEC).</td></tr></table>	Option	Description	<i>none</i>	none	<i>disable</i>	Disable forward error correction (FEC).	<i>cl91-rs-fec</i>	Reed-Solomon (FEC CL91).	<i>cl74-fc-fec</i>	Fire-Code (FEC CL74).	<i>auto</i>	Negotiate forward error correction (FEC).			
	Option	Description														
	<i>none</i>	none														
	<i>disable</i>	Disable forward error correction (FEC).														
	<i>cl91-rs-fec</i>	Reed-Solomon (FEC CL91).														
	<i>cl74-fc-fec</i>	Fire-Code (FEC CL74).														
<i>auto</i>	Negotiate forward error correction (FEC).															
gateway-address *	Gateway address.	ipv4-address	Not Specified	0.0.0.0												
gwaddr *	Gateway address.	ipv4-address	Not Specified	0.0.0.0												
gwdetect	Enable/disable detect gateway alive for first.	option	-	disable												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable detect gateway alive for first.</td></tr><tr><td><i>disable</i></td><td>Disable detect gateway alive for first.</td></tr></table>	Option	Description	<i>enable</i>	Enable detect gateway alive for first.	<i>disable</i>	Disable detect gateway alive for first.									
	Option	Description														
	<i>enable</i>	Enable detect gateway alive for first.														
<i>disable</i>	Disable detect gateway alive for first.															

Parameter	Description	Type	Size	Default						
ha-priority	HA election priority for the PING server.	integer	Minimum value: 1 Maximum value: 50	1						
icmp-accept-redirect	Enable/disable ICMP accept redirect.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable ICMP accept redirect.</td></tr><tr><td>disable</td><td>Disable ICMP accept redirect.</td></tr></table>	Option	Description	enable	Enable ICMP accept redirect.	disable	Disable ICMP accept redirect.			
Option	Description									
enable	Enable ICMP accept redirect.									
disable	Disable ICMP accept redirect.									
icmp-send-redirect	Enable/disable sending of ICMP redirects.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable sending of ICMP redirects.</td></tr><tr><td>disable</td><td>Disable sending of ICMP redirects.</td></tr></table>	Option	Description	enable	Enable sending of ICMP redirects.	disable	Disable sending of ICMP redirects.			
Option	Description									
enable	Enable sending of ICMP redirects.									
disable	Disable sending of ICMP redirects.									
ident-accept	Enable/disable authentication for this interface.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable determining a user's identity from packet identification.</td></tr><tr><td>disable</td><td>Disable determining a user's identity from packet identification.</td></tr></table>	Option	Description	enable	Enable determining a user's identity from packet identification.	disable	Disable determining a user's identity from packet identification.			
Option	Description									
enable	Enable determining a user's identity from packet identification.									
disable	Disable determining a user's identity from packet identification.									
idle-timeout	PPPoE auto disconnect after idle timeout seconds, 0 means no timeout.	integer	Minimum value: 0 Maximum value: 32767	0						
ike-saml-server	Configure IKE authentication SAML server.	string	Maximum length: 35							
inbandwidth	Bandwidth limit for incoming traffic (0 - 80000000 kbps), 0 means unlimited.	integer	Minimum value: 0 Maximum value: 80000000 **	0						
ingress-cos *	Override incoming CoS in user VLAN tag on VLAN interface or assign a priority VLAN tag on physical interface.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Disable.</td></tr></table>	Option	Description	disable	Disable.					
Option	Description									
disable	Disable.									

Parameter	Description	Type	Size	Default																		
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>cos0</td><td>CoS 0.</td></tr><tr><td>cos1</td><td>CoS 1.</td></tr><tr><td>cos2</td><td>CoS 2.</td></tr><tr><td>cos3</td><td>CoS 3.</td></tr><tr><td>cos4</td><td>CoS 4.</td></tr><tr><td>cos5</td><td>CoS 5.</td></tr><tr><td>cos6</td><td>CoS 6.</td></tr><tr><td>cos7</td><td>CoS 7.</td></tr></table>	Option	Description	cos0	CoS 0.	cos1	CoS 1.	cos2	CoS 2.	cos3	CoS 3.	cos4	CoS 4.	cos5	CoS 5.	cos6	CoS 6.	cos7	CoS 7.			
	Option	Description																				
	cos0	CoS 0.																				
	cos1	CoS 1.																				
	cos2	CoS 2.																				
	cos3	CoS 3.																				
	cos4	CoS 4.																				
	cos5	CoS 5.																				
	cos6	CoS 6.																				
cos7	CoS 7.																					
ingress-shaping-profile	Incoming traffic shaping profile.	string	Maximum length: 35																			
ingress-spillover-threshold	Ingress Spillover threshold (0 - 16776000 kbps), 0 means unlimited.	integer	Minimum value: 0 0 Maximum value: 16776000																			
interconnect-profile *	Set interconnect profile.	option	-	default																		
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>default</td><td>default interconnect profile</td></tr><tr><td>profile1</td><td>interconnect profile1 [(10G & IC > 7m/20db-loss) or (25G/27G & IC < 1m)]</td></tr><tr><td>profile2</td><td>interconnect profile2 [(27G in AP (106G) Auto Profile)]</td></tr></table>	Option	Description	default	default interconnect profile	profile1	interconnect profile1 [(10G & IC > 7m/20db-loss) or (25G/27G & IC < 1m)]	profile2	interconnect profile2 [(27G in AP (106G) Auto Profile)]													
	Option	Description																				
	default	default interconnect profile																				
	profile1	interconnect profile1 [(10G & IC > 7m/20db-loss) or (25G/27G & IC < 1m)]																				
profile2	interconnect profile2 [(27G in AP (106G) Auto Profile)]																					
interface	Interface name.	string	Maximum length: 15																			
internal	Implicitly created.	integer	Minimum value: 0 0 Maximum value: 255																			
ip	Interface IPv4 address and subnet mask, syntax: X.X.X.X/24.	ipv4-classnet-host	Not Specified	0.0.0.0 0.0.0.0																		
ip-managed-by-fortiipam	Enable/disable automatic IP address assignment of this interface by FortiIPAM.	option	-	disable																		

Parameter	Description	Type	Size	Default
	Option Description			
	<i>enable</i>	Enable automatic IP address assignment of this interface by FortiIPAM.		
	<i>disable</i>	Disable automatic IP address assignment of this interface by FortiIPAM.		
ipmac	Enable/disable IP/MAC binding.	option	-	disable
	Option Description			
	<i>enable</i>	Enable IP/MAC binding.		
	<i>disable</i>	Disable IP/MAC binding.		
ips-sniffer-mode	Enable/disable the use of this interface as a one-armed sniffer.	option	-	disable
	Option Description			
	<i>enable</i>	Enable IPS sniffer mode.		
	<i>disable</i>	Disable IPS sniffer mode.		
ipunnumbered	Unnumbered IP used for PPPoE interfaces for which no unique local address is provided.	ipv4-address	Not Specified	0.0.0.0
l2forward	Enable/disable L2 forwarding.	option	-	disable
	Option Description			
	<i>enable</i>	Enable L2 forwarding.		
	<i>disable</i>	Disable L2 forwarding.		
l2tp-client *	Enable/disable this interface as a Layer 2 Tunnelling Protocol (L2TP) client.	option	-	disable
	Option Description			
	<i>enable</i>	Enable L2TP client.		
	<i>disable</i>	Disable L2TP client.		
lacp-ha-secondary	LACP HA secondary member.	option	-	enable

Parameter	Description	Type	Size	Default								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Allow HA secondary member to send/receive LACP messages.</td></tr><tr><td><i>disable</i></td><td>Block HA secondary member from sending/receiving LACP messages.</td></tr></table>	Option	Description	<i>enable</i>	Allow HA secondary member to send/receive LACP messages.	<i>disable</i>	Block HA secondary member from sending/receiving LACP messages.					
	Option	Description										
	<i>enable</i>	Allow HA secondary member to send/receive LACP messages.										
<i>disable</i>	Block HA secondary member from sending/receiving LACP messages.											
lacp-mode	LACP mode.	option	-	active								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>static</i></td><td>Use static aggregation, do not send and ignore any LACP messages.</td></tr><tr><td><i>passive</i></td><td>Passively use LACP to negotiate 802.3ad aggregation.</td></tr><tr><td><i>active</i></td><td>Actively use LACP to negotiate 802.3ad aggregation.</td></tr></table>	Option	Description	<i>static</i>	Use static aggregation, do not send and ignore any LACP messages.	<i>passive</i>	Passively use LACP to negotiate 802.3ad aggregation.	<i>active</i>	Actively use LACP to negotiate 802.3ad aggregation.			
	Option	Description										
	<i>static</i>	Use static aggregation, do not send and ignore any LACP messages.										
	<i>passive</i>	Passively use LACP to negotiate 802.3ad aggregation.										
<i>active</i>	Actively use LACP to negotiate 802.3ad aggregation.											
lacp-speed	How often the interface sends LACP messages.	option	-	slow								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>slow</i></td><td>Send LACP message every 30 seconds.</td></tr><tr><td><i>fast</i></td><td>Send LACP message every second.</td></tr></table>	Option	Description	<i>slow</i>	Send LACP message every 30 seconds.	<i>fast</i>	Send LACP message every second.					
	Option	Description										
	<i>slow</i>	Send LACP message every 30 seconds.										
<i>fast</i>	Send LACP message every second.											
lcp-echo-interval	Time in seconds between PPPoE Link Control Protocol (LCP) echo requests.	integer	Minimum value: 5 0 Maximum value: 32767									
lcp-max-echo-fails	Maximum missed LCP echo messages before disconnect.	integer	Minimum value: 3 0 Maximum value: 32767									
link-up-delay	Number of milliseconds to wait before considering a link is up.	integer	Minimum value: 50 50 Maximum value: 3600000									
lldp-network-policy	LLDP-MED network policy profile.	string	Maximum length: 35									
lldp-reception	Enable/disable Link Layer Discovery Protocol (LLDP) reception.	option	-	vdom								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable reception of Link Layer Discovery Protocol (LLDP).</td></tr><tr><td><i>disable</i></td><td>Disable reception of Link Layer Discovery Protocol (LLDP).</td></tr></table>	Option	Description	<i>enable</i>	Enable reception of Link Layer Discovery Protocol (LLDP).	<i>disable</i>	Disable reception of Link Layer Discovery Protocol (LLDP).					
	Option	Description										
	<i>enable</i>	Enable reception of Link Layer Discovery Protocol (LLDP).										
<i>disable</i>	Disable reception of Link Layer Discovery Protocol (LLDP).											

Parameter	Description	Type	Size	Default																										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>vdom</i></td><td>Use VDOM Link Layer Discovery Protocol (LLDP) reception configuration setting.</td></tr></table>	Option	Description	<i>vdom</i>	Use VDOM Link Layer Discovery Protocol (LLDP) reception configuration setting.																									
	Option	Description																												
<i>vdom</i>	Use VDOM Link Layer Discovery Protocol (LLDP) reception configuration setting.																													
lldp-transmission	Enable/disable Link Layer Discovery Protocol (LLDP) transmission.	option	-	vdom																										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable transmission of Link Layer Discovery Protocol (LLDP).</td></tr><tr><td><i>disable</i></td><td>Disable transmission of Link Layer Discovery Protocol (LLDP).</td></tr><tr><td><i>vdom</i></td><td>Use VDOM Link Layer Discovery Protocol (LLDP) transmission configuration setting.</td></tr></table>	Option	Description	<i>enable</i>	Enable transmission of Link Layer Discovery Protocol (LLDP).	<i>disable</i>	Disable transmission of Link Layer Discovery Protocol (LLDP).	<i>vdom</i>	Use VDOM Link Layer Discovery Protocol (LLDP) transmission configuration setting.																					
	Option	Description																												
	<i>enable</i>	Enable transmission of Link Layer Discovery Protocol (LLDP).																												
	<i>disable</i>	Disable transmission of Link Layer Discovery Protocol (LLDP).																												
<i>vdom</i>	Use VDOM Link Layer Discovery Protocol (LLDP) transmission configuration setting.																													
macaddr	Change the interface's MAC address.	mac-address	Not Specified	00:00:00:00:00:00 **																										
managed-subnetwork-size	Number of IP addresses to be allocated by FortiPAM and used by this FortiGate unit's DHCP server settings.	option	-	256																										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>32</td><td>Allocate a subnet with 32 IP addresses.</td></tr><tr><td>64</td><td>Allocate a subnet with 64 IP addresses.</td></tr><tr><td>128</td><td>Allocate a subnet with 128 IP addresses.</td></tr><tr><td>256</td><td>Allocate a subnet with 256 IP addresses.</td></tr><tr><td>512</td><td>Allocate a subnet with 512 IP addresses.</td></tr><tr><td>1024</td><td>Allocate a subnet with 1024 IP addresses.</td></tr><tr><td>2048</td><td>Allocate a subnet with 2048 IP addresses.</td></tr><tr><td>4096</td><td>Allocate a subnet with 4096 IP addresses.</td></tr><tr><td>8192</td><td>Allocate a subnet with 8192 IP addresses.</td></tr><tr><td>16384</td><td>Allocate a subnet with 16384 IP addresses.</td></tr><tr><td>32768</td><td>Allocate a subnet with 32768 IP addresses.</td></tr><tr><td>65536</td><td>Allocate a subnet with 65536 IP addresses.</td></tr></table>	Option	Description	32	Allocate a subnet with 32 IP addresses.	64	Allocate a subnet with 64 IP addresses.	128	Allocate a subnet with 128 IP addresses.	256	Allocate a subnet with 256 IP addresses.	512	Allocate a subnet with 512 IP addresses.	1024	Allocate a subnet with 1024 IP addresses.	2048	Allocate a subnet with 2048 IP addresses.	4096	Allocate a subnet with 4096 IP addresses.	8192	Allocate a subnet with 8192 IP addresses.	16384	Allocate a subnet with 16384 IP addresses.	32768	Allocate a subnet with 32768 IP addresses.	65536	Allocate a subnet with 65536 IP addresses.			
	Option	Description																												
	32	Allocate a subnet with 32 IP addresses.																												
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	16384	Allocate a subnet with 16384 IP addresses.																												
	32768	Allocate a subnet with 32768 IP addresses.																												
65536	Allocate a subnet with 65536 IP addresses.																													

Parameter	Description	Type	Size	Default								
management-ip	High Availability in-band management IP address of this interface.	ipv4-classnet-host	Not Specified	0.0.0.0 0.0.0.0								
measured-downstream-bandwidth	Measured downstream bandwidth (kbps).	integer	Minimum value: 0 0 Maximum value: 4294967295	0								
measured-upstream-bandwidth	Measured upstream bandwidth (kbps).	integer	Minimum value: 0 0 Maximum value: 4294967295	0								
mediatype *	Select SFP media interface type	option	-	serdes-sfp **								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>serdes-sfp</i></td><td>SFP using SerDes Media Interface</td></tr><tr><td><i>sgmii-sfp</i></td><td>SFP using SGMII Media Interface</td></tr><tr><td><i>serdes-copper-sfp</i></td><td>Copper SFP using SerDes media Interface.</td></tr></table>				Option	Description	<i>serdes-sfp</i>	SFP using SerDes Media Interface	<i>sgmii-sfp</i>	SFP using SGMII Media Interface	<i>serdes-copper-sfp</i>	Copper SFP using SerDes media Interface.
Option	Description											
<i>serdes-sfp</i>	SFP using SerDes Media Interface											
<i>sgmii-sfp</i>	SFP using SGMII Media Interface											
<i>serdes-copper-sfp</i>	Copper SFP using SerDes media Interface.											
member <interface-name>	Physical interfaces that belong to the aggregate or redundant interface. Physical interface name.	string	Maximum length: 79									
min-links	Minimum number of aggregated ports that must be up.	integer	Minimum value: 1 1 Maximum value: 32	1								
min-links-down	Action to take when less than the configured minimum number of links are active.	option	-	operational								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>operational</i></td><td>Set the aggregate operationally down.</td></tr><tr><td><i>administrative</i></td><td>Set the aggregate administratively down.</td></tr></table>				Option	Description	<i>operational</i>	Set the aggregate operationally down.	<i>administrative</i>	Set the aggregate administratively down.		
Option	Description											
<i>operational</i>	Set the aggregate operationally down.											
<i>administrative</i>	Set the aggregate administratively down.											
mode	Addressing mode (static, DHCP, PPPoE).	option	-	static								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>static</i></td><td>Static setting.</td></tr></table>				Option	Description	<i>static</i>	Static setting.				
Option	Description											
<i>static</i>	Static setting.											

Parameter	Description	Type	Size	Default
	Option Description			
	<i>dhcp</i>	External DHCP client mode.		
	<i>pppoe</i>	External PPPoE mode.		
monitor-bandwidth	Enable monitoring bandwidth on this interface.	option	-	disable
	Option Description			
	<i>enable</i>	Enable monitoring bandwidth on this interface.		
	<i>disable</i>	Disable monitoring bandwidth on this interface.		
mtu	MTU value for this interface.	integer	Minimum value: 0 Maximum value: 4294967295	1500
mtu-override	Enable to set a custom MTU for this interface.	option	-	disable
	Option Description			
	<i>enable</i>	Override default MTU.		
	<i>disable</i>	Use default MTU.		
mux-type *	Multiplexer type.	option	-	llc-encaps
	Option Description			
	<i>llc-encaps</i>	LLC encapsulation.		
	<i>vc-encaps</i>	VC encapsulation.		
name	Name.	string	Maximum length: 15	
ndiscforward	Enable/disable NDISC forwarding.	option	-	enable
	Option Description			
	<i>enable</i>	Enable NDISC forwarding.		
	<i>disable</i>	Disable NDISC forwarding.		
netbios-forward	Enable/disable NETBIOS forwarding.	option	-	disable

Parameter	Description	Type	Size	Default										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Disable NETBIOS forwarding.</td></tr><tr><td>enable</td><td>Enable NETBIOS forwarding.</td></tr></table>	Option	Description	disable	Disable NETBIOS forwarding.	enable	Enable NETBIOS forwarding.							
Option	Description													
disable	Disable NETBIOS forwarding.													
enable	Enable NETBIOS forwarding.													
netflow-sampler	Enable/disable NetFlow on this interface and set the data that NetFlow collects (rx, tx, or both).	option	-	disable										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Disable NetFlow protocol on this interface.</td></tr><tr><td>tx</td><td>Monitor transmitted traffic on this interface.</td></tr><tr><td>rx</td><td>Monitor received traffic on this interface.</td></tr><tr><td>both</td><td>Monitor transmitted/received traffic on this interface.</td></tr></table>	Option	Description	disable	Disable NetFlow protocol on this interface.	tx	Monitor transmitted traffic on this interface.	rx	Monitor received traffic on this interface.	both	Monitor transmitted/received traffic on this interface.			
Option	Description													
disable	Disable NetFlow protocol on this interface.													
tx	Monitor transmitted traffic on this interface.													
rx	Monitor received traffic on this interface.													
both	Monitor transmitted/received traffic on this interface.													
np-qos-profile *	NP QoS profile ID.	integer	Minimum value: 0 0 Maximum value: 15											
outbandwidth	Bandwidth limit for outgoing traffic (0 - 80000000 kbps).	integer	Minimum value: 0 0 Maximum value: 80000000 **											
padt-retry-timeout	PPPoE Active Discovery Terminate (PADT) used to terminate sessions after an idle time.	integer	Minimum value: 1 0 Maximum value: 4294967295											
password	PPPoE account's password.	password	Not Specified											
phy-mode *	DSL physical mode.	option	-	vdsl										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>vdsl</td><td>VDSL.</td></tr></table>	Option	Description	vdsl	VDSL.									
Option	Description													
vdsl	VDSL.													
ping-serv-status	PING server status. Read-only.	integer	Minimum value: 0 0 Maximum value: 255											
poe *	Enable/disable PoE status.	option	-	enable										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable PoE status.</td></tr><tr><td>disable</td><td>Disable PoE status.</td></tr></table>	Option	Description	enable	Enable PoE status.	disable	Disable PoE status.							
Option	Description													
enable	Enable PoE status.													
disable	Disable PoE status.													

Parameter	Description	Type	Size	Default
polling-interval	sFlow polling interval in seconds (1 - 255).	integer	Minimum value: 1 Maximum value: 255	20
pppoe-unnumbered-negotiate	Enable/disable PPPoE unnumbered negotiation.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable IP address negotiating for unnumbered.		
	<i>disable</i>	Disable IP address negotiating for unnumbered.		
pptp-auth-type	PPTP authentication type.	option	-	auto
	Option	Description		
	<i>auto</i>	Automatically choose authentication.		
	<i>pap</i>	PAP authentication.		
	<i>chap</i>	CHAP authentication.		
	<i>mschapv1</i>	MS-CHAPv1 authentication.		
	<i>mschapv2</i>	MS-CHAPv2 authentication.		
pptp-client	Enable/disable PPTP client.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable PPTP client.		
	<i>disable</i>	Disable PPTP client.		
pptp-password	PPTP password.	password	Not Specified	
pptp-server-ip	PPTP server IP address.	ipv4-address	Not Specified	0.0.0.0
pptp-timeout	Idle timer in minutes (0 for disabled).	integer	Minimum value: 0 Maximum value: 65535	0
pptp-user	PPTP user name.	string	Maximum length: 64	
preserve-session-route	Enable/disable preservation of session route when dirty.	option	-	disable

Parameter	Description	Type	Size	Default
	Option Description			
	<i>enable</i>	Enable preservation of session route when dirty.		
	<i>disable</i>	Disable preservation of session route when dirty.		
priority	Priority of learned routes.	integer	Minimum value: 1 Maximum value: 65535	
priority-override	Enable/disable fail back to higher priority port once recovered.	option	-	enable
	Option Description			
	<i>enable</i>	Enable fail back to higher priority port once recovered.		
	<i>disable</i>	Disable fail back to higher priority port once recovered.		
proxy-captive-portal	Enable/disable proxy captive portal on this interface.	option	-	disable
	Option Description			
	<i>enable</i>	Enable proxy captive portal on this interface.		
	<i>disable</i>	Disable proxy captive portal on this interface.		
pvc-atm-qos *	SFP-DSL ADSL Fallback PVC ATM QoS.	option	-	ubr
	Option Description			
	<i>cbr</i>	ATM QoS CBR.		
	<i>rt-vbr</i>	ATM QoS rt-VBR.		
	<i>nrt-vbr</i>	ATM QoS nrt-VBR.		
	<i>ubr</i>	ATM QoS CCBR.		
pvc-chan *	SFP-DSL ADSL Fallback PVC Channel.	integer	Minimum value: 0 Maximum value: 7	
pvc-crc *	SFP-DSL ADSL Fallback PVC CRC Option: bit0: sar LLC preserve, bit1: ream LLC preserve, bit2: ream VC-MUX has crc.	integer	Minimum value: 2 Maximum value: 7	
pvc-pcr *	SFP-DSL ADSL Fallback PVC Packet Cell Rate in cells (0 - 5500).	integer	Minimum value: 0 Maximum value: 5500	

Parameter	Description	Type	Size	Default
pvc-scr *	SFP-DSL ADSL Fallback PVC Sustainable Cell Rate in cells (0 - 5500).	integer	Minimum value: 0 0 Maximum value: 5500	0
pvc-vlan-id *	SFP-DSL ADSL Fallback PVC VLAN ID.	integer	Minimum value: 1 1 Maximum value: 4094	7
pvc-vlan-rx-id *	SFP-DSL ADSL Fallback PVC VLANID RX.	integer	Minimum value: 1 1 Maximum value: 4094	7
pvc-vlan-rx-op *	SFP-DSL ADSL Fallback PVC VLAN RX op.	option	-	pass-through
	OptionDescription			
	pass-through	PVC VLAN Tag Passthrough.		
	replace	PVC VLAN Tag Replace.		
	remove	PVC VLAN Tag Remove.		
pvc-vlan-tx-id *	SFP-DSL ADSL Fallback PVC VLAN ID TX.	integer	Minimum value: 1 1 Maximum value: 4094	7
pvc-vlan-tx-op *	SFP-DSL ADSL Fallback PVC VLAN TX op.	option	-	remove
	OptionDescription			
	pass-through	PVC VLAN Tag Passthrough.		
	replace	PVC VLAN Tag Replace.		
	remove	PVC VLAN Tag Remove.		
reachable-time	IPv4 reachable time in milliseconds (30000 - 3600000, default = 30000).	integer	Minimum value: 30000 Maximum value: 3600000	30000
redundant-interface	Redundant interface. Read-only.	string	Maximum length: 15	
remote-ip	Remote IP address of tunnel.	ipv4-classnet-host	Not Specified	0.0.0.0 0.0.0.0
replacemsg-override-group	Replacement message override group.	string	Maximum length: 35	

Parameter	Description	Type	Size	Default										
retransmission *	Enable/disable DSL retransmission.	option	-	enable										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>disable</i></td><td>Disable retransmission.</td></tr><tr><td><i>enable</i></td><td>Enable retransmission.</td></tr></table>	Option	Description	<i>disable</i>	Disable retransmission.	<i>enable</i>	Enable retransmission.							
Option	Description													
<i>disable</i>	Disable retransmission.													
<i>enable</i>	Enable retransmission.													
ring-rx *	RX ring size.	integer	Minimum value: 0 0 Maximum value: 4294967295											
ring-tx *	TX ring size.	integer	Minimum value: 0 0 Maximum value: 4294967295											
role	Interface role.	option	-	undefined										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>lan</i></td><td>Connected to local network of endpoints.</td></tr><tr><td><i>wan</i></td><td>Connected to Internet.</td></tr><tr><td><i>dmz</i></td><td>Connected to server zone.</td></tr><tr><td><i>undefined</i></td><td>Interface has no specific role.</td></tr></table>	Option	Description	<i>lan</i>	Connected to local network of endpoints.	<i>wan</i>	Connected to Internet.	<i>dmz</i>	Connected to server zone.	<i>undefined</i>	Interface has no specific role.			
Option	Description													
<i>lan</i>	Connected to local network of endpoints.													
<i>wan</i>	Connected to Internet.													
<i>dmz</i>	Connected to server zone.													
<i>undefined</i>	Interface has no specific role.													
sample-direction	Data that NetFlow collects (rx, tx, or both).	option	-	both										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>tx</i></td><td>Monitor transmitted traffic on this interface.</td></tr><tr><td><i>rx</i></td><td>Monitor received traffic on this interface.</td></tr><tr><td><i>both</i></td><td>Monitor transmitted/received traffic on this interface.</td></tr></table>	Option	Description	<i>tx</i>	Monitor transmitted traffic on this interface.	<i>rx</i>	Monitor received traffic on this interface.	<i>both</i>	Monitor transmitted/received traffic on this interface.					
Option	Description													
<i>tx</i>	Monitor transmitted traffic on this interface.													
<i>rx</i>	Monitor received traffic on this interface.													
<i>both</i>	Monitor transmitted/received traffic on this interface.													
sample-rate	sFlow sample rate (10 - 99999).	integer	Minimum value: 10 10 Maximum value: 99999	2000										
secondary-IP	Enable/disable adding a secondary IP to this interface.	option	-	disable										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable secondary IP.</td></tr><tr><td><i>disable</i></td><td>Disable secondary IP.</td></tr></table>	Option	Description	<i>enable</i>	Enable secondary IP.	<i>disable</i>	Disable secondary IP.							
Option	Description													
<i>enable</i>	Enable secondary IP.													
<i>disable</i>	Disable secondary IP.													

Parameter	Description	Type	Size	Default										
security-8021x-dynamic-vlan-id *	VLAN ID for virtual switch.	integer	Minimum value: 0 Maximum value: 4094	0										
security-8021x-master *	802.1X master virtual-switch.	string	Maximum length: 15											
security-8021x-mode *	802.1X mode.	option	-	default										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>default</td><td>802.1X default mode.</td></tr><tr><td>dynamic-vlan</td><td>802.1X dynamic VLAN (master) mode.</td></tr><tr><td>fallback</td><td>802.1X fallback (master) mode.</td></tr><tr><td>slave</td><td>802.1X slave mode.</td></tr></table>				Option	Description	default	802.1X default mode.	dynamic-vlan	802.1X dynamic VLAN (master) mode.	fallback	802.1X fallback (master) mode.	slave	802.1X slave mode.
	Option	Description												
	default	802.1X default mode.												
	dynamic-vlan	802.1X dynamic VLAN (master) mode.												
	fallback	802.1X fallback (master) mode.												
slave	802.1X slave mode.													
security-exempt-list	Name of security-exempt-list.	string	Maximum length: 35											
security-external-logout	URL of external authentication logout server.	string	Maximum length: 127											
security-external-web	URL of external authentication web server.	var-string	Maximum length: 1023											
security-groups <name>	User groups that can authenticate with the captive portal. Names of user groups that can authenticate with the captive portal.	string	Maximum length: 79											
security-mac-auth-bypass	Enable/disable MAC authentication bypass.	option	-	disable										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>mac-auth-only</td><td>Enable MAC authentication bypass without EAP.</td></tr><tr><td>enable</td><td>Enable MAC authentication bypass.</td></tr><tr><td>disable</td><td>Disable MAC authentication bypass.</td></tr></table>				Option	Description	mac-auth-only	Enable MAC authentication bypass without EAP.	enable	Enable MAC authentication bypass.	disable	Disable MAC authentication bypass.		
	Option	Description												
	mac-auth-only	Enable MAC authentication bypass without EAP.												
	enable	Enable MAC authentication bypass.												
disable	Disable MAC authentication bypass.													
security-mode	Turn on captive portal authentication for this interface.	option	-	none										

Parameter	Description	Type	Size	Default
	Option Description			
	<i>none</i>	No security option.		
	<i>captive-portal</i>	Captive portal authentication.		
	<i>802.1X</i>	802.1X port-based authentication.		
security-redirect-url	URL redirection after disclaimer/authentication.	var-string	Maximum length: 1023	
select-profile-30a-35b *	Select VDSL Profile 30a or 35b.	option	-	35B
	Option Description			
	<i>30A</i>	Enable VDSL Profile 30A.		
	<i>35B</i>	Enable VDSL Profile 35B.		
service-name	PPPoE service name.	string	Maximum length: 63	
sflow-sampler	Enable/disable sFlow on this interface.	option	-	disable
	Option Description			
	<i>enable</i>	Enable sFlow protocol on this interface.		
	<i>disable</i>	Disable sFlow protocol on this interface.		
sfp-dsl *	Enable/disable SFP DSL.	option	-	disable
	Option Description			
	<i>disable</i>	Disable SFP DSL.		
	<i>enable</i>	Enable SFP DSL.		
sfp-dsl-adsl-fallback *	Enable/disable SFP DSL ADSL fallback.	option	-	disable
	Option Description			
	<i>disable</i>	Disable SFP DSL ADSL fallback.		
	<i>enable</i>	Enable SFP DSL ADSL fallback.		
sfp-dsl-autodetect *	Enable/disable SFP DSL MAC address autodetect.	option	-	enable

Parameter	Description	Type	Size	Default																				
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>disable</i></td><td>Disable SFP DSL MAC address autodetect.</td></tr><tr><td><i>enable</i></td><td>Enable SFP DSL MAC address autodetect.</td></tr></table>	Option	Description	<i>disable</i>	Disable SFP DSL MAC address autodetect.	<i>enable</i>	Enable SFP DSL MAC address autodetect.																	
	Option	Description																						
	<i>disable</i>	Disable SFP DSL MAC address autodetect.																						
<i>enable</i>	Enable SFP DSL MAC address autodetect.																							
sfp-dsl-mac *	SFP DSL MAC address.	mac-address	Not Specified	00:00:00:00:00:00																				
snmp-index	Permanent SNMP Index of the interface.	integer	Minimum value: 0 1 Maximum value: 2147483647																					
speed	Interface speed. The default setting and the options available depend on the interface hardware.	option	-	auto																				
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>auto</i></td><td>Automatically adjust speed.</td></tr><tr><td><i>10full</i></td><td>10M full-duplex.</td></tr><tr><td><i>10half</i></td><td>10M half-duplex.</td></tr><tr><td><i>100full</i></td><td>100M full-duplex.</td></tr><tr><td><i>100half</i></td><td>100M half-duplex.</td></tr><tr><td><i>1000full</i></td><td>1000M full-duplex.</td></tr><tr><td><i>1000auto</i></td><td>1000M auto adjust.</td></tr><tr><td><i>10000full</i></td><td>10G full-duplex.</td></tr><tr><td><i>10000auto</i></td><td>10G auto.</td></tr></table>	Option	Description	<i>auto</i>	Automatically adjust speed.	<i>10full</i>	10M full-duplex.	<i>10half</i>	10M half-duplex.	<i>100full</i>	100M full-duplex.	<i>100half</i>	100M half-duplex.	<i>1000full</i>	1000M full-duplex.	<i>1000auto</i>	1000M auto adjust.	<i>10000full</i>	10G full-duplex.	<i>10000auto</i>	10G auto.			
	Option	Description																						
	<i>auto</i>	Automatically adjust speed.																						
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	<i>1000auto</i>	1000M auto adjust.																						
	<i>10000full</i>	10G full-duplex.																						
<i>10000auto</i>	10G auto.																							
spillover-threshold	Egress Spillover threshold (0 - 16776000 kbps), 0 means unlimited.	integer	Minimum value: 0 0 Maximum value: 16776000																					
src-check	Enable/disable source IP check.	option	-	enable																				
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable source IP check.</td></tr><tr><td><i>disable</i></td><td>Disable source IP check.</td></tr></table>	Option	Description	<i>enable</i>	Enable source IP check.	<i>disable</i>	Disable source IP check.																	
	Option	Description																						
	<i>enable</i>	Enable source IP check.																						
<i>disable</i>	Disable source IP check.																							
status	Bring the interface up or shut the interface down.	option	-	up																				

Parameter	Description	Type	Size	Default
	Option Description			
	<i>up</i>	Bring the interface up.		
	<i>down</i>	Shut the interface down.		
stp *	Enable/disable STP.	option	-	disable
	Option Description			
	<i>disable</i>	Disable STP.		
	<i>enable</i>	Enable STP.		
stp-ha-secondary *	Control STP behavior on HA secondary.	option	-	priority-adjust
	Option Description			
	<i>disable</i>	Disable STP negotiation on HA secondary.		
	<i>enable</i>	Enable STP negotiation on HA secondary.		
	<i>priority-adjust</i>	Enable STP negotiation on HA secondary and make priority lower than HA primary.		
stpforward	Enable/disable STP forwarding.	option	-	disable
	Option Description			
	<i>enable</i>	Enable STP forwarding.		
	<i>disable</i>	Disable STP forwarding.		
stpforward-mode	Configure STP forwarding mode.	option	-	rpl-all-ext-id
	Option Description			
	<i>rpl-all-ext-id</i>	Replace all extension IDs (root, bridge).		
	<i>rpl-bridge-ext-id</i>	Replace the bridge extension ID only.		
	<i>rpl-nothing</i>	Replace nothing.		
subst	Enable to always send packets from this interface to a destination MAC address.	option	-	disable

Parameter	Description	Type	Size	Default								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Send packets from this interface.</td></tr><tr><td><i>disable</i></td><td>Do not send packets from this interface.</td></tr></table>	Option	Description	<i>enable</i>	Send packets from this interface.	<i>disable</i>	Do not send packets from this interface.					
	Option	Description										
	<i>enable</i>	Send packets from this interface.										
<i>disable</i>	Do not send packets from this interface.											
substitute-dst-mac	Destination MAC address that all packets are sent to from this interface.	mac-address	Not Specified	00:00:00:00:00:00								
sw-algorithm *	Frame distribution algorithm for switch.	option	-	eh								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>l2</i></td><td>Use layer 2 address for distribution.</td></tr><tr><td><i>l3</i></td><td>Use layer 3 address for distribution.</td></tr><tr><td><i>eh</i></td><td>Use enhanced hashing for distribution.</td></tr></table>	Option	Description	<i>l2</i>	Use layer 2 address for distribution.	<i>l3</i>	Use layer 3 address for distribution.	<i>eh</i>	Use enhanced hashing for distribution.			
	Option	Description										
	<i>l2</i>	Use layer 2 address for distribution.										
	<i>l3</i>	Use layer 3 address for distribution.										
<i>eh</i>	Use enhanced hashing for distribution.											
swc-first-create *	Initial create for switch-controller VLANs.	integer	Minimum value: 0 0 Maximum value: 4294967295									
swc-vlan *	Creation status for switch-controller VLANs. Read-only.	integer	Minimum value: 0 0 Maximum value: 4294967295									
switch	Contained in switch. Read-only.	string	Maximum length: 15									
switch-controller-access-vlan *	Block FortiSwitch port-to-port traffic.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Block FortiSwitch port-to-port traffic on the VLAN, only permitting traffic to and from the FortiGate.</td></tr><tr><td><i>disable</i></td><td>Allow normal VLAN traffic.</td></tr></table>	Option	Description	<i>enable</i>	Block FortiSwitch port-to-port traffic on the VLAN, only permitting traffic to and from the FortiGate.	<i>disable</i>	Allow normal VLAN traffic.					
	Option	Description										
	<i>enable</i>	Block FortiSwitch port-to-port traffic on the VLAN, only permitting traffic to and from the FortiGate.										
<i>disable</i>	Allow normal VLAN traffic.											
switch-controller-arp-inspection *	Enable/disable FortiSwitch ARP inspection.	option	-	disable								

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>enable</i>	Enable ARP inspection for FortiSwitch devices.		
	<i>disable</i>	Disable ARP inspection for FortiSwitch devices.		
switch-controller-dhcp-snooping *	Switch controller DHCP snooping.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable DHCP snooping for FortiSwitch devices.		
	<i>disable</i>	Disable DHCP snooping for FortiSwitch devices.		
switch-controller-dhcp-snooping-option82 *	Switch controller DHCP snooping option82.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable DHCP snooping insert option82 for FortiSwitch devices.		
	<i>disable</i>	Disable DHCP snooping insert option82 for FortiSwitch devices.		
switch-controller-dhcp-snooping-verify-mac *	Switch controller DHCP snooping verify MAC.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable DHCP snooping verify source MAC for FortiSwitch devices.		
	<i>disable</i>	Disable DHCP snooping verify source MAC for FortiSwitch devices.		
switch-controller-dynamic *	Integrated FortiLink settings for managed FortiSwitch.	string	Maximum length: 35	
switch-controller-feature *	Interface's purpose when assigning traffic (read only).	option	-	none
	Option	Description		
	<i>none</i>	VLAN for generic purpose.		
	<i>default-vlan</i>	Default VLAN (native) assigned to all switch ports upon discovery.		

Parameter	Description	Type	Size	Default														
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>quarantine</i></td><td>VLAN for quarantined traffic.</td></tr><tr><td><i>rspan</i></td><td>VLAN for RSPAN/ERSPAN mirrored traffic.</td></tr><tr><td><i>voice</i></td><td>VLAN dedicated for voice devices.</td></tr><tr><td><i>video</i></td><td>VLAN dedicated for camera devices.</td></tr><tr><td><i>nac</i></td><td>VLAN dedicated for NAC onboarding devices.</td></tr><tr><td><i>nac-segment</i></td><td>VLAN dedicated for NAC segment devices.</td></tr></table>	Option	Description	<i>quarantine</i>	VLAN for quarantined traffic.	<i>rspan</i>	VLAN for RSPAN/ERSPAN mirrored traffic.	<i>voice</i>	VLAN dedicated for voice devices.	<i>video</i>	VLAN dedicated for camera devices.	<i>nac</i>	VLAN dedicated for NAC onboarding devices.	<i>nac-segment</i>	VLAN dedicated for NAC segment devices.			
	Option	Description																
	<i>quarantine</i>	VLAN for quarantined traffic.																
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	<i>video</i>	VLAN dedicated for camera devices.																
	<i>nac</i>	VLAN dedicated for NAC onboarding devices.																
<i>nac-segment</i>	VLAN dedicated for NAC segment devices.																	
switch-controller-igmp-snooping *	Switch controller IGMP snooping.	option	-	disable														
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable IGMP snooping.</td></tr><tr><td><i>disable</i></td><td>Disable IGMP snooping.</td></tr></table>	Option	Description	<i>enable</i>	Enable IGMP snooping.	<i>disable</i>	Disable IGMP snooping.											
	Option	Description																
	<i>enable</i>	Enable IGMP snooping.																
<i>disable</i>	Disable IGMP snooping.																	
switch-controller-igmp-snooping-fast-leave *	Switch controller IGMP snooping fast-leave.	option	-	disable														
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable IGMP snooping fast-leave.</td></tr><tr><td><i>disable</i></td><td>Disable IGMP snooping fast-leave.</td></tr></table>	Option	Description	<i>enable</i>	Enable IGMP snooping fast-leave.	<i>disable</i>	Disable IGMP snooping fast-leave.											
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	<i>enable</i>	Enable IGMP snooping fast-leave.																
<i>disable</i>	Disable IGMP snooping fast-leave.																	
switch-controller-igmp-snooping-proxy *	Switch controller IGMP snooping proxy.	option	-	disable														
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable IGMP snooping proxy.</td></tr><tr><td><i>disable</i></td><td>Disable IGMP snooping proxy.</td></tr></table>	Option	Description	<i>enable</i>	Enable IGMP snooping proxy.	<i>disable</i>	Disable IGMP snooping proxy.											
	Option	Description																
	<i>enable</i>	Enable IGMP snooping proxy.																
<i>disable</i>	Disable IGMP snooping proxy.																	
switch-controller-iot-scanning *	Enable/disable managed FortiSwitch IoT scanning.	option	-	disable														

Parameter	Description	Type	Size	Default
	Option Description			
	<i>enable</i>	Enable IoT scanning for managed FortiSwitch devices.		
	<i>disable</i>	Disable IoT scanning for managed FortiSwitch devices.		
switch-controller-learning-limit *	Limit the number of dynamic MAC addresses on this VLAN (1 - 128, 0 = no limit, default).	integer	Minimum value: 0 0 Maximum value: 128	
switch-controller-mgmt-vlan *	VLAN to use for FortiLink management purposes.	integer	Minimum value: 4094 1 Maximum value: 4094	
switch-controller-nac *	Integrated FortiLink settings for managed FortiSwitch.	string	Maximum length: 35	
switch-controller-netflow-collect *	NetFlow collection and processing.	option	-	disable
	Option Description			
	<i>disable</i>	Disable NetFlow collection.		
	<i>enable</i>	Enable NetFlow collection.		
switch-controller-rspan-mode *	Stop Layer2 MAC learning and interception of BPDUs and other packets on this interface.	option	-	disable
	Option Description			
	<i>disable</i>	Disable RSPAN passthrough mode on this VLAN interface.		
	<i>enable</i>	Enable RSPAN passthrough mode on this VLAN interface.		
switch-controller-source-ip *	Source IP address used in FortiLink over L3 connections.	option	-	outbound
	Option Description			
	<i>outbound</i>	Source IP address is that of the outbound interface.		
	<i>fixed</i>	Source IP address is that of the FortiLink interface.		
switch-controller-traffic-policy *	Switch controller traffic policy for the VLAN.	string	Maximum length: 63	

Parameter	Description	Type	Size	Default
system-id	Define a system ID for the aggregate interface.	mac-address	Not Specified	00:00:00:00:00:00
system-id-type	Method in which system ID is generated.	option	-	auto
	Option Description			
	<i>auto</i>	Use the MAC address of the first member.		
	<i>user</i>	User-defined system ID.		
tc-mode *	DSL transfer mode.	option	-	ptm
	Option Description			
	<i>ptm</i>	Packet transfer mode.		
tcp-mss	TCP maximum segment size. 0 means do not change segment size.	integer	Minimum value: 0 48 Maximum value: 65535	0
trunk *	Enable/disable VLAN trunk.	option	-	disable
	Option Description			
	<i>enable</i>	Enable VLAN trunk on this interface.		
	<i>disable</i>	Disable VLAN trunk on this interface.		
trust-ip-1	Trusted host for dedicated management traffic (0.0.0.0/24 for all hosts).	ipv4-classnet-any	Not Specified	0.0.0.0 0.0.0.0
trust-ip-2	Trusted host for dedicated management traffic (0.0.0.0/24 for all hosts).	ipv4-classnet-any	Not Specified	0.0.0.0 0.0.0.0
trust-ip-3	Trusted host for dedicated management traffic (0.0.0.0/24 for all hosts).	ipv4-classnet-any	Not Specified	0.0.0.0 0.0.0.0
trust-ip6-1	Trusted IPv6 host for dedicated management traffic (::/0 for all hosts).	ipv6-prefix	Not Specified	::/0
trust-ip6-2	Trusted IPv6 host for dedicated management traffic (::/0 for all hosts).	ipv6-prefix	Not Specified	::/0
trust-ip6-3	Trusted IPv6 host for dedicated management traffic (::/0 for all hosts).	ipv6-prefix	Not Specified	::/0

Parameter	Description	Type	Size	Default																																						
type	Interface type.	option	-	vlan																																						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>physical</i></td><td>Physical interface.</td></tr><tr><td><i>vlan</i></td><td>VLAN interface.</td></tr><tr><td><i>aggregate</i></td><td>Aggregate interface.</td></tr><tr><td><i>redundant</i></td><td>Redundant interface.</td></tr><tr><td><i>tunnel</i></td><td>Tunnel interface.</td></tr><tr><td><i>vdom-link</i></td><td>VDOM link interface.</td></tr><tr><td><i>loopback</i></td><td>Loopback interface.</td></tr><tr><td><i>switch</i></td><td>Software switch interface.</td></tr><tr><td><i>vap-switch</i></td><td>VAP interface.</td></tr><tr><td><i>wl-mesh</i></td><td>WLAN mesh interface.</td></tr><tr><td><i>fext-wan</i></td><td>FortiExtender interface.</td></tr><tr><td><i>vxlan</i></td><td>VXLAN interface.</td></tr><tr><td><i>geneve</i></td><td>GENEVE interface.</td></tr><tr><td><i>hdlc</i></td><td>T1/E1 interface.</td></tr><tr><td><i>switch-vlan</i></td><td>Switch VLAN interface.</td></tr><tr><td><i>emac-vlan</i></td><td>EMAC VLAN interface.</td></tr><tr><td><i>ssl</i></td><td>SSL VPN client interface.</td></tr><tr><td><i>lan-extension</i></td><td>LAN extension interface.</td></tr></table>	Option	Description	<i>physical</i>	Physical interface.	<i>vlan</i>	VLAN interface.	<i>aggregate</i>	Aggregate interface.	<i>redundant</i>	Redundant interface.	<i>tunnel</i>	Tunnel interface.	<i>vdom-link</i>	VDOM link interface.	<i>loopback</i>	Loopback interface.	<i>switch</i>	Software switch interface.	<i>vap-switch</i>	VAP interface.	<i>wl-mesh</i>	WLAN mesh interface.	<i>fext-wan</i>	FortiExtender interface.	<i>vxlan</i>	VXLAN interface.	<i>geneve</i>	GENEVE interface.	<i>hdlc</i>	T1/E1 interface.	<i>switch-vlan</i>	Switch VLAN interface.	<i>emac-vlan</i>	EMAC VLAN interface.	<i>ssl</i>	SSL VPN client interface.	<i>lan-extension</i>	LAN extension interface.			
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<i>lan-extension</i>	LAN extension interface.																																									
username	Username of the PPPoE account, provided by your ISP.	string	Maximum length: 64																																							
vci *	Virtual Channel ID.	integer	Minimum value: 0 Maximum value: 65535	35																																						
vdom	Interface is in this virtual domain (VDOM).	string	Maximum length: 31																																							
vectoring *	Enable/disable DSL vectoring.	option	-	enable																																						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>disable</i></td><td>Disable vectoring.</td></tr><tr><td><i>enable</i></td><td>Enable vectoring.</td></tr></table>	Option	Description	<i>disable</i>	Disable vectoring.	<i>enable</i>	Enable vectoring.																																			
	Option	Description																																								
	<i>disable</i>	Disable vectoring.																																								
<i>enable</i>	Enable vectoring.																																									

Parameter	Description	Type	Size	Default								
vindex *	Switch control interface VLAN ID. Read-only.	integer	Minimum value: 0 0 Maximum value: 65535	0								
vlan-id *	Vlan ID.	integer	Minimum value: 1 0 Maximum value: 4095	1								
vlan-op-mode *	Configure DSL 802.1q mode.	option	-	passthrough								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>tag</td><td>802.1q Tagged.</td></tr><tr><td>untag</td><td>802.1q Un-Tagged.</td></tr><tr><td>passthrough</td><td>802.1q Passthrough.</td></tr></table>	Option	Description	tag	802.1q Tagged.	untag	802.1q Un-Tagged.	passthrough	802.1q Passthrough.			
Option	Description											
tag	802.1q Tagged.											
untag	802.1q Un-Tagged.											
passthrough	802.1q Passthrough.											
vlan-protocol	Ethernet protocol of VLAN.	option	-	8021q								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>8021q</td><td>IEEE 802.1Q.</td></tr><tr><td>8021ad</td><td>IEEE 802.1AD.</td></tr></table>	Option	Description	8021q	IEEE 802.1Q.	8021ad	IEEE 802.1AD.					
Option	Description											
8021q	IEEE 802.1Q.											
8021ad	IEEE 802.1AD.											
vlanforward	Enable/disable traffic forwarding between VLANs on this interface.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable traffic forwarding.</td></tr><tr><td>disable</td><td>Disable traffic forwarding.</td></tr></table>	Option	Description	enable	Enable traffic forwarding.	disable	Disable traffic forwarding.					
Option	Description											
enable	Enable traffic forwarding.											
disable	Disable traffic forwarding.											
vlanid	VLAN ID (1 - 4094).	integer	Minimum value: 1 1 Maximum value: 4094	0								
vpi *	Virtual Path ID.	integer	Minimum value: 0 0 Maximum value: 255	0								
vrf	Virtual Routing Forwarding ID.	integer	Minimum value: 0 0 Maximum value: 251	0								
vrrp-virtual-mac	Enable/disable use of virtual MAC for VRRP.	option	-	disable								

Parameter	Description	Type	Size	Default
	Option Description			
	<i>enable</i>	Enable use of virtual MAC for VRRP.		
	<i>disable</i>	Disable use of virtual MAC for VRRP.		
wccp	Enable/disable WCCP on this interface. Used for encapsulated WCCP communication between WCCP clients and servers.	option	-	disable
	Option Description			
	<i>enable</i>	Enable WCCP protocol on this interface.		
	<i>disable</i>	Disable WCCP protocol on this interface.		
weight	Default weight for static routes (if route has no weight configured).	integer	Minimum value: 0 Maximum value: 255	0
wifi-5g-threshold *	Minimal signal strength to be considered as a good 5G AP.	string	Maximum length: 7	-78
wifi-acl *	Access control for MAC addresses in the MAC list.	option	-	deny
	Option Description			
	<i>allow</i>	Allow.		
	<i>deny</i>	Deny.		
wifi-ap-band *	How to select the AP to connect.	option	-	any
	Option Description			
	<i>any</i>	Connect to the best 2G or 5G AP.		
	<i>5g-preferred</i>	Connect to the 5G AP if a good 5G AP exists.		
	<i>5g-only</i>	Only connect to the 5G AP.		
wifi-auth *	WiFi authentication.	option	-	PSK
	Option Description			
	<i>PSK</i>	PSK.		
	<i>radius</i>	RADIUS.		
	<i>usergroup</i>	User group.		

Parameter	Description	Type	Size	Default						
wifi-auto-connect *	Enable/disable WiFi network auto connect.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable WiFi network auto connect.</td></tr><tr><td>disable</td><td>Disable WiFi network auto connect.</td></tr></table>	Option	Description	enable	Enable WiFi network auto connect.	disable	Disable WiFi network auto connect.			
Option	Description									
enable	Enable WiFi network auto connect.									
disable	Disable WiFi network auto connect.									
wifi-auto-save *	Enable/disable WiFi network automatic save.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable WiFi network automatic save.</td></tr><tr><td>disable</td><td>Disable WiFi network automatic save.</td></tr></table>	Option	Description	enable	Enable WiFi network automatic save.	disable	Disable WiFi network automatic save.			
Option	Description									
enable	Enable WiFi network automatic save.									
disable	Disable WiFi network automatic save.									
wifi-broadcast-ssid *	Enable/disable SSID broadcast in the beacon.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable SSID broadcast in the beacon.</td></tr><tr><td>disable</td><td>Disable SSID broadcast in the beacon.</td></tr></table>	Option	Description	enable	Enable SSID broadcast in the beacon.	disable	Disable SSID broadcast in the beacon.			
Option	Description									
enable	Enable SSID broadcast in the beacon.									
disable	Disable SSID broadcast in the beacon.									
wifi-dns-server1 *	DNS server 1.	ipv4-address	Not Specified	0.0.0.0						
wifi-dns-server2 *	DNS server 2.	ipv4-address	Not Specified	0.0.0.0						
wifi-encrypt *	Data encryption.	option	-	AES						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>TKIP</td><td>TKIP.</td></tr><tr><td>AES</td><td>AES.</td></tr></table>	Option	Description	TKIP	TKIP.	AES	AES.			
Option	Description									
TKIP	TKIP.									
AES	AES.									
wifi-fragment-threshold *	WiFi fragment threshold (800 - 2346).	integer	Minimum value: 800 Maximum value: 2346	2346						
wifi-gateway *	IPv4 default gateway IP address.	ipv4-address	Not Specified	0.0.0.0						
wifi-key *	WiFi WEP Key.	password	Not Specified							
wifi-keyindex *	WEP key index (1 - 4).	integer	Minimum value: 1 Maximum value: 4	1						

Parameter	Description	Type	Size	Default
wifi-mac-filter *	Enable/disable MAC filter status.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable MAC filter.		
	<i>disable</i>	Disable MAC filter.		
wifi-passphrase *	WiFi pre-shared key for WPA.	password	Not Specified	
wifi-radius-server *	WiFi RADIUS server for WPA.	string	Maximum length: 35	
wifi-rts-threshold *	WiFi RTS threshold (256 - 2346).	integer	Minimum value: 256 Maximum value: 2346	2346
wifi-security *	Wireless access security of SSID.	option	-	wpa-personal
	Option	Description		
	<i>open</i>	Open.		
	<i>wep64</i>	WEP64.		
	<i>wep128</i>	WEP128.		
	<i>wpa-personal</i>	WPA personal.		
	<i>wpa-enterprise</i>	WPA enterprise.		
	<i>wpa-only-personal</i>	WPA personal only.		
	<i>wpa-only-enterprise</i>	WPA enterprise only.		
	<i>wpa2-only-personal</i>	WPA2 personal only.		
<i>wpa2-only-enterprise</i>	WPA2 enterprise only.			
wifi-ssid *	IEEE 802.11 Service Set Identifier.	string	Maximum length: 32	fortinet
wifi-usergroup *	WiFi user group for WPA.	string	Maximum length: 35	
wins-ip	WINS server IP.	ipv4-address	Not Specified	0.0.0.0

* This parameter may not exist in some models.

** Values may differ between models.

config client-options

Parameter	Description	Type	Size	Default
code	DHCP client option code.	integer	Minimum value: 0 0 Maximum value: 255	0
id	ID.	integer	Minimum value: 0 0 Maximum value: 4294967295	0
ip	DHCP option IPs.	user	Not Specified	
type	DHCP client option type.	option	-	hex
		Option	Description	
		hex	DHCP option in hex.	
		string	DHCP option in string.	
		ip	DHCP option in IP.	
		fqdn	DHCP option in domain search option format.	
value	DHCP client option value.	string	Maximum length: 312	

config dhcp-snooping-server-list

Parameter	Description	Type	Size	Default
name	DHCP server name.	string	Maximum length: 35	default
server-ip	IP address for DHCP server.	ipv4-address	Not Specified	0.0.0.0

config egress-queues

Parameter	Description	Type	Size	Default
cos0	CoS profile name for CoS 0.	string	Maximum length: 35	
cos1	CoS profile name for CoS 1.	string	Maximum length: 35	
cos2	CoS profile name for CoS 2.	string	Maximum length: 35	

Parameter	Description	Type	Size	Default
cos3	CoS profile name for CoS 3.	string	Maximum length: 35	
cos4	CoS profile name for CoS 4.	string	Maximum length: 35	
cos5	CoS profile name for CoS 5.	string	Maximum length: 35	
cos6	CoS profile name for CoS 6.	string	Maximum length: 35	
cos7	CoS profile name for CoS 7.	string	Maximum length: 35	

config ipv6

Parameter	Description	Type	Size	Default								
autoconf	Enable/disable address auto config.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable auto-configuration.</td></tr><tr><td><i>disable</i></td><td>Disable auto-configuration.</td></tr></table>	Option	Description	<i>enable</i>	Enable auto-configuration.	<i>disable</i>	Disable auto-configuration.					
Option	Description											
<i>enable</i>	Enable auto-configuration.											
<i>disable</i>	Disable auto-configuration.											
cli-conn6-status	CLI IPv6 connection status. Read-only.	integer	Minimum value: 0 0 Maximum value: 4294967295									
dhcp6-client-options	DHCPv6 client options. Read-only.	option	-									
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>rapid</i></td><td>Send rapid commit option.</td></tr><tr><td><i>iapd</i></td><td>Send including IA-PD option.</td></tr><tr><td><i>iana</i></td><td>Send including IA-NA option.</td></tr></table>	Option	Description	<i>rapid</i>	Send rapid commit option.	<i>iapd</i>	Send including IA-PD option.	<i>iana</i>	Send including IA-NA option.			
Option	Description											
<i>rapid</i>	Send rapid commit option.											
<i>iapd</i>	Send including IA-PD option.											
<i>iana</i>	Send including IA-NA option.											
dhcp6-information-request	Enable/disable DHCPv6 information request.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable DHCPv6 information request.</td></tr><tr><td><i>disable</i></td><td>Disable DHCPv6 information request.</td></tr></table>	Option	Description	<i>enable</i>	Enable DHCPv6 information request.	<i>disable</i>	Disable DHCPv6 information request.					
Option	Description											
<i>enable</i>	Enable DHCPv6 information request.											
<i>disable</i>	Disable DHCPv6 information request.											

Parameter	Description	Type	Size	Default
dhcp6-prefix-delegation	Enable/disable DHCPv6 prefix delegation.	option	-	disable
	Option	Description		
	enable	Enable DHCPv6 prefix delegation.		
	disable	Disable DHCPv6 prefix delegation.		
dhcp6-relay-ip	DHCPv6 relay IP address.	user	Not Specified	
dhcp6-relay-service	Enable/disable DHCPv6 relay.	option	-	disable
	Option	Description		
	disable	Disable DHCPv6 relay		
	enable	Enable DHCPv6 relay.		
dhcp6-relay-source-interface	Enable/disable use of address on this interface as the source address of the relay message.	option	-	disable
	Option	Description		
	disable	Use address of the egress interface as source address of the relay message.		
	enable	Use address of this interface as source address of the relay message.		
dhcp6-relay-type	DHCPv6 relay type.	option	-	regular
	Option	Description		
	regular	Regular DHCP relay.		
icmp6-send-redirect	Enable/disable sending of ICMPv6 redirects.	option	-	enable
	Option	Description		
	enable	Enable sending of ICMPv6 redirects.		
	disable	Disable sending of ICMPv6 redirects.		
interface-identifier	IPv6 interface identifier.	ipv6-address	Not Specified	::
ip6-address	Primary IPv6 address prefix. Syntax: xxxx:xxxx:xxxx:xxxx:xxxx:xxxx:xxxx:xxx.	ipv6-prefix	Not Specified	::/0

Parameter	Description	Type	Size	Default																		
ip6-allowaccess	Allow management access to the interface.	option	-																			
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>ping</td><td>PING access.</td></tr><tr><td>https</td><td>HTTPS access.</td></tr><tr><td>ssh</td><td>SSH access.</td></tr><tr><td>snmp</td><td>SNMP access.</td></tr><tr><td>http</td><td>HTTP access.</td></tr><tr><td>telnet</td><td>TELNET access.</td></tr><tr><td>fgfm</td><td>FortiManager access.</td></tr><tr><td>fabric</td><td>Fabric access.</td></tr></table>	Option	Description	ping	PING access.	https	HTTPS access.	ssh	SSH access.	snmp	SNMP access.	http	HTTP access.	telnet	TELNET access.	fgfm	FortiManager access.	fabric	Fabric access.			
Option	Description																					
ping	PING access.																					
https	HTTPS access.																					
ssh	SSH access.																					
snmp	SNMP access.																					
http	HTTP access.																					
telnet	TELNET access.																					
fgfm	FortiManager access.																					
fabric	Fabric access.																					
ip6-default-life	Default life (sec).	integer	Minimum value: 0 Maximum value: 9000	1800																		
ip6-delegated-prefix-iaid	IAID of obtained delegated-prefix from the upstream interface.	integer	Minimum value: 0 Maximum value: 4294967295	0																		
ip6-dns-server-override	Enable/disable using the DNS server acquired by DHCP.	option	-	enable																		
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable using the DNS server acquired by DHCP.</td></tr><tr><td>disable</td><td>Disable using the DNS server acquired by DHCP.</td></tr></table>	Option	Description	enable	Enable using the DNS server acquired by DHCP.	disable	Disable using the DNS server acquired by DHCP.															
Option	Description																					
enable	Enable using the DNS server acquired by DHCP.																					
disable	Disable using the DNS server acquired by DHCP.																					
ip6-hop-limit	Hop limit (0 means unspecified).	integer	Minimum value: 0 Maximum value: 255	0																		
ip6-link-mtu	IPv6 link MTU.	integer	Minimum value: 1280 Maximum value: 16000	0																		
ip6-manage-flag	Enable/disable the managed flag.	option	-	disable																		
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable the managed IPv6 flag.</td></tr></table>	Option	Description	enable	Enable the managed IPv6 flag.																	
Option	Description																					
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Parameter	Description	Type	Size	Default										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>disable</i></td><td>Disable the managed IPv6 flag.</td></tr></table>	Option	Description	<i>disable</i>	Disable the managed IPv6 flag.									
	Option	Description												
<i>disable</i>	Disable the managed IPv6 flag.													
ip6-max-interval	IPv6 maximum interval (4 to 1800 sec).	integer	Minimum value: 4 Maximum value: 1800	600										
ip6-min-interval	IPv6 minimum interval (3 to 1350 sec).	integer	Minimum value: 3 Maximum value: 1350	198										
ip6-mode	Addressing mode (static, DHCP, delegated).	option	-	static										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>static</i></td><td>Static setting.</td></tr><tr><td><i>dhcp</i></td><td>DHCPv6 client mode.</td></tr><tr><td><i>pppoe</i></td><td>IPv6 over PPPoE mode.</td></tr><tr><td><i>delegated</i></td><td>IPv6 address with delegated prefix.</td></tr></table>	Option	Description	<i>static</i>	Static setting.	<i>dhcp</i>	DHCPv6 client mode.	<i>pppoe</i>	IPv6 over PPPoE mode.	<i>delegated</i>	IPv6 address with delegated prefix.			
	Option	Description												
	<i>static</i>	Static setting.												
	<i>dhcp</i>	DHCPv6 client mode.												
	<i>pppoe</i>	IPv6 over PPPoE mode.												
<i>delegated</i>	IPv6 address with delegated prefix.													
ip6-other-flag	Enable/disable the other IPv6 flag.	option	-	disable										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable the other IPv6 flag.</td></tr><tr><td><i>disable</i></td><td>Disable the other IPv6 flag.</td></tr></table>	Option	Description	<i>enable</i>	Enable the other IPv6 flag.	<i>disable</i>	Disable the other IPv6 flag.							
	Option	Description												
	<i>enable</i>	Enable the other IPv6 flag.												
<i>disable</i>	Disable the other IPv6 flag.													
ip6-prefix-mode	Assigning a prefix from DHCP or RA.	option	-	dhcp6										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>dhcp6</i></td><td>Use delegated prefix from a DHCPv6 client to form a delegated IPv6 address.</td></tr><tr><td><i>ra</i></td><td>Use prefix from RA to form a delegated IPv6 address.</td></tr></table>	Option	Description	<i>dhcp6</i>	Use delegated prefix from a DHCPv6 client to form a delegated IPv6 address.	<i>ra</i>	Use prefix from RA to form a delegated IPv6 address.							
	Option	Description												
	<i>dhcp6</i>	Use delegated prefix from a DHCPv6 client to form a delegated IPv6 address.												
<i>ra</i>	Use prefix from RA to form a delegated IPv6 address.													
ip6-reachable-time	IPv6 reachable time (milliseconds; 0 means unspecified).	integer	Minimum value: 0 Maximum value: 3600000	0										
ip6-retrans-time	IPv6 retransmit time (milliseconds; 0 means unspecified).	integer	Minimum value: 0 Maximum value: 4294967295	0										

Parameter	Description	Type	Size	Default
ip6-send-adv	Enable/disable sending advertisements about the interface.	option	-	disable
	Option Description			
	<i>enable</i>	Enable sending advertisements about this interface.		
	<i>disable</i>	Disable sending advertisements about this interface.		
ip6-subnet	Subnet to routing prefix. Syntax: xxxx:xxxx:xxxx:xxxx:xxxx:xxxx:xxxx:xxxx/xxx.	ipv6-prefix	Not Specified	::/0
ip6-upstream-interface	Interface name providing delegated information.	string	Maximum length: 15	
nd-cert	Neighbor discovery certificate.	string	Maximum length: 35	
nd-cga-modifier	Neighbor discovery CGA modifier.	user	Not Specified	
nd-mode	Neighbor discovery mode.	option	-	basic
	Option Description			
	<i>basic</i>	Do not support SEND.		
	<i>SEND-compatible</i>	Support SEND.		
nd-security-level	Neighbor discovery security level (0 - 7; 0 = least secure, default = 0).	integer	Minimum value: 0 Maximum value: 7	0
nd-timestamp-delta	Neighbor discovery timestamp delta value (1 - 3600 sec; default = 300).	integer	Minimum value: 1 Maximum value: 3600	300
nd-timestamp-fuzz	Neighbor discovery timestamp fuzz factor (1 - 60 sec; default = 1).	integer	Minimum value: 1 Maximum value: 60	1
ra-send-mtu	Enable/disable sending link MTU in RA packet.	option	-	enable
	Option Description			
	<i>enable</i>	Enable sending link MTU in RA packet.		
	<i>disable</i>	Disable sending link MTU in RA packet.		
unique-autoconf-addr	Enable/disable unique auto config address.	option	-	disable

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>enable</i>	Enable unique auto-configuration address.		
	<i>disable</i>	Disable unique auto-configuration address.		
vrip6_link_local	Link-local IPv6 address of virtual router.	ipv6-address	Not Specified	::
vrrp-virtual-mac6	Enable/disable virtual MAC for VRRP.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable virtual MAC for VRRP.		
	<i>disable</i>	Disable virtual MAC for VRRP.		

config dhcp6-iapd-list

Parameter	Description	Type	Size	Default
iaid	Identity association identifier.	integer	Minimum value: 0 0 Maximum value: 4294967295	0
prefix-hint	DHCPv6 prefix that will be used as a hint to the upstream DHCPv6 server.	ipv6-network	Not Specified	::/0
prefix-hint-plt	DHCPv6 prefix hint preferred life time (sec), 0 means unlimited lease time.	integer	Minimum value: 0 0 Maximum value: 4294967295	604800
prefix-hint-vlt	DHCPv6 prefix hint valid life time (sec).	integer	Minimum value: 0 0 Maximum value: 4294967295	2592000

config ip6-delegated-prefix-list

Parameter	Description	Type	Size	Default
autonomous-flag	Enable/disable the autonomous flag.	option	-	enable

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>enable</i>	Enable the autonomous flag.		
	<i>disable</i>	Disable the autonomous flag.		
delegated-prefix-iaid	IAID of obtained delegated-prefix from the upstream interface.	integer	Minimum value: 0 0 Maximum value: 4294967295	
onlink-flag	Enable/disable the onlink flag.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable the onlink flag.		
	<i>disable</i>	Disable the onlink flag.		
prefix-id	Prefix ID.	integer	Minimum value: 0 0 Maximum value: 4294967295	
rdnss	Recursive DNS server option.	user	Not Specified	
rdnss-service	Recursive DNS service option.	option	-	specify
	Option	Description		
	<i>delegated</i>	Delegated RDNSS settings.		
	<i>default</i>	System RDNSS settings.		
	<i>specify</i>	Specify recursive DNS servers.		
subnet	Add subnet ID to routing prefix.	ipv6-network	Not Specified	::/0
upstream-interface	Name of the interface that provides delegated information.	string	Maximum length: 15	

config ip6-extra-addr

Parameter	Description	Type	Size	Default
prefix	IPv6 address prefix.	ipv6-prefix	Not Specified	::/0

config ip6-prefix-list

Parameter	Description	Type	Size	Default
autonomous-flag	Enable/disable the autonomous flag.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable the autonomous flag.		
	<i>disable</i>	Disable the autonomous flag.		
dnssl <domain>	DNS search list option. Domain name.	string	Maximum length: 79	
onlink-flag	Enable/disable the onlink flag.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable the onlink flag.		
	<i>disable</i>	Disable the onlink flag.		
preferred-life-time	Preferred life time (sec).	integer	Minimum value: 0 Maximum value: 4294967295	604800
prefix	IPv6 prefix.	ipv6-network	Not Specified	::/0
rdnss	Recursive DNS server option.	user	Not Specified	
valid-life-time	Valid life time (sec).	integer	Minimum value: 0 Maximum value: 4294967295	2592000

config vrrp6

Parameter	Description	Type	Size	Default
accept-mode	Enable/disable accept mode.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable accept mode.		
	<i>disable</i>	Disable accept mode.		

Parameter	Description	Type	Size	Default						
adv-interval	Advertisement interval (1 - 255 seconds).	integer	Minimum value: 1 Maximum value: 255	1						
preempt	Enable/disable preempt mode.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable preempt mode.</td></tr><tr><td><i>disable</i></td><td>Disable preempt mode.</td></tr></table>	Option	Description	<i>enable</i>	Enable preempt mode.	<i>disable</i>	Disable preempt mode.			
Option	Description									
<i>enable</i>	Enable preempt mode.									
<i>disable</i>	Disable preempt mode.									
priority	Priority of the virtual router (1 - 255).	integer	Minimum value: 1 Maximum value: 255	100						
start-time	Startup time (1 - 255 seconds).	integer	Minimum value: 1 Maximum value: 255	3						
status	Enable/disable VRRP.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable VRRP.</td></tr><tr><td><i>disable</i></td><td>Disable VRRP.</td></tr></table>	Option	Description	<i>enable</i>	Enable VRRP.	<i>disable</i>	Disable VRRP.			
Option	Description									
<i>enable</i>	Enable VRRP.									
<i>disable</i>	Disable VRRP.									
vrdst6	Monitor the route to this destination.	ipv6-address	Not Specified							
vrgrp	VRRP group ID (1 - 65535).	integer	Minimum value: 1 Maximum value: 65535	0						
vrid	Virtual router identifier (1 - 255).	integer	Minimum value: 1 Maximum value: 255	0						
vrip6	IPv6 address of the virtual router.	ipv6-address	Not Specified	::						

config l2tp-client-settings

Parameter	Description	Type	Size	Default
auth-type	L2TP authentication type.	option	-	auto
	Option	Description		
	<i>auto</i>	Automatically choose authentication.		
	<i>pap</i>	PAP authentication.		
	<i>chap</i>	CHAP authentication.		
	<i>mschapv1</i>	MS-CHAPv1 authentication.		
	<i>mschapv2</i>	MS-CHAPv2 authentication.		
defaultgw	Enable/disable default gateway.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable default gateway.		
	<i>disable</i>	Disable default gateway.		
distance	Distance of learned routes.	integer	Minimum value: 1 Maximum value: 255	2
hello-interval	L2TP hello message interval in seconds (0 - 3600 sec, default = 60).	integer	Minimum value: 0 Maximum value: 3600	60
ip	IP. Read-only.	ipv4-classnet-host	Not Specified	0.0.0.0 0.0.0.0
mtu	L2TP MTU.	integer	Minimum value: 40 Maximum value: 65535	1460
password	L2TP password.	password	Not Specified	
peer-host	L2TP peer host address.	string	Maximum length: 255	
peer-mask	L2TP peer mask.	ipv4-netmask	Not Specified	255.255.255.255

Parameter	Description	Type	Size	Default
peer-port	L2TP peer port number.	integer	Minimum value: 1 Maximum value: 65535	1701
priority	Priority of learned routes.	integer	Minimum value: 1 Maximum value: 65535	1
user	L2TP user name.	string	Maximum length: 127	

config secondaryip

Parameter	Description	Type	Size	Default																										
allowaccess	Management access settings for the secondary IP address.	option	-																											
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>ping</td><td>PING access.</td></tr><tr><td>https</td><td>HTTPS access.</td></tr><tr><td>ssh</td><td>SSH access.</td></tr><tr><td>snmp</td><td>SNMP access.</td></tr><tr><td>http</td><td>HTTP access.</td></tr><tr><td>telnet</td><td>TELNET access.</td></tr><tr><td>fgfm</td><td>FortiManager access.</td></tr><tr><td>radius-acct</td><td>RADIUS accounting access.</td></tr><tr><td>probe-response</td><td>Probe access.</td></tr><tr><td>fabric</td><td>Security Fabric access.</td></tr><tr><td>ftm</td><td>FTM access.</td></tr><tr><td>speed-test</td><td>Speed test access.</td></tr></table>	Option	Description	ping	PING access.	https	HTTPS access.	ssh	SSH access.	snmp	SNMP access.	http	HTTP access.	telnet	TELNET access.	fgfm	FortiManager access.	radius-acct	RADIUS accounting access.	probe-response	Probe access.	fabric	Security Fabric access.	ftm	FTM access.	speed-test	Speed test access.			
	Option	Description																												
	ping	PING access.																												
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	ssh	SSH access.																												
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	http	HTTP access.																												
	telnet	TELNET access.																												
	fgfm	FortiManager access.																												
	radius-acct	RADIUS accounting access.																												
	probe-response	Probe access.																												
	fabric	Security Fabric access.																												
	ftm	FTM access.																												
speed-test	Speed test access.																													
detectprotocol	Protocols used to detect the server.	option	-	ping																										

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>ping</i>	PING.		
	<i>tcp-echo</i>	TCP echo.		
	<i>udp-echo</i>	UDP echo.		
detectserver	Gateway's ping server for this IP.	user	Not Specified	
gwdetect	Enable/disable detect gateway alive for first.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable detect gateway alive for first.		
	<i>disable</i>	Disable detect gateway alive for first.		
ha-priority	HA election priority for the PING server.	integer	Minimum value: 1 Maximum value: 50	
id	ID.	integer	Minimum value: 0 Maximum value: 4294967295	
ip	Secondary IP address of the interface.	ipv4-classnet-host	Not Specified	0.0.0.0 0.0.0.0
ping-serv-status	PING server status. Read-only.	integer	Minimum value: 0 Maximum value: 255	

config tagging

Parameter	Description	Type	Size	Default
category	Tag category.	string	Maximum length: 63	
name	Tagging entry name.	string	Maximum length: 63	
tags <name>	Tags. Tag name.	string	Maximum length: 79	

config vrrp

Parameter	Description	Type	Size	Default						
accept-mode	Enable/disable accept mode.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable accept mode.</td></tr><tr><td><i>disable</i></td><td>Disable accept mode.</td></tr></table>	Option	Description	<i>enable</i>	Enable accept mode.	<i>disable</i>	Disable accept mode.			
Option	Description									
<i>enable</i>	Enable accept mode.									
<i>disable</i>	Disable accept mode.									
adv-interval	Advertisement interval (1 - 255 seconds).	integer	Minimum value: 1 Maximum value: 255	1						
ignore-default-route	Enable/disable ignoring of default route when checking destination.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable ignoring of default route when checking destination.</td></tr><tr><td><i>disable</i></td><td>Disable ignoring of default route when checking destination.</td></tr></table>	Option	Description	<i>enable</i>	Enable ignoring of default route when checking destination.	<i>disable</i>	Disable ignoring of default route when checking destination.			
Option	Description									
<i>enable</i>	Enable ignoring of default route when checking destination.									
<i>disable</i>	Disable ignoring of default route when checking destination.									
preempt	Enable/disable preempt mode.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable preempt mode.</td></tr><tr><td><i>disable</i></td><td>Disable preempt mode.</td></tr></table>	Option	Description	<i>enable</i>	Enable preempt mode.	<i>disable</i>	Disable preempt mode.			
Option	Description									
<i>enable</i>	Enable preempt mode.									
<i>disable</i>	Disable preempt mode.									
priority	Priority of the virtual router (1 - 255).	integer	Minimum value: 1 Maximum value: 255	100						
start-time	Startup time (1 - 255 seconds).	integer	Minimum value: 1 Maximum value: 255	3						
status	Enable/disable this VRRP configuration.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable this VRRP configuration.</td></tr><tr><td><i>disable</i></td><td>Disable this VRRP configuration.</td></tr></table>	Option	Description	<i>enable</i>	Enable this VRRP configuration.	<i>disable</i>	Disable this VRRP configuration.			
Option	Description									
<i>enable</i>	Enable this VRRP configuration.									
<i>disable</i>	Disable this VRRP configuration.									
version	VRRP version.	option	-	2						

Parameter	Description	Type	Size	Default
	Option	Description		
	2	VRRP version 2.		
	3	VRRP version 3.		
vrdst	Monitor the route to this destination.	ipv4-address-any	Not Specified	
vrdst-priority	Priority of the virtual router when the virtual router destination becomes unreachable (0 - 254).	integer	Minimum value: 0 Maximum value: 254	0
vrgrp	VRRP group ID (1 - 65535).	integer	Minimum value: 1 Maximum value: 65535	0
vrid	Virtual router identifier (1 - 255).	integer	Minimum value: 1 Maximum value: 255	0
vip	IP address of the virtual router.	ipv4-address-any	Not Specified	0.0.0.0

config proxy-arp

Parameter	Description	Type	Size	Default
id	ID.	integer	Minimum value: 0 Maximum value: 4294967295	0
ip	Set IP addresses of proxy ARP.	user	Not Specified	

config wifi-mac-list

Parameter	Description	Type	Size	Default
id	ID.	integer	Minimum value: 0 Maximum value: 4294967295	0

Parameter	Description	Type	Size	Default
mac	MAC address.	mac-address	Not Specified	00:00:00:00:00:00

config wifi-networks

Parameter	Description	Type	Size	Default
id	ID.	integer	Minimum value: 0 0 Maximum value: 4294967295	0
wifi-encrypt	Data encryption.	option	-	AES
	OptionDescription			
	TKIP	TKIP.		
	AES	AES.		
wifi-key	WiFi WEP Key.	password	Not Specified	
wifi-keyindex	WEP key index (1 - 4).	integer	Minimum value: 1 1 Maximum value: 4	1
wifi-passphrase	WiFi pre-shared key for WPA.	password	Not Specified	
wifi-security	Wireless access security of SSID.	option	-	wpa-personal
	OptionDescription			
	open	Open.		
	wep64	WEP64.		
	wep128	WEP128.		
	wpa-personal	WPA personal.		
	wpa-only-personal	WPA personal only.		
	wpa2-only-personal	WPA2 personal only.		
wifi-ssid	IEEE 802.11 Service Set Identifier.	string	Maximum length: 32	fortinet

config system ipam

Configure IP address management services.

```
config system ipam
  Description: Configure IP address management services.
  config pools
    Description: Configure IPAM pools.
    edit <name>
      set description {string}
      set subnet {ipv4-classnet}
    next
  end
  config rules
    Description: Configure IPAM allocation rules.
    edit <name>
      set description {string}
      set device <name1>, <name2>, ...
      set dhcp [enable|disable]
      set interface <name1>, <name2>, ...
      set pool <name1>, <name2>, ...
      set role [any|lan|...]
    next
  end
  set server-type {option}
  set status [enable|disable]
end
```

config system ipam

Parameter	Description	Type	Size	Default						
server-type	Configure the type of IPAM server to use.	option	-	fabric-root						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>fabric-root</i></td><td>Use the IPAM server running on the Security Fabric root.</td></tr></table>	Option	Description	<i>fabric-root</i>	Use the IPAM server running on the Security Fabric root.					
	Option	Description								
<i>fabric-root</i>	Use the IPAM server running on the Security Fabric root.									
status	Enable/disable IP address management services.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable integration with IP address management services.</td></tr><tr><td><i>disable</i></td><td>Disable integration with IP address management services.</td></tr></table>	Option	Description	<i>enable</i>	Enable integration with IP address management services.	<i>disable</i>	Disable integration with IP address management services.			
	Option	Description								
	<i>enable</i>	Enable integration with IP address management services.								
<i>disable</i>	Disable integration with IP address management services.									

config pools

Parameter	Description	Type	Size	Default
description	Description.	string	Maximum length: 127	
name	IPAM pool name.	string	Maximum length: 79	
subnet	Configure IPAM pool subnet, Class A - Class B subnet.	ipv4-classnet	Not Specified	0.0.0.0 0.0.0.0

config rules

Parameter	Description	Type	Size	Default												
description	Description.	string	Maximum length: 127													
device <name>	Configure serial number or wildcard of FortiGate to match. FortiGate serial number or wildcard.	string	Maximum length: 79													
dhcp	Enable/disable DHCP server for matching IPAM interfaces.	option	-	disable												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable DHCP server on matched IPAM interface.</td></tr><tr><td>disable</td><td>Disable DHCP server on matched IPAM interface.</td></tr></table>	Option	Description	enable	Enable DHCP server on matched IPAM interface.	disable	Disable DHCP server on matched IPAM interface.									
Option	Description															
enable	Enable DHCP server on matched IPAM interface.															
disable	Disable DHCP server on matched IPAM interface.															
interface <name>	Configure name or wildcard of interface to match. Interface name or wildcard.	string	Maximum length: 79													
name	IPAM rule name.	string	Maximum length: 79													
pool <name>	Configure name of IPAM pool to use. Ipam pool name.	string	Maximum length: 79													
role	Configure role of interface to match.	option	-	any												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>any</td><td>Match any interface role.</td></tr><tr><td>lan</td><td>Match interface role lan.</td></tr><tr><td>wan</td><td>Match interface role wan.</td></tr><tr><td>dmz</td><td>Match interface role dmz.</td></tr><tr><td>undefined</td><td>Match interface role undefined.</td></tr></table>	Option	Description	any	Match any interface role.	lan	Match interface role lan.	wan	Match interface role wan.	dmz	Match interface role dmz.	undefined	Match interface role undefined.			
Option	Description															
any	Match any interface role.															
lan	Match interface role lan.															
wan	Match interface role wan.															
dmz	Match interface role dmz.															
undefined	Match interface role undefined.															

config system ipip-tunnel

Configure IP in IP Tunneling.

```
config system ipip-tunnel
  Description: Configure IP in IP Tunneling.
  edit <name>
    set auto-asic-offload [enable|disable]
    set interface {string}
    set local-gw {ipv4-address-any}
    set remote-gw {ipv4-address}
    set use-sdwan [disable|enable]
  next
end
```

config system ipip-tunnel

Parameter	Description	Type	Size	Default
auto-asic-offload *	Enable/disable tunnel ASIC offloading.	option	-	enable
	Option		Description	
	<i>enable</i>		Enable auto ASIC offloading.	
	<i>disable</i>		Disable ASIC offloading.	
interface	Interface name that is associated with the incoming traffic from available options.	string	Maximum length: 15	
local-gw	IPv4 address for the local gateway.	ipv4-address-any	Not Specified	0.0.0.0
name	IPIP Tunnel name.	string	Maximum length: 15	
remote-gw	IPv4 address for the remote gateway.	ipv4-address	Not Specified	0.0.0.0
use-sdwan	Enable/disable use of SD-WAN to reach remote gateway.	option	-	disable
	Option		Description	
	<i>disable</i>		Disable use of SD-WAN to reach remote gateway.	
	<i>enable</i>		Enable use of SD-WAN to reach remote gateway.	

* This parameter may not exist in some models.

config system ips

Configure IPS system settings.

```
config system ips
  Description: Configure IPS system settings.
  set override-signature-hold-by-id [enable|disable]
  set signature-hold-time {user}
end
```

config system ips

Parameter	Description	Type	Size	Default
override-signature-hold-by-id	Enable/disable override of hold of triggering signatures that are specified by IDs regardless of hold.	option	-	enable
	Option	Description		
	<i>enable</i>	Allow the signatures specified by IDs to be triggered even if they are on hold.		
	<i>disable</i>	Do not trigger the signatures that are on hold.		
signature-hold-time	Time to hold and monitor IPS signatures. Format <#d###h> (day range: 0 - 7, hour range: 0 - 23, max hold time: 7d0h, default hold time: 0d0h).	user	Not Specified	0h

config system ipsec-aggregate

Configure an aggregate of IPsec tunnels.

```
config system ipsec-aggregate
  Description: Configure an aggregate of IPsec tunnels.
  edit <name>
    set algorithm [L3|L4|...]
    set member <tunnel-name1>, <tunnel-name2>, ...
  next
end
```

config system ipsec-aggregate

Parameter	Description	Type	Size	Default												
algorithm	Frame distribution algorithm.	option	-	round-robin												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>L3</td><td>Use layer 3 address for distribution.</td></tr><tr><td>L4</td><td>Use layer 4 information for distribution.</td></tr><tr><td>round-robin</td><td>Per-packet round-robin distribution.</td></tr><tr><td>redundant</td><td>Use first tunnel that is up for all traffic.</td></tr><tr><td>weighted-round-robin</td><td>Weighted round-robin distribution.</td></tr></table>	Option	Description	L3	Use layer 3 address for distribution.	L4	Use layer 4 information for distribution.	round-robin	Per-packet round-robin distribution.	redundant	Use first tunnel that is up for all traffic.	weighted-round-robin	Weighted round-robin distribution.			
	Option	Description														
	L3	Use layer 3 address for distribution.														
	L4	Use layer 4 information for distribution.														
	round-robin	Per-packet round-robin distribution.														
	redundant	Use first tunnel that is up for all traffic.														
weighted-round-robin	Weighted round-robin distribution.															
member <tunnel-name>	Member tunnels of the aggregate. Tunnel name.	string	Maximum length: 79													
name	IPsec aggregate name.	string	Maximum length: 15													

config system ips-urlfilter-dns

Configure IPS URL filter DNS servers.

```
config system ips-urlfilter-dns
  Description: Configure IPS URL filter DNS servers.
  edit <address>
    set ipv6-capability [enable|disable]
    set status [enable|disable]
  next
end
```

config system ips-urlfilter-dns

Parameter	Description	Type	Size	Default
address	DNS server IP address.	ipv4-address	Not Specified	0.0.0.0
ipv6-capability	Enable/disable this server for IPv6 queries.	option	-	disable

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		
status	Enable/disable using this DNS server for IPS URL filter DNS queries.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable this DNS server for IPS URL filter DNS queries.		
	<i>disable</i>	Disable this DNS server for IPS URL filter DNS queries.		

config system ips-urlfilter-dns6

Configure IPS URL filter IPv6 DNS servers.

```
config system ips-urlfilter-dns6
  Description: Configure IPS URL filter IPv6 DNS servers.
  edit <address6>
    set status [enable|disable]
  next
end
```

config system ips-urlfilter-dns6

Parameter	Description	Type	Size	Default
address6	IPv6 address of DNS server.	ipv6-address	Not Specified	::
status	Enable/disable this server for IPv6 DNS queries.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		

config system ipv6-neighbor-cache

Configure IPv6 neighbor cache table.

```

config system ipv6-neighbor-cache
    Description: Configure IPv6 neighbor cache table.
    edit <id>
        set interface {string}
        set ipv6 {ipv6-address}
        set mac {mac-address}
    next
end

```

config system ipv6-neighbor-cache

Parameter	Description	Type	Size	Default
id	Unique integer ID of the entry.	integer	Minimum value: 0 Maximum value: 4294967295	0
interface	Select the associated interface name from available options.	string	Maximum length: 15	
ipv6	IPv6 address (format: xxxx:xxxx:xxxx:xxxx:xxxx:xxxx:xxxx:xxxx).	ipv6-address	Not Specified	::
mac	MAC address (format: xx:xx:xx:xx:xx:xx).	mac-address	Not Specified	00:00:00:00:00:00

config system ipv6-tunnel

Configure IPv6/IPv4 in IPv6 tunnel.

```

config system ipv6-tunnel
    Description: Configure IPv6/IPv4 in IPv6 tunnel.
    edit <name>
        set auto-asic-offload [enable|disable]
        set destination {ipv6-address}
        set interface {string}
        set source {ipv6-address}
        set use-sdwan [disable|enable]
    next
end

```

config system ipv6-tunnel

Parameter	Description	Type	Size	Default
auto-asic-offload *	Enable/disable tunnel ASIC offloading.	option	-	enable
	Option		Description	
	<i>enable</i>		Enable auto ASIC offloading.	
	<i>disable</i>		Disable ASIC offloading.	
destination	Remote IPv6 address of the tunnel.	ipv6-address	Not Specified	::
interface	Interface name.	string	Maximum length: 15	
name	IPv6 tunnel name.	string	Maximum length: 15	
source	Local IPv6 address of the tunnel.	ipv6-address	Not Specified	::
use-sdwan	Enable/disable use of SD-WAN to reach remote gateway.	option	-	disable
	Option		Description	
	<i>disable</i>		Disable use of SD-WAN to reach remote gateway.	
	<i>enable</i>		Enable use of SD-WAN to reach remote gateway.	

* This parameter may not exist in some models.

config system iscsi



This command is available for model(s): FortiGate-VM64 OPC.

It is not available for: FortiGate 1000D, FortiGate 1000F, FortiGate 1001F, FortiGate 100EF, FortiGate 100E, FortiGate 100F, FortiGate 101F, FortiGate 1100E, FortiGate 1101E, FortiGate 140E-POE, FortiGate 140E, FortiGate 1500DT, FortiGate 1500D, FortiGate 1800F, FortiGate 1801F, FortiGate 2000E, FortiGate 200E, FortiGate 200F, FortiGate 201E, FortiGate 201F, FortiGate 2201E, FortiGate 2500E, FortiGate 2600F, FortiGate 2601F, FortiGate 3000D, FortiGate 3000F, FortiGate 3001F, FortiGate 300E, FortiGate 301E, FortiGate 3100D, FortiGate 3200D, FortiGate 3200F, FortiGate 3201F, FortiGate 3300E, FortiGate 3301E, FortiGate 3400E, FortiGate 3401E, FortiGate 3501F, FortiGate 3600E, FortiGate 3601E, FortiGate 3700D, FortiGate 3700F, FortiGate 3701F, FortiGate 3960E, FortiGate 3980E, FortiGate 400E Bypass, FortiGate 400E, FortiGate 400F, FortiGate 401E, FortiGate 401F, FortiGate 40F 3G4G, FortiGate 4200F, FortiGate 4201F, FortiGate 4400F, FortiGate 4401F, FortiGate 5001E1, FortiGate 5001E, FortiGate 500E, FortiGate 501E, FortiGate 600E, FortiGate 601E, FortiGate 60E-POE, FortiGate 60E, FortiGate 60F, FortiGate 61E, FortiGate 70F, FortiGate 71F, FortiGate 800D, FortiGate 80E-POE, FortiGate 80E, FortiGate 80F Bypass, FortiGate 80F DSL, FortiGate 80F-POE, FortiGate 80F, FortiGate 81E-POE, FortiGate 81E, FortiGate 81F-POE, FortiGate 81F, FortiGate 900D, FortiGate 90E, FortiGate 91E, FortiGate-VM64 Aliyun, FortiGate-VM64 AWS, FortiGate-VM64 Azure, FortiGate-VM64 GCP, FortiGate-VM64, FortiGateRugged 60F 3G4G, FortiGateRugged 60F, FortiGateRugged 70F 3G4G, FortiGateRugged 70F, FortiWiFi 40F 3G4G, FortiWiFi 40F, FortiWiFi 60E, FortiWiFi 60F, FortiWiFi 61E, FortiWiFi 61F, FortiWiFi 80F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G-POE, FortiWiFi 81F 2R-POE, FortiWiFi 81F 2R.

Configure system iSCSI.

```
config system iscsi
  Description: Configure system iSCSI.
  edit <name>
    set ip {ipv4-address}
    set iqn {string}
    set port {integer}
  next
end
```

config system iscsi

Parameter	Description	Type	Size	Default
ip	iSCSI IP address.	ipv4-address	Not Specified	0.0.0.0
iqn	iSCSI qualified name.	string	Maximum length: 127	

Parameter	Description	Type	Size	Default
name	iSCSI name.	string	Maximum length: 35	
port	iSCSI port number.	integer	Minimum value: 1 Maximum value: 65535	3260

config system isf-queue-profile



This command is available for model(s): FortiGate 1100E, FortiGate 1101E, FortiGate 1500DT, FortiGate 1500D, FortiGate 1800F, FortiGate 1801F, FortiGate 2201E, FortiGate 2600F, FortiGate 2601F, FortiGate 3000D, FortiGate 300E, FortiGate 301E, FortiGate 3100D, FortiGate 3200D, FortiGate 3300E, FortiGate 3301E, FortiGate 3700D, FortiGate 400E, FortiGate 401E, FortiGate 4200F, FortiGate 4201F, FortiGate 4400F, FortiGate 4401F, FortiGate 800D.

It is not available for: FortiGate 1000D, FortiGate 1000F, FortiGate 1001F, FortiGate 100EF, FortiGate 100E, FortiGate 100F, FortiGate 101F, FortiGate 140E-POE, FortiGate 140E, FortiGate 2000E, FortiGate 200E, FortiGate 200F, FortiGate 201E, FortiGate 201F, FortiGate 2500E, FortiGate 3000F, FortiGate 3001F, FortiGate 3200F, FortiGate 3201F, FortiGate 3400E, FortiGate 3401E, FortiGate 3501F, FortiGate 3600E, FortiGate 3601E, FortiGate 3700F, FortiGate 3701F, FortiGate 3960E, FortiGate 3980E, FortiGate 400E Bypass, FortiGate 400F, FortiGate 401F, FortiGate 40F 3G4G, FortiGate 5001E1, FortiGate 5001E, FortiGate 500E, FortiGate 501E, FortiGate 600E, FortiGate 601E, FortiGate 60E-POE, FortiGate 60E, FortiGate 60F, FortiGate 61E, FortiGate 70F, FortiGate 71F, FortiGate 80E-POE, FortiGate 80E, FortiGate 80F Bypass, FortiGate 80F DSL, FortiGate 80F-POE, FortiGate 80F, FortiGate 81E-POE, FortiGate 81E, FortiGate 81F-POE, FortiGate 81F, FortiGate 900D, FortiGate 90E, FortiGate 91E, FortiGate-VM64 Aliyun, FortiGate-VM64 AWS, FortiGate-VM64 Azure, FortiGate-VM64 GCP, FortiGate-VM64 OPC, FortiGate-VM64, FortiGateRugged 60F 3G4G, FortiGateRugged 60F, FortiGateRugged 70F 3G4G, FortiGateRugged 70F, FortiWiFi 40F 3G4G, FortiWiFi 40F, FortiWiFi 60E, FortiWiFi 60F, FortiWiFi 61E, FortiWiFi 61F, FortiWiFi 80F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G-POE, FortiWiFi 81F 2R-POE, FortiWiFi 81F 2R.

Create a queue profile of switch.

```
config system isf-queue-profile
  Description: Create a queue profile of switch.
  edit <name>
    set bandwidth-unit [kbps|pps]
    set burst-bps-granularity [disable|512-bytes|...]
    set burst-pps-granularity [disable|half-packet|...]
    set guaranteed-bandwidth {integer}
    set maximum-bandwidth {integer}
```

next
end

config system isf-queue-profile

Parameter	Description	Type	Size	Default
bandwidth-unit	Unit of measurement for guaranteed and maximum bandwidth.	option	-	kbps
	Option	Description		
	<i>kbps</i>	kilobits per second.		
	<i>pps</i>	packets per second.		
burst-bps-granularity	Burst granularity based on bytes per second.	option	-	disable
	Option	Description		
	<i>disable</i>	Disable burst control.		
	<i>512-bytes</i>	512 bytes.		
	<i>1k-bytes</i>	1K bytes.		
	<i>2k-bytes</i>	2K bytes.		
	<i>4k-bytes</i>	4K bytes.		
	<i>8k-bytes</i>	8K bytes.		
	<i>16k-bytes</i>	16K bytes.		
	<i>32k-bytes</i>	32K bytes.		
burst-pps-granularity	Burst granularity based on packets per second.	option	-	disable
	Option	Description		
	<i>disable</i>	Disable burst control.		
	<i>half-packet</i>	One burst unit equals two time slots in which one packet is sent.		
	<i>1-packet</i>	1 packet.		
	<i>2-packets</i>	2 packets.		
	<i>4-packets</i>	4 packets.		
	<i>16-packets</i>	16 packets.		
	<i>65-packets</i>	65 packets.		
	<i>262-packets</i>	262 packets.		

Parameter	Description	Type	Size	Default
guaranteed-bandwidth	Guaranteed bandwidth.	integer	Minimum value: 0 Maximum value: 1000000000	0
maximum-bandwidth	Upper bandwidth limit enforced.	integer	Minimum value: 0 Maximum value: 1000000000	0
name	Profile name.	string	Maximum length: 15	

config system link-monitor

Configure Link Health Monitor.

```

config system link-monitor
  Description: Configure Link Health Monitor.
  edit <name>
    set addr-mode [ipv4|ipv6]
    set class-id {integer}
    set diffservcode {user}
    set fail-weight {integer}
    set failtime {integer}
    set gateway-ip {ipv4-address-any}
    set gateway-ip6 {ipv6-address}
    set ha-priority {integer}
    set http-agent {string}
    set http-get {string}
    set http-match {string}
    set interval {integer}
    set packet-size {integer}
    set password {password}
    set port {integer}
    set probe-count {integer}
    set probe-timeout {integer}
    set protocol {option1}, {option2}, ...
    set recoverytime {integer}
    set route <subnet1>, <subnet2>, ...
    set security-mode [none|authentication]
    set server <address1>, <address2>, ...
    set server-config [default|individual]
  config server-list
    Description: Servers for link-monitor to monitor.
    edit <id>

```

```

        set dst {string}
        set port {integer}
        set protocol {option1}, {option2}, ...
        set weight {integer}
    next
end
set server-type [static|dynamic]
set service-detection [enable|disable]
set source-ip {ipv4-address-any}
set source-ip6 {ipv6-address}
set srcintf {string}
set status [enable|disable]
set update-cascade-interface [enable|disable]
set update-policy-route [enable|disable]
set update-static-route [enable|disable]
next
end

```

config system link-monitor

Parameter	Description	Type	Size	Default						
addr-mode	Address mode (IPv4 or IPv6).	option	-	ipv4						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>ipv4</td><td>IPv4 mode.</td></tr><tr><td>ipv6</td><td>IPv6 mode.</td></tr></table>	Option	Description	ipv4	IPv4 mode.	ipv6	IPv6 mode.			
	Option	Description								
	ipv4	IPv4 mode.								
ipv6	IPv6 mode.									
class-id	Traffic class ID.	integer	Minimum value: 0 0 Maximum value: 4294967295	0						
diffservcode	Differentiated services code point (DSCP) in the IP header of the probe packet.	user	Not Specified							
fail-weight	Threshold weight to trigger link failure alert.	integer	Minimum value: 0 0 Maximum value: 255	0						
failtime	Number of retry attempts before the server is considered down (1 - 3600, default = 5).	integer	Minimum value: 1 1 Maximum value: 3600	5						
gateway-ip	Gateway IP address used to probe the server.	ipv4-address-any	Not Specified	0.0.0.0						
gateway-ip6	Gateway IPv6 address used to probe the server.	ipv6-address	Not Specified	::						

Parameter	Description	Type	Size	Default								
ha-priority	HA election priority (1 - 50).	integer	Minimum value: 1 1 Maximum value: 50									
http-agent	String in the http-agent field in the HTTP header.	string	Maximum length: 1024	Chrome/ Safari/								
http-get	If you are monitoring an HTML server you can send an HTTP-GET request with a custom string. Use this option to define the string.	string	Maximum length: 1024	/								
http-match	String that you expect to see in the HTTP-GET requests of the traffic to be monitored.	string	Maximum length: 1024									
interval	Detection interval in milliseconds (20 - 3600 * 1000 msec, default = 500).	integer	Minimum value: 20 20 Maximum value: 3600000	500								
name	Link monitor name.	string	Maximum length: 35									
packet-size	Packet size of a TWAMP test session.	integer	Minimum value: 64 64 Maximum value: 1024	64								
password	TWAMP controller password in authentication mode.	password	Not Specified									
port	Port number of the traffic to be used to monitor the server.	integer	Minimum value: 1 1 Maximum value: 65535	0								
probe-count	Number of most recent probes that should be used to calculate latency and jitter (5 - 30, default = 30).	integer	Minimum value: 5 5 Maximum value: 30	30								
probe-timeout	Time to wait before a probe packet is considered lost (20 - 5000 msec, default = 500).	integer	Minimum value: 20 20 Maximum value: 5000	500								
protocol	Protocols used to monitor the server.	option	-	ping								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>ping</td><td>PING link monitor.</td></tr><tr><td>tcp-echo</td><td>TCP echo link monitor.</td></tr><tr><td>udp-echo</td><td>UDP echo link monitor.</td></tr></table>				Option	Description	ping	PING link monitor.	tcp-echo	TCP echo link monitor.	udp-echo	UDP echo link monitor.
Option	Description											
ping	PING link monitor.											
tcp-echo	TCP echo link monitor.											
udp-echo	UDP echo link monitor.											

Parameter	Description	Type	Size	Default						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>http</i></td><td>HTTP-GET link monitor.</td></tr><tr><td><i>twamp</i></td><td>TWAMP link monitor.</td></tr></table>				Option	Description	<i>http</i>	HTTP-GET link monitor.	<i>twamp</i>	TWAMP link monitor.
	Option	Description								
	<i>http</i>	HTTP-GET link monitor.								
<i>twamp</i>	TWAMP link monitor.									
recoverytime	Number of successful responses received before server is considered recovered (1 - 3600, default = 5).	integer	Minimum value: 5 1 Maximum value: 3600	5						
route <subnet>	Subnet to monitor. IP and netmask (x.x.x.x/y).	string	Maximum length: 79							
security-mode	Twamp controller security mode.	option	-	none						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>none</i></td><td>Unauthenticated mode.</td></tr><tr><td><i>authentication</i></td><td>Authenticated mode.</td></tr></table>				Option	Description	<i>none</i>	Unauthenticated mode.	<i>authentication</i>	Authenticated mode.
	Option	Description								
	<i>none</i>	Unauthenticated mode.								
<i>authentication</i>	Authenticated mode.									
server <address>	IP address of the server(s) to be monitored. Server address.	string	Maximum length: 79							
server-config	Mode of server configuration.	option	-	default						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>default</i></td><td>All servers share the same attributes.</td></tr><tr><td><i>individual</i></td><td>Some attributes can be specified for individual servers.</td></tr></table>				Option	Description	<i>default</i>	All servers share the same attributes.	<i>individual</i>	Some attributes can be specified for individual servers.
	Option	Description								
	<i>default</i>	All servers share the same attributes.								
<i>individual</i>	Some attributes can be specified for individual servers.									
server-type	Server type (static or dynamic).	option	-	static						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>static</i></td><td>Static servers.</td></tr><tr><td><i>dynamic</i></td><td>Dynamic servers.</td></tr></table>				Option	Description	<i>static</i>	Static servers.	<i>dynamic</i>	Dynamic servers.
	Option	Description								
	<i>static</i>	Static servers.								
<i>dynamic</i>	Dynamic servers.									
service-detection	Only use monitor to read quality values. If enabled, static routes and cascade interfaces will not be updated.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Only use monitor for service-detection.</td></tr><tr><td><i>disable</i></td><td>Monitor will update routes/interfaces on link failure.</td></tr></table>				Option	Description	<i>enable</i>	Only use monitor for service-detection.	<i>disable</i>	Monitor will update routes/interfaces on link failure.
	Option	Description								
	<i>enable</i>	Only use monitor for service-detection.								
<i>disable</i>	Monitor will update routes/interfaces on link failure.									
source-ip	Source IP address used in packet to the server.	ipv4-address-any	Not Specified	0.0.0.0						

Parameter	Description	Type	Size	Default						
source-ip6	Source IPv6 address used in packet to the server.	ipv6-address	Not Specified	::						
srcintf	Interface that receives the traffic to be monitored.	string	Maximum length: 15							
status	Enable/disable this link monitor.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable this link monitor.</td></tr><tr><td><i>disable</i></td><td>Disable this link monitor.</td></tr></table>	Option	Description	<i>enable</i>	Enable this link monitor.	<i>disable</i>	Disable this link monitor.			
Option	Description									
<i>enable</i>	Enable this link monitor.									
<i>disable</i>	Disable this link monitor.									
update-cascade-interface	Enable/disable update cascade interface.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable update cascade interface.</td></tr><tr><td><i>disable</i></td><td>Disable update cascade interface.</td></tr></table>	Option	Description	<i>enable</i>	Enable update cascade interface.	<i>disable</i>	Disable update cascade interface.			
Option	Description									
<i>enable</i>	Enable update cascade interface.									
<i>disable</i>	Disable update cascade interface.									
update-policy-route	Enable/disable updating the policy route.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable updating the policy route.</td></tr><tr><td><i>disable</i></td><td>Disable updating the policy route.</td></tr></table>	Option	Description	<i>enable</i>	Enable updating the policy route.	<i>disable</i>	Disable updating the policy route.			
Option	Description									
<i>enable</i>	Enable updating the policy route.									
<i>disable</i>	Disable updating the policy route.									
update-static-route	Enable/disable updating the static route.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable updating the static route.</td></tr><tr><td><i>disable</i></td><td>Disable updating the static route.</td></tr></table>	Option	Description	<i>enable</i>	Enable updating the static route.	<i>disable</i>	Disable updating the static route.			
Option	Description									
<i>enable</i>	Enable updating the static route.									
<i>disable</i>	Disable updating the static route.									

config server-list

Parameter	Description	Type	Size	Default
dst	IP address of the server to be monitored.	string	Maximum length: 64	

Parameter	Description	Type	Size	Default												
id	Server ID.	integer	Minimum value: 1 Maximum value: 32	0												
port	Port number of the traffic to be used to monitor the server.	integer	Minimum value: 1 Maximum value: 65535	0												
protocol	Protocols used to monitor the server.	option	-	ping												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>ping</td><td>PING link monitor.</td></tr><tr><td>tcp-echo</td><td>TCP echo link monitor.</td></tr><tr><td>udp-echo</td><td>UDP echo link monitor.</td></tr><tr><td>http</td><td>HTTP-GET link monitor.</td></tr><tr><td>twamp</td><td>TWAMP link monitor.</td></tr></table>				Option	Description	ping	PING link monitor.	tcp-echo	TCP echo link monitor.	udp-echo	UDP echo link monitor.	http	HTTP-GET link monitor.	twamp	TWAMP link monitor.
	Option	Description														
	ping	PING link monitor.														
	tcp-echo	TCP echo link monitor.														
	udp-echo	UDP echo link monitor.														
	http	HTTP-GET link monitor.														
twamp	TWAMP link monitor.															
weight	Weight of the monitor to this dst (0 - 255).	integer	Minimum value: 0 Maximum value: 255	0												

config system lldp network-policy

Configure LLDP network policy.

```

config system lldp network-policy
  Description: Configure LLDP network policy.
  edit <name>
    set comment {var-string}
    config guest
      Description: Guest.
      set dscp {integer}
      set priority {integer}
      set status [disable|enable]
      set tag [none|dot1q|...]
      set vlan {integer}
    end
    config guest-voice-signaling
      Description: Guest Voice Signaling.
      set dscp {integer}
      set priority {integer}
  
```

```

        set status [disable|enable]
        set tag [none|dot1q|...]
        set vlan {integer}
    end
    config softphone
        Description: Softphone.
        set dscp {integer}
        set priority {integer}
        set status [disable|enable]
        set tag [none|dot1q|...]
        set vlan {integer}
    end
    config streaming-video
        Description: Streaming Video.
        set dscp {integer}
        set priority {integer}
        set status [disable|enable]
        set tag [none|dot1q|...]
        set vlan {integer}
    end
    config video-conferencing
        Description: Video Conferencing.
        set dscp {integer}
        set priority {integer}
        set status [disable|enable]
        set tag [none|dot1q|...]
        set vlan {integer}
    end
    config video-signaling
        Description: Video Signaling.
        set dscp {integer}
        set priority {integer}
        set status [disable|enable]
        set tag [none|dot1q|...]
        set vlan {integer}
    end
    config voice
        Description: Voice.
        set dscp {integer}
        set priority {integer}
        set status [disable|enable]
        set tag [none|dot1q|...]
        set vlan {integer}
    end
    config voice-signaling
        Description: Voice signaling.
        set dscp {integer}
        set priority {integer}
        set status [disable|enable]
        set tag [none|dot1q|...]
        set vlan {integer}
    end
end

```

```
next
end
```

config system lldp network-policy

Parameter	Description	Type	Size	Default
comment	Comment.	var-string	Maximum length: 1023	
name	LLDP network policy name.	string	Maximum length: 35	

config guest

Parameter	Description	Type	Size	Default								
dscp	Differentiated Services Code Point (DSCP) value to advertise.	integer	Minimum value: 0 Maximum value: 63	46								
priority	802.1P CoS/PCP to advertise (0 - 7; from lowest to highest priority).	integer	Minimum value: 0 Maximum value: 7	5								
status	Enable/disable advertising this policy.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Disable advertising this LLDP network policy.</td></tr><tr><td>enable</td><td>Enable advertising this LLDP network policy.</td></tr></table>	Option	Description	disable	Disable advertising this LLDP network policy.	enable	Enable advertising this LLDP network policy.					
Option	Description											
disable	Disable advertising this LLDP network policy.											
enable	Enable advertising this LLDP network policy.											
tag	Advertise tagged or untagged traffic.	option	-	none								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>none</td><td>Advertise that untagged frames should be used.</td></tr><tr><td>dot1q</td><td>Advertise that 802.1Q (VLAN) tagging should be used.</td></tr><tr><td>dot1p</td><td>Advertise that 802.1P priority tagging (VLAN 0) should be used.</td></tr></table>	Option	Description	none	Advertise that untagged frames should be used.	dot1q	Advertise that 802.1Q (VLAN) tagging should be used.	dot1p	Advertise that 802.1P priority tagging (VLAN 0) should be used.			
Option	Description											
none	Advertise that untagged frames should be used.											
dot1q	Advertise that 802.1Q (VLAN) tagging should be used.											
dot1p	Advertise that 802.1P priority tagging (VLAN 0) should be used.											
vlan	802.1Q VLAN ID to advertise (1 - 4094).	integer	Minimum value: 1 Maximum value: 4094	0								

config guest-voice-signaling

Parameter	Description	Type	Size	Default
dscp	Differentiated Services Code Point (DSCP) value to advertise.	integer	Minimum value: 0 Maximum value: 63	46
priority	802.1P CoS/PCP to advertise (0 - 7; from lowest to highest priority).	integer	Minimum value: 0 Maximum value: 7	5
status	Enable/disable advertising this policy.	option	-	disable
		Option	Description	
		<i>disable</i>	Disable advertising this LLDP network policy.	
		<i>enable</i>	Enable advertising this LLDP network policy.	
tag	Advertise tagged or untagged traffic.	option	-	none
		Option	Description	
		<i>none</i>	Advertise that untagged frames should be used.	
		<i>dot1q</i>	Advertise that 802.1Q (VLAN) tagging should be used.	
		<i>dot1p</i>	Advertise that 802.1P priority tagging (VLAN 0) should be used.	
vlan	802.1Q VLAN ID to advertise (1 - 4094).	integer	Minimum value: 1 Maximum value: 4094	0

config softphone

Parameter	Description	Type	Size	Default
dscp	Differentiated Services Code Point (DSCP) value to advertise.	integer	Minimum value: 0 Maximum value: 63	46
priority	802.1P CoS/PCP to advertise (0 - 7; from lowest to highest priority).	integer	Minimum value: 0 Maximum value: 7	5
status	Enable/disable advertising this policy.	option	-	disable

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>disable</i>	Disable advertising this LLDP network policy.		
	<i>enable</i>	Enable advertising this LLDP network policy.		
tag	Advertise tagged or untagged traffic.	option	-	none
	Option	Description		
	<i>none</i>	Advertise that untagged frames should be used.		
	<i>dot1q</i>	Advertise that 802.1Q (VLAN) tagging should be used.		
	<i>dot1p</i>	Advertise that 802.1P priority tagging (VLAN 0) should be used.		
vlan	802.1Q VLAN ID to advertise (1 - 4094).	integer	Minimum value: 1 Maximum value: 4094	0

config streaming-video

Parameter	Description	Type	Size	Default
dscp	Differentiated Services Code Point (DSCP) value to advertise.	integer	Minimum value: 0 Maximum value: 63	46
priority	802.1P CoS/PCP to advertise (0 - 7; from lowest to highest priority).	integer	Minimum value: 0 Maximum value: 7	5
status	Enable/disable advertising this policy.	option	-	disable
	Option	Description		
	<i>disable</i>	Disable advertising this LLDP network policy.		
	<i>enable</i>	Enable advertising this LLDP network policy.		
tag	Advertise tagged or untagged traffic.	option	-	none
	Option	Description		
	<i>none</i>	Advertise that untagged frames should be used.		
	<i>dot1q</i>	Advertise that 802.1Q (VLAN) tagging should be used.		
	<i>dot1p</i>	Advertise that 802.1P priority tagging (VLAN 0) should be used.		

Parameter	Description	Type	Size	Default
vlan	802.1Q VLAN ID to advertise (1 - 4094).	integer	Minimum value: 1 Maximum value: 4094	0

config video-conferencing

Parameter	Description	Type	Size	Default								
dscp	Differentiated Services Code Point (DSCP) value to advertise.	integer	Minimum value: 0 Maximum value: 63	46								
priority	802.1P CoS/PCP to advertise (0 - 7; from lowest to highest priority).	integer	Minimum value: 0 Maximum value: 7	5								
status	Enable/disable advertising this policy.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Disable advertising this LLDP network policy.</td></tr><tr><td>enable</td><td>Enable advertising this LLDP network policy.</td></tr></table>				Option	Description	disable	Disable advertising this LLDP network policy.	enable	Enable advertising this LLDP network policy.		
Option	Description											
disable	Disable advertising this LLDP network policy.											
enable	Enable advertising this LLDP network policy.											
tag	Advertise tagged or untagged traffic.	option	-	none								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>none</td><td>Advertise that untagged frames should be used.</td></tr><tr><td>dot1q</td><td>Advertise that 802.1Q (VLAN) tagging should be used.</td></tr><tr><td>dot1p</td><td>Advertise that 802.1P priority tagging (VLAN 0) should be used.</td></tr></table>				Option	Description	none	Advertise that untagged frames should be used.	dot1q	Advertise that 802.1Q (VLAN) tagging should be used.	dot1p	Advertise that 802.1P priority tagging (VLAN 0) should be used.
Option	Description											
none	Advertise that untagged frames should be used.											
dot1q	Advertise that 802.1Q (VLAN) tagging should be used.											
dot1p	Advertise that 802.1P priority tagging (VLAN 0) should be used.											
vlan	802.1Q VLAN ID to advertise (1 - 4094).	integer	Minimum value: 1 Maximum value: 4094	0								

config video-signaling

Parameter	Description	Type	Size	Default
dscp	Differentiated Services Code Point (DSCP) value to advertise.	integer	Minimum value: 0 Maximum value: 63	46

Parameter	Description	Type	Size	Default
priority	802.1P CoS/PCP to advertise (0 - 7; from lowest to highest priority).	integer	Minimum value: 0 Maximum value: 7	5
status	Enable/disable advertising this policy.	option	-	disable
	Option	Description		
	disable	Disable advertising this LLDP network policy.		
	enable	Enable advertising this LLDP network policy.		
tag	Advertise tagged or untagged traffic.	option	-	none
	Option	Description		
	none	Advertise that untagged frames should be used.		
	dot1q	Advertise that 802.1Q (VLAN) tagging should be used.		
	dot1p	Advertise that 802.1P priority tagging (VLAN 0) should be used.		
vlan	802.1Q VLAN ID to advertise (1 - 4094).	integer	Minimum value: 1 Maximum value: 4094	0

config voice

Parameter	Description	Type	Size	Default						
dscp	Differentiated Services Code Point (DSCP) value to advertise.	integer	Minimum value: 0 Maximum value: 63	46						
priority	802.1P CoS/PCP to advertise (0 - 7; from lowest to highest priority).	integer	Minimum value: 0 Maximum value: 7	5						
status	Enable/disable advertising this policy.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Disable advertising this LLDP network policy.</td></tr><tr><td>enable</td><td>Enable advertising this LLDP network policy.</td></tr></table>				Option	Description	disable	Disable advertising this LLDP network policy.	enable	Enable advertising this LLDP network policy.
Option	Description									
disable	Disable advertising this LLDP network policy.									
enable	Enable advertising this LLDP network policy.									
tag	Advertise tagged or untagged traffic.	option	-	none						

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>none</i>	Advertise that untagged frames should be used.		
	<i>dot1q</i>	Advertise that 802.1Q (VLAN) tagging should be used.		
	<i>dot1p</i>	Advertise that 802.1P priority tagging (VLAN 0) should be used.		
vlan	802.1Q VLAN ID to advertise (1 - 4094).	integer	Minimum value: 1 Maximum value: 4094	0

config voice-signaling

Parameter	Description	Type	Size	Default								
dscp	Differentiated Services Code Point (DSCP) value to advertise.	integer	Minimum value: 0 Maximum value: 63	46								
priority	802.1P CoS/PCP to advertise (0 - 7; from lowest to highest priority).	integer	Minimum value: 0 Maximum value: 7	5								
status	Enable/disable advertising this policy.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Disable advertising this LLDP network policy.</td></tr><tr><td>enable</td><td>Enable advertising this LLDP network policy.</td></tr></table>				Option	Description	disable	Disable advertising this LLDP network policy.	enable	Enable advertising this LLDP network policy.		
Option	Description											
disable	Disable advertising this LLDP network policy.											
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tag	Advertise tagged or untagged traffic.	option	-	none								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>none</td><td>Advertise that untagged frames should be used.</td></tr><tr><td>dot1q</td><td>Advertise that 802.1Q (VLAN) tagging should be used.</td></tr><tr><td>dot1p</td><td>Advertise that 802.1P priority tagging (VLAN 0) should be used.</td></tr></table>				Option	Description	none	Advertise that untagged frames should be used.	dot1q	Advertise that 802.1Q (VLAN) tagging should be used.	dot1p	Advertise that 802.1P priority tagging (VLAN 0) should be used.
Option	Description											
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dot1q	Advertise that 802.1Q (VLAN) tagging should be used.											
dot1p	Advertise that 802.1P priority tagging (VLAN 0) should be used.											
vlan	802.1Q VLAN ID to advertise (1 - 4094).	integer	Minimum value: 1 Maximum value: 4094	0								

config system lte-modem



This command is available for model(s): FortiGate 1000D, FortiGate 1000F, FortiGate 1001F, FortiGate 100EF, FortiGate 100E, FortiGate 100F, FortiGate 101F, FortiGate 1100E, FortiGate 1101E, FortiGate 140E-POE, FortiGate 140E, FortiGate 1500DT, FortiGate 1500D, FortiGate 1800F, FortiGate 1801F, FortiGate 2000E, FortiGate 200E, FortiGate 200F, FortiGate 201E, FortiGate 201F, FortiGate 2201E, FortiGate 2500E, FortiGate 2600F, FortiGate 2601F, FortiGate 3000D, FortiGate 3000F, FortiGate 3001F, FortiGate 300E, FortiGate 301E, FortiGate 3100D, FortiGate 3200D, FortiGate 3200F, FortiGate 3201F, FortiGate 3300E, FortiGate 3301E, FortiGate 3400E, FortiGate 3401E, FortiGate 3501F, FortiGate 3600E, FortiGate 3601E, FortiGate 3700D, FortiGate 3700F, FortiGate 3701F, FortiGate 3960E, FortiGate 3980E, FortiGate 400E Bypass, FortiGate 400E, FortiGate 400F, FortiGate 401E, FortiGate 401F, FortiGate 40F 3G4G, FortiGate 4200F, FortiGate 4201F, FortiGate 4400F, FortiGate 4401F, FortiGate 5001E1, FortiGate 5001E, FortiGate 500E, FortiGate 501E, FortiGate 600E, FortiGate 601E, FortiGate 60E-POE, FortiGate 60E, FortiGate 60F, FortiGate 61E, FortiGate 70F, FortiGate 71F, FortiGate 800D, FortiGate 80E-POE, FortiGate 80E, FortiGate 80F Bypass, FortiGate 80F DSL, FortiGate 80F-POE, FortiGate 80F, FortiGate 81E-POE, FortiGate 81E, FortiGate 81F-POE, FortiGate 81F, FortiGate 900D, FortiGate 90E, FortiGate 91E, FortiGateRugged 60F 3G4G, FortiGateRugged 60F, FortiGateRugged 70F 3G4G, FortiGateRugged 70F, FortiWiFi 40F 3G4G, FortiWiFi 40F, FortiWiFi 60E, FortiWiFi 60F, FortiWiFi 61E, FortiWiFi 61F, FortiWiFi 80F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G-POE, FortiWiFi 81F 2R-POE, FortiWiFi 81F 2R.

It is not available for: FortiGate-VM64 Aliyun, FortiGate-VM64 AWS, FortiGate-VM64 Azure, FortiGate-VM64 GCP, FortiGate-VM64 OPC, FortiGate-VM64.

Configure USB LTE/WIMAX devices.

```
config system lte-modem
  Description: Configure USB LTE/WIMAX devices.
  set allow-modify-mtu-size [enable|disable]
  set allow-modify-wireless-profile-table [enable|disable]
  set apn {string}
  set authtype [none|pap|...]
  set auto-connect [enable|disable]
  set band-restrictions {string}
  set billing-date {integer}
  set connection-hot-swap [5-minutes|10-minutes|...]
  set data-limit {integer}
  set data-usage-tracking [enable|disable]
  set extra-init {string}
  set force-wireless-profile {integer}
  set gps-port {integer}
  set gps-service [enable|disable]
  set holddown-timer {integer}
  set image-preference [generic|att|...]
  set interface {string}
  set manual-handover [enable|disable]
  set mode [standalone|redundant]
```

```

set modem-port {integer}
set network-type [auto|umts-3g|...]
set override-gateway [enable|disable]
set passwd {password}
set sim-hot-swap [enable|disable]
set sim-slot {integer}
set sim1-pin {password}
set sim2-pin {password}
set status [enable|disable]
set username {string}
end

```

config system lte-modem

Parameter	Description	Type	Size	Default								
allow-modify-mtu-size *	Allow FortiGate to modify the wireless WAN interface MTU size.	option	-	enable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Allow LTE daemon to modify wireless profile table.</td></tr><tr><td>disable</td><td>Do not allow LTE daemon to modify wireless profile table.</td></tr></table>	Option	Description	enable	Allow LTE daemon to modify wireless profile table.	disable	Do not allow LTE daemon to modify wireless profile table.					
Option	Description											
enable	Allow LTE daemon to modify wireless profile table.											
disable	Do not allow LTE daemon to modify wireless profile table.											
allow-modify-wireless-profile-table *	Allow FortiGate to modify the wireless profile table if the internal LTE modem is running the GENERIC modem firmware.	option	-	enable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Allow LTE daemon to modify wireless profile table.</td></tr><tr><td>disable</td><td>Do not allow LTE daemon to modify wireless profile table.</td></tr></table>	Option	Description	enable	Allow LTE daemon to modify wireless profile table.	disable	Do not allow LTE daemon to modify wireless profile table.					
Option	Description											
enable	Allow LTE daemon to modify wireless profile table.											
disable	Do not allow LTE daemon to modify wireless profile table.											
apn	Login APN string for PDP-IP packet data calls.	string	Maximum length: 127									
authtype	Authentication type for PDP-IP packet data calls.	option	-	none								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>none</td><td>Username and password not required.</td></tr><tr><td>pap</td><td>Use PAP authentication.</td></tr><tr><td>chap</td><td>Use CHAP authentication.</td></tr></table>	Option	Description	none	Username and password not required.	pap	Use PAP authentication.	chap	Use CHAP authentication.			
Option	Description											
none	Username and password not required.											
pap	Use PAP authentication.											
chap	Use CHAP authentication.											
auto-connect *	Enable/disable modem auto connect.	option	-	disable								

Parameter	Description	Type	Size	Default								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable modem auto connect.</td></tr><tr><td><i>disable</i></td><td>Disable modem auto connect.</td></tr></table>	Option	Description	<i>enable</i>	Enable modem auto connect.	<i>disable</i>	Disable modem auto connect.					
	Option	Description										
	<i>enable</i>	Enable modem auto connect.										
<i>disable</i>	Disable modem auto connect.											
band-restrictions *	Bitmaps for the allowed 3G and LTE bands.Ex: 0000000000000000-0000000000001008 (3G Mask-LTE Mask)	string	Maximum length: 35									
billing-date *	LTE Modem billing date (1 - 31).	integer	Minimum value: 1 Maximum value: 31	1								
connection-hot-swap *	Set connection-based SIM card hot swap time interval.	option	-	5-minutes								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>5-minutes</i></td><td>Perform SIM card hot swap if current card is not able to connect for 5 minutes.</td></tr><tr><td><i>10-minutes</i></td><td>Perform SIM card hot swap if current card is not able to connect for 10 minutes.</td></tr><tr><td><i>never</i></td><td>SIM card hot swap based on card presence only.</td></tr></table>	Option	Description	<i>5-minutes</i>	Perform SIM card hot swap if current card is not able to connect for 5 minutes.	<i>10-minutes</i>	Perform SIM card hot swap if current card is not able to connect for 10 minutes.	<i>never</i>	SIM card hot swap based on card presence only.			
	Option	Description										
	<i>5-minutes</i>	Perform SIM card hot swap if current card is not able to connect for 5 minutes.										
	<i>10-minutes</i>	Perform SIM card hot swap if current card is not able to connect for 10 minutes.										
<i>never</i>	SIM card hot swap based on card presence only.											
data-limit *	LTE Modem data limit (0 - 100000) mega bytes, 0 for unlimited data.	integer	Minimum value: 0 Maximum value: 100000	0								
data-usage-tracking *	Enable/disable data usage tracking.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable data usage tracking.</td></tr><tr><td><i>disable</i></td><td>Disable data usage tracking.</td></tr></table>	Option	Description	<i>enable</i>	Enable data usage tracking.	<i>disable</i>	Disable data usage tracking.					
	Option	Description										
	<i>enable</i>	Enable data usage tracking.										
<i>disable</i>	Disable data usage tracking.											
extra-init	Extra initialization string for USB LTE/WIMAX devices.	string	Maximum length: 127									
force-wireless-profile *	Force to use wireless profile index (1 - 16), 0 if don't force.	integer	Minimum value: 0 Maximum value: 16	0								

Parameter	Description	Type	Size	Default																				
gps-port *	Modem GPS port index (0 - 20).	integer	Minimum value: 0 Maximum value: 20	255																				
gps-service *	Enable/disable GPS daemon.	option	-	enable																				
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable GPS daemon.</td></tr><tr><td>disable</td><td>Disable GPS daemon.</td></tr></table>	Option	Description	enable	Enable GPS daemon.	disable	Disable GPS daemon.																	
Option	Description																							
enable	Enable GPS daemon.																							
disable	Disable GPS daemon.																							
holddown-timer	Hold down timer (10 - 60 sec).	integer	Minimum value: 10 Maximum value: 60	30																				
image-preference *	Modem Image Preference.	option	-	auto-sim																				
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>generic</td><td>Generic Firmware.</td></tr><tr><td>att</td><td>AT&T Firmware.</td></tr><tr><td>verizon</td><td>Verizon Firmware.</td></tr><tr><td>telus</td><td>Telus Firmware.</td></tr><tr><td>docomo</td><td>DOCOMO Firmware.</td></tr><tr><td>softbank</td><td>Softbank Firmware.</td></tr><tr><td>sprint</td><td>Sprint Firmware.</td></tr><tr><td>auto-sim</td><td>Auto Select Firmware.</td></tr><tr><td>no-change</td><td>Do not change.</td></tr></table>	Option	Description	generic	Generic Firmware.	att	AT&T Firmware.	verizon	Verizon Firmware.	telus	Telus Firmware.	docomo	DOCOMO Firmware.	softbank	Softbank Firmware.	sprint	Sprint Firmware.	auto-sim	Auto Select Firmware.	no-change	Do not change.			
Option	Description																							
generic	Generic Firmware.																							
att	AT&T Firmware.																							
verizon	Verizon Firmware.																							
telus	Telus Firmware.																							
docomo	DOCOMO Firmware.																							
softbank	Softbank Firmware.																							
sprint	Sprint Firmware.																							
auto-sim	Auto Select Firmware.																							
no-change	Do not change.																							
interface	The interface that the modem is acting as a redundant interface for.	string	Maximum length: 63																					
manual-handover *	Enable/Disable manual handover from 3G to LTE network.	option	-	disable																				
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable 3G to LTE manual handover.</td></tr><tr><td>disable</td><td>Disable 3G to LTE manual handover.</td></tr></table>	Option	Description	enable	Enable 3G to LTE manual handover.	disable	Disable 3G to LTE manual handover.																	
Option	Description																							
enable	Enable 3G to LTE manual handover.																							
disable	Disable 3G to LTE manual handover.																							

Parameter	Description	Type	Size	Default								
mode	Modem operation mode. This command is obsolete.	option	-	standalone								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>standalone</i></td><td>Standalone modem operation mode.</td></tr><tr><td><i>redundant</i></td><td>Redundant modem operation mode where the modem is used as a backup interface.</td></tr></table>	Option	Description	<i>standalone</i>	Standalone modem operation mode.	<i>redundant</i>	Redundant modem operation mode where the modem is used as a backup interface.					
Option	Description											
<i>standalone</i>	Standalone modem operation mode.											
<i>redundant</i>	Redundant modem operation mode where the modem is used as a backup interface.											
modem-port	Modem port index (0 - 20).	integer	Minimum value: 0 Maximum value: 20	255								
network-type *	Wireless network type.	option	-	auto								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>auto</i></td><td>Automatic detection</td></tr><tr><td><i>umts-3g</i></td><td>UMTS 3G -- For networks use GSM technology</td></tr><tr><td><i>lte</i></td><td>LTE</td></tr></table>	Option	Description	<i>auto</i>	Automatic detection	<i>umts-3g</i>	UMTS 3G -- For networks use GSM technology	<i>lte</i>	LTE			
Option	Description											
<i>auto</i>	Automatic detection											
<i>umts-3g</i>	UMTS 3G -- For networks use GSM technology											
<i>lte</i>	LTE											
override-gateway *	Enable/disable LTE gateway override (default = disable).	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Override gateway to 0.0.0.0</td></tr><tr><td><i>disable</i></td><td>Use gateway as assigned by ISP DHCP server.</td></tr></table>	Option	Description	<i>enable</i>	Override gateway to 0.0.0.0	<i>disable</i>	Use gateway as assigned by ISP DHCP server.					
Option	Description											
<i>enable</i>	Override gateway to 0.0.0.0											
<i>disable</i>	Use gateway as assigned by ISP DHCP server.											
passwd	Authentication password for PDP-IP packet data calls.	password	Not Specified									
sim-hot-swap *	Enable/disable SIM card auto detection and hot swap.	option	-	enable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable SIM card auto detection.</td></tr><tr><td><i>disable</i></td><td>Disable SIM card auto detection.</td></tr></table>	Option	Description	<i>enable</i>	Enable SIM card auto detection.	<i>disable</i>	Disable SIM card auto detection.					
Option	Description											
<i>enable</i>	Enable SIM card auto detection.											
<i>disable</i>	Disable SIM card auto detection.											
sim-slot *	SIM card slot (1 - 2). 1: right slot. 2: left slot.	integer	Minimum value: 1 Maximum value: 2	1								

Parameter	Description	Type	Size	Default
sim1-pin *	PIN code for SIM #1 (if applicable).	password	Not Specified	
sim2-pin *	PIN code for SIM #2 (if applicable).	password	Not Specified	
status	Enable/disable USB LTE/WIMAX device.	option	-	disable **
	Option	Description		
	<i>enable</i>	Enable USB LTE/WIMA device.		
	<i>disable</i>	Disable USB LTE/WIMA device.		
username	Authentication username for PDP-IP packet data calls.	string	Maximum length: 63	

* This parameter may not exist in some models.

** Values may differ between models.

config system mac-address-table

Configure MAC address tables.

```

config system mac-address-table
  Description: Configure MAC address tables.
  edit <mac>
    set interface {string}
    set reply-substitute {mac-address}
  next
end

```

config system mac-address-table

Parameter	Description	Type	Size	Default
interface	Interface name.	string	Maximum length: 35	
mac	MAC address.	mac-address	Not Specified	00:00:00:00:00:00
reply-substitute	New MAC for reply traffic.	mac-address	Not Specified	00:00:00:00:00:00

config system management-tunnel

Management tunnel configuration.

```
config system management-tunnel
  Description: Management tunnel configuration.
  set allow-collect-statistics [enable|disable]
  set allow-config-restore [enable|disable]
  set allow-push-configuration [enable|disable]
  set allow-push-firmware [enable|disable]
  set authorized-manager-only [enable|disable]
  set serial-number {user}
  set status [enable|disable]
end
```

config system management-tunnel

Parameter	Description	Type	Size	Default
allow-collect-statistics	Enable/disable collection of run time statistics.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable collection of run time statistics.		
	<i>disable</i>	Disable collection of run time statistics.		
allow-config-restore	Enable/disable allow config restore.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable allow config restore.		
	<i>disable</i>	Disable allow config restore.		
allow-push-configuration	Enable/disable push configuration.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable push configuration.		
	<i>disable</i>	Disable push configuration.		
allow-push-firmware	Enable/disable push firmware.	option	-	enable

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>enable</i>	Enable push firmware.		
	<i>disable</i>	Disable push firmware.		
authorized-manager-only	Enable/disable restriction of authorized manager only.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable restriction of authorized manager only.		
	<i>disable</i>	Disable restriction of authorized manager only.		
serial-number	Serial number.	user	Not Specified	
status	Enable/disable FGFM tunnel.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable management tunnel.		
	<i>disable</i>	Disable management tunnel.		

config system mobile-tunnel

Configure Mobile tunnels, an implementation of Network Mobility (NEMO) extensions for Mobile IPv4 RFC5177.

```

config system mobile-tunnel
    Description: Configure Mobile tunnels, an implementation of Network Mobility (NEMO) extensions
    for Mobile IPv4 RFC5177.
    edit <name>
        set hash-algorithm {option}
        set home-address {ipv4-address}
        set home-agent {ipv4-address}
        set lifetime {integer}
        set n-mhae-key {password_aes256}
        set n-mhae-key-type [ascii|base64]
        set n-mhae-spi {integer}
    config network
        Description: NEMO network configuration.
        edit <id>
            set interface {string}
            set prefix {ipv4-classnet}
        next
    end
    set reg-interval {integer}
    set reg-retry {integer}

```



```

    set renew-interval {integer}
    set roaming-interface {string}
    set status [disable|enable]
    set tunnel-mode {option}
next
end

```

config system mobile-tunnel

Parameter	Description	Type	Size	Default						
hash-algorithm	Hash Algorithm (Keyed MD5).	option	-	hmac-md5						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>hmac-md5</td><td>Keyed MD5.</td></tr></table>	Option	Description	hmac-md5	Keyed MD5.					
Option	Description									
hmac-md5	Keyed MD5.									
home-address	Home IP address (Format: xxx.xxx.xxx.xxx).	ipv4-address	Not Specified	0.0.0.0						
home-agent	IPv4 address of the NEMO HA (Format: xxx.xxx.xxx.xxx).	ipv4-address	Not Specified	0.0.0.0						
lifetime	NMMO HA registration request lifetime (180 - 65535 sec, default = 65535).	integer	Minimum value: 180 Maximum value: 65535	65535						
n-mhae-key	NEMO authentication key.	password_aes256	Not Specified							
n-mhae-key-type	NEMO authentication key type (ASCII or base64).	option	-	ascii						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>ascii</td><td>The authentication key is an ASCII string.</td></tr><tr><td>base64</td><td>The authentication key is Base64 encoded.</td></tr></table>	Option	Description	ascii	The authentication key is an ASCII string.	base64	The authentication key is Base64 encoded.			
Option	Description									
ascii	The authentication key is an ASCII string.									
base64	The authentication key is Base64 encoded.									
n-mhae-spi	NEMO authentication SPI (default: 256).	integer	Minimum value: 0 Maximum value: 4294967295	256						
name	Tunnel name.	string	Maximum length: 15							
reg-interval	NMMO HA registration interval (5 - 300, default = 5).	integer	Minimum value: 5 Maximum value: 300	5						

Parameter	Description	Type	Size	Default						
reg-retry	Maximum number of NMMO HA registration retries (1 to 30, default = 3).	integer	Minimum value: 1 Maximum value: 30	3						
renew-interval	Time before lifetime expiration to send NMMO HA re-registration (5 - 60, default = 60).	integer	Minimum value: 5 Maximum value: 60	60						
roaming-interface	Select the associated interface name from available options.	string	Maximum length: 15							
status	Enable/disable this mobile tunnel.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Disable this mobile tunnel.</td></tr><tr><td>enable</td><td>Enable this mobile tunnel.</td></tr></table>				Option	Description	disable	Disable this mobile tunnel.	enable	Enable this mobile tunnel.
Option	Description									
disable	Disable this mobile tunnel.									
enable	Enable this mobile tunnel.									
tunnel-mode	NEMO tunnel mode (GRE tunnel).	option	-	gre						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>gre</td><td>GRE tunnel.</td></tr></table>				Option	Description	gre	GRE tunnel.		
Option	Description									
gre	GRE tunnel.									

config network

Parameter	Description	Type	Size	Default
id	Network entry ID.	integer	Minimum value: 0 Maximum value: 4294967295	0
interface	Select the associated interface name from available options.	string	Maximum length: 15	
prefix	Class IP and Netmask with correction (Format:xxx.xxx.xxx.xxx xxx.xxx.xxx.xxx or xxx.xxx.xxx.xxx/x).	ipv4-classnet	Not Specified	0.0.0.0 0.0.0.0

config system modem



This command is available for model(s): FortiGate 1000D, FortiGate 1000F, FortiGate 1001F, FortiGate 100EF, FortiGate 100E, FortiGate 100F, FortiGate 101F, FortiGate 1100E, FortiGate 1101E, FortiGate 140E-POE, FortiGate 140E, FortiGate 1500DT, FortiGate 1500D, FortiGate 1800F, FortiGate 1801F, FortiGate 2000E, FortiGate 200E, FortiGate 200F, FortiGate 201E, FortiGate 201F, FortiGate 2201E, FortiGate 2500E, FortiGate 2600F, FortiGate 2601F, FortiGate 3000D, FortiGate 3000F, FortiGate 3001F, FortiGate 300E, FortiGate 301E, FortiGate 3100D, FortiGate 3200D, FortiGate 3200F, FortiGate 3201F, FortiGate 3300E, FortiGate 3301E, FortiGate 3400E, FortiGate 3401E, FortiGate 3501F, FortiGate 3600E, FortiGate 3601E, FortiGate 3700D, FortiGate 3700F, FortiGate 3701F, FortiGate 3960E, FortiGate 3980E, FortiGate 400E Bypass, FortiGate 400E, FortiGate 400F, FortiGate 401E, FortiGate 401F, FortiGate 40F 3G4G, FortiGate 4200F, FortiGate 4201F, FortiGate 4400F, FortiGate 4401F, FortiGate 5001E1, FortiGate 5001E, FortiGate 500E, FortiGate 501E, FortiGate 600E, FortiGate 601E, FortiGate 60E-POE, FortiGate 60E, FortiGate 60F, FortiGate 61E, FortiGate 70F, FortiGate 71F, FortiGate 800D, FortiGate 80E-POE, FortiGate 80E, FortiGate 80F Bypass, FortiGate 80F DSL, FortiGate 80F-POE, FortiGate 80F, FortiGate 81E-POE, FortiGate 81E, FortiGate 81F-POE, FortiGate 81F, FortiGate 900D, FortiGate 90E, FortiGate 91E, FortiGateRugged 60F 3G4G, FortiGateRugged 60F, FortiGateRugged 70F 3G4G, FortiGateRugged 70F, FortiWiFi 40F 3G4G, FortiWiFi 40F, FortiWiFi 60E, FortiWiFi 60F, FortiWiFi 61E, FortiWiFi 61F, FortiWiFi 80F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G-POE, FortiWiFi 81F 2R-POE, FortiWiFi 81F 2R.

It is not available for: FortiGate-VM64 Aliyun, FortiGate-VM64 AWS, FortiGate-VM64 Azure, FortiGate-VM64 GCP, FortiGate-VM64 OPC, FortiGate-VM64.

Configure MODEM.

```
config system modem
  Description: Configure MODEM.
  set action [dial|stop|...]
  set altmode [enable|disable]
  set authtype1 {option1}, {option2}, ...
  set authtype2 {option1}, {option2}, ...
  set authtype3 {option1}, {option2}, ...
  set auto-dial [enable|disable]
  set connect-timeout {integer}
  set dial-cmd1 {string}
  set dial-cmd2 {string}
  set dial-cmd3 {string}
  set dial-on-demand [enable|disable]
  set distance {integer}
  set dont-send-CR1 [enable|disable]
  set dont-send-CR2 [enable|disable]
  set dont-send-CR3 [enable|disable]
  set extra-init1 {string}
  set extra-init2 {string}
  set extra-init3 {string}
  set holddown-timer {integer}
```

```

set idle-timer {integer}
set interface {string}
set lockdown-lac {string}
set mode [standalone|redundant]
set network-init {string}
set passwd1 {password}
set passwd2 {password}
set passwd3 {password}
set peer-modem1 [generic|actiontec|...]
set peer-modem2 [generic|actiontec|...]
set peer-modem3 [generic|actiontec|...]
set phone1 {string}
set phone2 {string}
set phone3 {string}
set pin-init {string}
set ppp-echo-request1 [enable|disable]
set ppp-echo-request2 [enable|disable]
set ppp-echo-request3 [enable|disable]
set priority {integer}
set redial [none|1|...]
set reset {integer}
set status [enable|disable]
set traffic-check [enable|disable]
set username1 {string}
set username2 {string}
set username3 {string}
set wireless-port {integer}
end

```

config system modem

Parameter	Description	Type	Size	Default								
action	Dial up/stop MODEM.	option	-	stop								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>dial</td><td>Dial up number.</td></tr><tr><td>stop</td><td>Stop dialup.</td></tr><tr><td>none</td><td>No action.</td></tr></table>	Option	Description	dial	Dial up number.	stop	Stop dialup.	none	No action.			
	Option	Description										
	dial	Dial up number.										
	stop	Stop dialup.										
none	No action.											
altmode	Enable/disable altmode for installations using PPP in China.	option	-	enable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable setting.</td></tr><tr><td>disable</td><td>Disable setting.</td></tr></table>	Option	Description	enable	Enable setting.	disable	Disable setting.					
	Option	Description										
	enable	Enable setting.										
disable	Disable setting.											

Parameter	Description	Type	Size	Default										
authtype1	Allowed authentication types for ISP 1.	option	-	pap chap mschap mschapv2										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>pap</i></td><td>PAP</td></tr><tr><td><i>chap</i></td><td>CHAP</td></tr><tr><td><i>mschap</i></td><td>MSCHAP</td></tr><tr><td><i>mschapv2</i></td><td>MSCHAPv2</td></tr></table>	Option	Description	<i>pap</i>	PAP	<i>chap</i>	CHAP	<i>mschap</i>	MSCHAP	<i>mschapv2</i>	MSCHAPv2			
Option	Description													
<i>pap</i>	PAP													
<i>chap</i>	CHAP													
<i>mschap</i>	MSCHAP													
<i>mschapv2</i>	MSCHAPv2													
authtype2	Allowed authentication types for ISP 2.	option	-	pap chap mschap mschapv2										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>pap</i></td><td>PAP</td></tr><tr><td><i>chap</i></td><td>CHAP</td></tr><tr><td><i>mschap</i></td><td>MSCHAP</td></tr><tr><td><i>mschapv2</i></td><td>MSCHAPv2</td></tr></table>	Option	Description	<i>pap</i>	PAP	<i>chap</i>	CHAP	<i>mschap</i>	MSCHAP	<i>mschapv2</i>	MSCHAPv2			
Option	Description													
<i>pap</i>	PAP													
<i>chap</i>	CHAP													
<i>mschap</i>	MSCHAP													
<i>mschapv2</i>	MSCHAPv2													
authtype3	Allowed authentication types for ISP 3.	option	-	pap chap mschap mschapv2										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>pap</i></td><td>PAP</td></tr><tr><td><i>chap</i></td><td>CHAP</td></tr><tr><td><i>mschap</i></td><td>MSCHAP</td></tr><tr><td><i>mschapv2</i></td><td>MSCHAPv2</td></tr></table>	Option	Description	<i>pap</i>	PAP	<i>chap</i>	CHAP	<i>mschap</i>	MSCHAP	<i>mschapv2</i>	MSCHAPv2			
Option	Description													
<i>pap</i>	PAP													
<i>chap</i>	CHAP													
<i>mschap</i>	MSCHAP													
<i>mschapv2</i>	MSCHAPv2													
auto-dial	Enable/disable auto-dial after a reboot or disconnection.	option	-	disable										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable setting.</td></tr><tr><td><i>disable</i></td><td>Disable setting.</td></tr></table>	Option	Description	<i>enable</i>	Enable setting.	<i>disable</i>	Disable setting.							
Option	Description													
<i>enable</i>	Enable setting.													
<i>disable</i>	Disable setting.													
connect-timeout	Connection completion timeout (30 - 255 sec, default = 90).	integer	Minimum value: 30 Maximum value: 255	90										

Parameter	Description	Type	Size	Default						
dial-cmd1	Dial command (this is often an ATD or ATDT command).	string	Maximum length: 63							
dial-cmd2	Dial command (this is often an ATD or ATDT command).	string	Maximum length: 63							
dial-cmd3	Dial command (this is often an ATD or ATDT command).	string	Maximum length: 63							
dial-on-demand	Enable/disable to dial the modem when packets are routed to the modem interface.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable setting.</td></tr><tr><td><i>disable</i></td><td>Disable setting.</td></tr></table>	Option	Description	<i>enable</i>	Enable setting.	<i>disable</i>	Disable setting.			
Option	Description									
<i>enable</i>	Enable setting.									
<i>disable</i>	Disable setting.									
distance	Distance of learned routes (1 - 255, default = 1).	integer	Minimum value: 1 Maximum value: 255							
dont-send-CR1	Do not send CR when connected (ISP1).	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable setting.</td></tr><tr><td><i>disable</i></td><td>Disable setting.</td></tr></table>	Option	Description	<i>enable</i>	Enable setting.	<i>disable</i>	Disable setting.			
Option	Description									
<i>enable</i>	Enable setting.									
<i>disable</i>	Disable setting.									
dont-send-CR2	Do not send CR when connected (ISP2).	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable setting.</td></tr><tr><td><i>disable</i></td><td>Disable setting.</td></tr></table>	Option	Description	<i>enable</i>	Enable setting.	<i>disable</i>	Disable setting.			
Option	Description									
<i>enable</i>	Enable setting.									
<i>disable</i>	Disable setting.									
dont-send-CR3	Do not send CR when connected (ISP3).	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable setting.</td></tr><tr><td><i>disable</i></td><td>Disable setting.</td></tr></table>	Option	Description	<i>enable</i>	Enable setting.	<i>disable</i>	Disable setting.			
Option	Description									
<i>enable</i>	Enable setting.									
<i>disable</i>	Disable setting.									
extra-init1	Extra initialization string to ISP 1.	string	Maximum length: 127							

Parameter	Description	Type	Size	Default								
extra-init2	Extra initialization string to ISP 2.	string	Maximum length: 127									
extra-init3	Extra initialization string to ISP 3.	string	Maximum length: 127									
holddown-timer	Hold down timer in seconds (1 - 60 sec).	integer	Minimum value: 1 Maximum value: 60	60								
idle-timer	MODEM connection idle time (1 - 9999 min, default = 5).	integer	Minimum value: 1 Maximum value: 9999	5								
interface	Name of redundant interface.	string	Maximum length: 63									
lockdown-lac	Allow connection only to the specified Location Area Code (LAC).	string	Maximum length: 127									
mode	Set MODEM operation mode to redundant or standalone.	option	-	standalone								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>standalone</i></td><td>Standalone.</td></tr><tr><td><i>redundant</i></td><td>Redundant for an interface.</td></tr></table>				Option	Description	<i>standalone</i>	Standalone.	<i>redundant</i>	Redundant for an interface.		
Option	Description											
<i>standalone</i>	Standalone.											
<i>redundant</i>	Redundant for an interface.											
network-init	AT command to set the Network name/type (AT+COPS=<mode>,[<format>,<oper>[,<AcT>]]).	string	Maximum length: 127									
passwd1	Password to access the specified dialup account.	password	Not Specified									
passwd2	Password to access the specified dialup account.	password	Not Specified									
passwd3	Password to access the specified dialup account.	password	Not Specified									
peer-modem1	Specify peer MODEM type for phone1.	option	-	generic								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>generic</i></td><td>All other modem type.</td></tr><tr><td><i>actiontec</i></td><td>ActionTec modem.</td></tr><tr><td><i>ascend_TNT</i></td><td>Ascend TNT modem.</td></tr></table>				Option	Description	<i>generic</i>	All other modem type.	<i>actiontec</i>	ActionTec modem.	<i>ascend_TNT</i>	Ascend TNT modem.
Option	Description											
<i>generic</i>	All other modem type.											
<i>actiontec</i>	ActionTec modem.											
<i>ascend_TNT</i>	Ascend TNT modem.											

Parameter	Description	Type	Size	Default								
peer-modem2	Specify peer MODEM type for phone2.	option	-	generic								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>generic</i></td><td>All other modem type.</td></tr><tr><td><i>actiontec</i></td><td>ActionTec modem.</td></tr><tr><td><i>ascend_TNT</i></td><td>Ascend TNT modem.</td></tr></table>	Option	Description	<i>generic</i>	All other modem type.	<i>actiontec</i>	ActionTec modem.	<i>ascend_TNT</i>	Ascend TNT modem.			
Option	Description											
<i>generic</i>	All other modem type.											
<i>actiontec</i>	ActionTec modem.											
<i>ascend_TNT</i>	Ascend TNT modem.											
peer-modem3	Specify peer MODEM type for phone3.	option	-	generic								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>generic</i></td><td>All other modem type.</td></tr><tr><td><i>actiontec</i></td><td>ActionTec modem.</td></tr><tr><td><i>ascend_TNT</i></td><td>Ascend TNT modem.</td></tr></table>	Option	Description	<i>generic</i>	All other modem type.	<i>actiontec</i>	ActionTec modem.	<i>ascend_TNT</i>	Ascend TNT modem.			
Option	Description											
<i>generic</i>	All other modem type.											
<i>actiontec</i>	ActionTec modem.											
<i>ascend_TNT</i>	Ascend TNT modem.											
phone1	Phone number to connect to the dialup account (must not contain spaces, and should include standard special characters).	string	Maximum length: 63									
phone2	Phone number to connect to the dialup account (must not contain spaces, and should include standard special characters).	string	Maximum length: 63									
phone3	Phone number to connect to the dialup account (must not contain spaces, and should include standard special characters).	string	Maximum length: 63									
pin-init	AT command to set the PIN (AT+PIN=<pin>).	string	Maximum length: 127									
ppp-echo-request1	Enable/disable PPP echo-request to ISP 1.	option	-	enable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable setting.</td></tr><tr><td><i>disable</i></td><td>Disable setting.</td></tr></table>	Option	Description	<i>enable</i>	Enable setting.	<i>disable</i>	Disable setting.					
Option	Description											
<i>enable</i>	Enable setting.											
<i>disable</i>	Disable setting.											
ppp-echo-request2	Enable/disable PPP echo-request to ISP 2.	option	-	enable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable setting.</td></tr><tr><td><i>disable</i></td><td>Disable setting.</td></tr></table>	Option	Description	<i>enable</i>	Enable setting.	<i>disable</i>	Disable setting.					
Option	Description											
<i>enable</i>	Enable setting.											
<i>disable</i>	Disable setting.											

Parameter	Description	Type	Size	Default																								
ppp-echo-request3	Enable/disable PPP echo-request to ISP 3.	option	-	enable																								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable setting.</td></tr><tr><td><i>disable</i></td><td>Disable setting.</td></tr></table>	Option	Description	<i>enable</i>	Enable setting.	<i>disable</i>	Disable setting.																					
Option	Description																											
<i>enable</i>	Enable setting.																											
<i>disable</i>	Disable setting.																											
priority	Priority of learned routes (0 - 4294967295, default = 0).	integer	Minimum value: 0 0 Maximum value: 4294967295																									
redial	Redial limit (1 - 10 attempts, none = redial forever).	option	-	none																								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>none</i></td><td>Forever.</td></tr><tr><td><i>1</i></td><td>One attempt.</td></tr><tr><td><i>2</i></td><td>Two attempts.</td></tr><tr><td><i>3</i></td><td>Three attempts.</td></tr><tr><td><i>4</i></td><td>Four attempts.</td></tr><tr><td><i>5</i></td><td>Five attempts.</td></tr><tr><td><i>6</i></td><td>Six attempts.</td></tr><tr><td><i>7</i></td><td>Seven attempts.</td></tr><tr><td><i>8</i></td><td>Eight attempts.</td></tr><tr><td><i>9</i></td><td>Nine attempts.</td></tr><tr><td><i>10</i></td><td>Ten attempts.</td></tr></table>	Option	Description	<i>none</i>	Forever.	<i>1</i>	One attempt.	<i>2</i>	Two attempts.	<i>3</i>	Three attempts.	<i>4</i>	Four attempts.	<i>5</i>	Five attempts.	<i>6</i>	Six attempts.	<i>7</i>	Seven attempts.	<i>8</i>	Eight attempts.	<i>9</i>	Nine attempts.	<i>10</i>	Ten attempts.			
Option	Description																											
<i>none</i>	Forever.																											
<i>1</i>	One attempt.																											
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<i>7</i>	Seven attempts.																											
<i>8</i>	Eight attempts.																											
<i>9</i>	Nine attempts.																											
<i>10</i>	Ten attempts.																											
reset	Number of dial attempts before resetting modem (0 = never reset).	integer	Minimum value: 0 0 Maximum value: 10																									
status	Enable/disable Modem support (equivalent to bringing an interface up or down).	option	-	disable																								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable setting.</td></tr><tr><td><i>disable</i></td><td>Disable setting.</td></tr></table>	Option	Description	<i>enable</i>	Enable setting.	<i>disable</i>	Disable setting.																					
Option	Description																											
<i>enable</i>	Enable setting.																											
<i>disable</i>	Disable setting.																											
traffic-check	Enable/disable traffic-check.	option	-	disable																								

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		
username1	User name to access the specified dialup account.	string	Maximum length: 63	
username2	User name to access the specified dialup account.	string	Maximum length: 63	
username3	User name to access the specified dialup account.	string	Maximum length: 63	
wireless-port	Enter wireless port number: 0 for default, 1 for first port, and so on (0 - 4294967295).	integer	Minimum value: 0 Maximum value: 4294967295	

config system nd-proxy

Configure IPv6 neighbor discovery proxy (RFC4389).

```
config system nd-proxy
    Description: Configure IPv6 neighbor discovery proxy (RFC4389).
    set member <interface-name1>, <interface-name2>, ...
    set status [enable|disable]
end
```

config system nd-proxy

Parameter	Description	Type	Size	Default						
member <interface-name>	Interfaces using the neighbor discovery proxy. Interface name.	string	Maximum length: 79							
status	Enable/disable neighbor discovery proxy.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable neighbor discovery proxy.</td></tr><tr><td><i>disable</i></td><td>Disable neighbor discovery proxy.</td></tr></table>				Option	Description	<i>enable</i>	Enable neighbor discovery proxy.	<i>disable</i>	Disable neighbor discovery proxy.
Option	Description									
<i>enable</i>	Enable neighbor discovery proxy.									
<i>disable</i>	Disable neighbor discovery proxy.									

config system netflow

Configure NetFlow.

```
config system netflow
  Description: Configure NetFlow.
  set active-flow-timeout {integer}
  config collectors
    Description: Netflow collectors.
    edit <id>
      set collector-ip {string}
      set collector-port {integer}
      set interface {string}
      set interface-select-method [auto|sdwan|...]
      set source-ip {string}
    next
  end
  set inactive-flow-timeout {integer}
  set template-tx-counter {integer}
  set template-tx-timeout {integer}
end
```

config system netflow

Parameter	Description	Type	Size	Default
active-flow-timeout	Timeout to report active flows (60 - 3600 sec, default = 1800).	integer	Minimum value: 60 Maximum value: 3600	1800
inactive-flow-timeout	Timeout for periodic report of finished flows (10 - 600 sec, default = 15).	integer	Minimum value: 10 Maximum value: 600	15
template-tx-counter	Counter of flowset records before resending a template flowset record.	integer	Minimum value: 10 Maximum value: 6000	20
template-tx-timeout	Timeout for periodic template flowset transmission (60 - 86400 sec, default = 1800).	integer	Minimum value: 60 Maximum value: 86400	1800

config collectors

Parameter	Description	Type	Size	Default
collector-ip	Collector IP.	string	Maximum length: 63	
collector-port	NetFlow collector port number.	integer	Minimum value: 0 Maximum value: 65535	2055
id	ID.	integer	Minimum value: 1 Maximum value: 6	0
interface	Specify outgoing interface to reach server.	string	Maximum length: 15	
interface-select-method	Specify how to select outgoing interface to reach server.	option	-	auto
		Option	Description	
		auto	Set outgoing interface automatically.	
		sdwan	Set outgoing interface by SD-WAN or policy routing rules.	
		specify	Set outgoing interface manually.	
source-ip	Source IP address for communication with the NetFlow agent.	string	Maximum length: 63	

config system network-visibility

Configure network visibility settings.

```
config system network-visibility
  Description: Configure network visibility settings.
  set destination-hostname-visibility [disable|enable]
  set destination-location [disable|enable]
  set destination-visibility [disable|enable]
  set hostname-limit {integer}
  set hostname-ttl {integer}
  set source-location [disable|enable]
end
```

config system network-visibility

Parameter	Description	Type	Size	Default						
destination-hostname-visibility	Enable/disable logging of destination hostname visibility.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>disable</i></td><td>Disable logging of destination hostname visibility.</td></tr><tr><td><i>enable</i></td><td>Enable logging of destination hostname visibility.</td></tr></table>	Option	Description	<i>disable</i>	Disable logging of destination hostname visibility.	<i>enable</i>	Enable logging of destination hostname visibility.			
Option	Description									
<i>disable</i>	Disable logging of destination hostname visibility.									
<i>enable</i>	Enable logging of destination hostname visibility.									
destination-location	Enable/disable logging of destination geographical location visibility.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>disable</i></td><td>Disable logging of destination geographical location visibility.</td></tr><tr><td><i>enable</i></td><td>Enable logging of destination geographical location visibility.</td></tr></table>	Option	Description	<i>disable</i>	Disable logging of destination geographical location visibility.	<i>enable</i>	Enable logging of destination geographical location visibility.			
Option	Description									
<i>disable</i>	Disable logging of destination geographical location visibility.									
<i>enable</i>	Enable logging of destination geographical location visibility.									
destination-visibility	Enable/disable logging of destination visibility.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>disable</i></td><td>Disable logging of destination visibility.</td></tr><tr><td><i>enable</i></td><td>Enable logging of destination visibility.</td></tr></table>	Option	Description	<i>disable</i>	Disable logging of destination visibility.	<i>enable</i>	Enable logging of destination visibility.			
Option	Description									
<i>disable</i>	Disable logging of destination visibility.									
<i>enable</i>	Enable logging of destination visibility.									
hostname-limit	Limit of the number of hostname table entries (0 - 50000).	integer	Minimum value: 0 Maximum value: 50000	5000						
hostname-ttl	TTL of hostname table entries (60 - 86400).	integer	Minimum value: 60 Maximum value: 86400	86400						
source-location	Enable/disable logging of source geographical location visibility.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>disable</i></td><td>Disable logging of source geographical location visibility.</td></tr><tr><td><i>enable</i></td><td>Enable logging of source geographical location visibility.</td></tr></table>	Option	Description	<i>disable</i>	Disable logging of source geographical location visibility.	<i>enable</i>	Enable logging of source geographical location visibility.			
Option	Description									
<i>disable</i>	Disable logging of source geographical location visibility.									
<i>enable</i>	Enable logging of source geographical location visibility.									

config system np6



This command is available for model(s): FortiGate 1000D, FortiGate 1100E, FortiGate 1101E, FortiGate 1500DT, FortiGate 1500D, FortiGate 2000E, FortiGate 2201E, FortiGate 2500E, FortiGate 3000D, FortiGate 300E, FortiGate 301E, FortiGate 3100D, FortiGate 3200D, FortiGate 3300E, FortiGate 3301E, FortiGate 3400E, FortiGate 3401E, FortiGate 3600E, FortiGate 3601E, FortiGate 3700D, FortiGate 3960E, FortiGate 3980E, FortiGate 400E Bypass, FortiGate 400E, FortiGate 401E, FortiGate 5001E1, FortiGate 5001E, FortiGate 500E, FortiGate 501E, FortiGate 600E, FortiGate 601E, FortiGate 800D, FortiGate 900D.

It is not available for: FortiGate 1000F, FortiGate 1001F, FortiGate 100EF, FortiGate 100E, FortiGate 100F, FortiGate 101F, FortiGate 140E-POE, FortiGate 140E, FortiGate 1800F, FortiGate 1801F, FortiGate 200E, FortiGate 200F, FortiGate 201E, FortiGate 201F, FortiGate 2600F, FortiGate 2601F, FortiGate 3000F, FortiGate 3001F, FortiGate 3200F, FortiGate 3201F, FortiGate 3501F, FortiGate 3700F, FortiGate 3701F, FortiGate 400F, FortiGate 401F, FortiGate 40F 3G4G, FortiGate 4200F, FortiGate 4201F, FortiGate 4400F, FortiGate 4401F, FortiGate 60E-POE, FortiGate 60E, FortiGate 60F, FortiGate 61E, FortiGate 70F, FortiGate 71F, FortiGate 80E-POE, FortiGate 80E, FortiGate 80F Bypass, FortiGate 80F DSL, FortiGate 80F-POE, FortiGate 80F, FortiGate 81E-POE, FortiGate 81E, FortiGate 81F-POE, FortiGate 81F, FortiGate 90E, FortiGate 91E, FortiGate-VM64 Aliyun, FortiGate-VM64 AWS, FortiGate-VM64 Azure, FortiGate-VM64 GCP, FortiGate-VM64 OPC, FortiGate-VM64, FortiGateRugged 60F 3G4G, FortiGateRugged 60F, FortiGateRugged 70F 3G4G, FortiGateRugged 70F, FortiWiFi 40F 3G4G, FortiWiFi 40F, FortiWiFi 60E, FortiWiFi 60F, FortiWiFi 61E, FortiWiFi 61F, FortiWiFi 80F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G-POE, FortiWiFi 81F 2R-POE, FortiWiFi 81F 2R.

Configure NP6 attributes.

```
config system np6
  Description: Configure NP6 attributes.
  edit <name>
    set fastpath [disable|enable]
    config fp-anomaly
      Description: NP6 IPv4 anomaly protection. trap-to-host forwards anomaly sessions to
the CPU.
      set icmp-csum-err [drop|trap-to-host]
      set icmp-frag [allow|drop|...]
      set icmp-land [allow|drop|...]
      set ipv4-csum-err [drop|trap-to-host]
      set ipv4-land [allow|drop|...]
      set ipv4-optlsrr [allow|drop|...]
      set ipv4-optrr [allow|drop|...]
      set ipv4-optsecurity [allow|drop|...]
      set ipv4-optssrr [allow|drop|...]
      set ipv4-optstream [allow|drop|...]
      set ipv4-opttimestamp [allow|drop|...]
      set ipv4-proto-err [allow|drop|...]
      set ipv4-unknpt [allow|drop|...]
```

```

    set ipv6-daddr-err [allow|drop|...]
    set ipv6-land [allow|drop|...]
    set ipv6-optendpid [allow|drop|...]
    set ipv6-opthomeaddr [allow|drop|...]
    set ipv6-optinvld [allow|drop|...]
    set ipv6-optjumbo [allow|drop|...]
    set ipv6-optnsap [allow|drop|...]
    set ipv6-optralert [allow|drop|...]
    set ipv6-opttunnel [allow|drop|...]
    set ipv6-proto-err [allow|drop|...]
    set ipv6-saddr-err [allow|drop|...]
    set ipv6-unknopt [allow|drop|...]
    set tcp-csum-err [drop|trap-to-host]
    set tcp-fin-noack [allow|drop|...]
    set tcp-fin-only [allow|drop|...]
    set tcp-land [allow|drop|...]
    set tcp-no-flag [allow|drop|...]
    set tcp-syn-data [allow|drop|...]
    set tcp-syn-fin [allow|drop|...]
    set tcp-winnuke [allow|drop|...]
    set udp-csum-err [drop|trap-to-host]
    set udp-land [allow|drop|...]
end
set garbage-session-collector [disable|enable]
config hpe
    Description: HPE configuration.
    set arp-max {integer}
    set enable-shaper [disable|enable]
    set esp-max {integer}
    set icmp-max {integer}
    set ip-frag-max {integer}
    set ip-others-max {integer}
    set l2-others-max {integer}
    set pri-type-max {integer}
    set sctp-max {integer}
    set tcp-max {integer}
    set tcpfin-rst-max {integer}
    set tcpsyn-ack-max {integer}
    set tcpsyn-max {integer}
    set udp-max {integer}
end
set ipsec-ob-hash-function [switch-group-hash|global-hash|...]
set ipsec-outbound-hash [disable|enable]
set low-latency-mode [disable|enable]
set per-session-accounting [disable|traffic-log-only|...]
set session-collector-interval {integer}
set session-timeout-fixed [disable|enable]
set session-timeout-interval {integer}
set session-timeout-random-range {integer}
next
end

```

config system np6

Parameter	Description	Type	Size	Default												
fastpath	Enable/disable NP6 offloading (also called fast path).	option	-	enable												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>disable</i></td><td>Disable NP6 offloading (fast path).</td></tr><tr><td><i>enable</i></td><td>Enable NP6 offloading (fast path).</td></tr></table>	Option	Description	<i>disable</i>	Disable NP6 offloading (fast path).	<i>enable</i>	Enable NP6 offloading (fast path).									
Option	Description															
<i>disable</i>	Disable NP6 offloading (fast path).															
<i>enable</i>	Enable NP6 offloading (fast path).															
garbage-session-collector	Enable/disable garbage session collector.	option	-	disable												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>disable</i></td><td>Disable garbage session collector.</td></tr><tr><td><i>enable</i></td><td>Enable garbage session collector.</td></tr></table>	Option	Description	<i>disable</i>	Disable garbage session collector.	<i>enable</i>	Enable garbage session collector.									
Option	Description															
<i>disable</i>	Disable garbage session collector.															
<i>enable</i>	Enable garbage session collector.															
ipsec-ob-hash-function *	Set hash function for IPsec outbound.	option	-	switch-group-hash												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>switch-group-hash</i></td><td>Hash outbound SA traffic within NPs connected to same switch.</td></tr><tr><td><i>global-hash</i></td><td>Hash outbound SA traffic among all NPs.</td></tr><tr><td><i>global-hash-weighted</i></td><td>Hash outbound SA traffic among all NPs with more weights on NPs connected to switch 0. It's applicable to the case that ingress traffic is from switch 1.</td></tr><tr><td><i>round-robin-switch-group</i></td><td>Round-robin outbound SA traffic within NPs connected to same switch.</td></tr><tr><td><i>round-robin-global</i></td><td>Round-robin outbound SA traffic among all NPs.</td></tr></table>	Option	Description	<i>switch-group-hash</i>	Hash outbound SA traffic within NPs connected to same switch.	<i>global-hash</i>	Hash outbound SA traffic among all NPs.	<i>global-hash-weighted</i>	Hash outbound SA traffic among all NPs with more weights on NPs connected to switch 0. It's applicable to the case that ingress traffic is from switch 1.	<i>round-robin-switch-group</i>	Round-robin outbound SA traffic within NPs connected to same switch.	<i>round-robin-global</i>	Round-robin outbound SA traffic among all NPs.			
Option	Description															
<i>switch-group-hash</i>	Hash outbound SA traffic within NPs connected to same switch.															
<i>global-hash</i>	Hash outbound SA traffic among all NPs.															
<i>global-hash-weighted</i>	Hash outbound SA traffic among all NPs with more weights on NPs connected to switch 0. It's applicable to the case that ingress traffic is from switch 1.															
<i>round-robin-switch-group</i>	Round-robin outbound SA traffic within NPs connected to same switch.															
<i>round-robin-global</i>	Round-robin outbound SA traffic among all NPs.															
ipsec-outbound-hash *	Enable/disable hash function for IPsec outbound traffic.	option	-	disable												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>disable</i></td><td>Disable hash function for IPsec outbound traffic.</td></tr><tr><td><i>enable</i></td><td>Enable hash function for IPsec outbound traffic.</td></tr></table>	Option	Description	<i>disable</i>	Disable hash function for IPsec outbound traffic.	<i>enable</i>	Enable hash function for IPsec outbound traffic.									
Option	Description															
<i>disable</i>	Disable hash function for IPsec outbound traffic.															
<i>enable</i>	Enable hash function for IPsec outbound traffic.															

Parameter	Description	Type	Size	Default								
low-latency-mode	Enable/disable low latency mode.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>disable</i></td><td>Disable low latency mode.</td></tr><tr><td><i>enable</i></td><td>Enable low latency mode.</td></tr></table>	Option	Description	<i>disable</i>	Disable low latency mode.	<i>enable</i>	Enable low latency mode.					
Option	Description											
<i>disable</i>	Disable low latency mode.											
<i>enable</i>	Enable low latency mode.											
name	Device Name.	string	Maximum length: 31									
per-session-accounting	Enable/disable per-session accounting.	option	-	traffic-log-only								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>disable</i></td><td>Disable per-session accounting.</td></tr><tr><td><i>traffic-log-only</i></td><td>Per-session accounting only for sessions with traffic logging enabled in firewall policy.</td></tr><tr><td><i>enable</i></td><td>Per-session accounting for all sessions.</td></tr></table>	Option	Description	<i>disable</i>	Disable per-session accounting.	<i>traffic-log-only</i>	Per-session accounting only for sessions with traffic logging enabled in firewall policy.	<i>enable</i>	Per-session accounting for all sessions.			
Option	Description											
<i>disable</i>	Disable per-session accounting.											
<i>traffic-log-only</i>	Per-session accounting only for sessions with traffic logging enabled in firewall policy.											
<i>enable</i>	Per-session accounting for all sessions.											
session-collector-interval	Set garbage session collection cleanup interval (1 - 100 sec, default 64).	integer	Minimum value: 1 Maximum value: 100	64								
session-timeout-fixed	{disable enable} Toggle between using fixed or random timeouts for refreshing NP6 sessions.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>disable</i></td><td>Disable Refresh NP6 sessions at the configured fixed interval.</td></tr><tr><td><i>enable</i></td><td>Enable Refresh NP6 sessions randomly where the time between refreshes is within the random range.</td></tr></table>	Option	Description	<i>disable</i>	Disable Refresh NP6 sessions at the configured fixed interval.	<i>enable</i>	Enable Refresh NP6 sessions randomly where the time between refreshes is within the random range.					
Option	Description											
<i>disable</i>	Disable Refresh NP6 sessions at the configured fixed interval.											
<i>enable</i>	Enable Refresh NP6 sessions randomly where the time between refreshes is within the random range.											
session-timeout-interval	Set the fixed timeout for refreshing NP6 sessions (0 - 1000 sec, default 40 sec).	integer	Minimum value: 0 Maximum value: 1000	40								
session-timeout-random-range	Set the random timeout range for refreshing NP6 sessions (0 - 1000 sec, default 8 sec).	integer	Minimum value: 0 Maximum value: 1000	8								

* This parameter may not exist in some models.

config fp-anomaly

Parameter	Description	Type	Size	Default								
icmp-csum-err	Invalid IPv4 ICMP checksum anomalies.	option	-	drop								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>drop</td><td>Drop IPv4 invalid ICMP checksum.</td></tr><tr><td>trap-to-host</td><td>Forward IPv4 invalid ICMP checksum to main CPU for processing.</td></tr></table>	Option	Description	drop	Drop IPv4 invalid ICMP checksum.	trap-to-host	Forward IPv4 invalid ICMP checksum to main CPU for processing.					
Option	Description											
drop	Drop IPv4 invalid ICMP checksum.											
trap-to-host	Forward IPv4 invalid ICMP checksum to main CPU for processing.											
icmp-frag	Layer 3 fragmented packets that could be part of layer 4 ICMP anomalies.	option	-	allow								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>allow</td><td>Allow L3 fragment packet with L4 protocol as ICMP attack to pass.</td></tr><tr><td>drop</td><td>Drop L3 fragment packet with L4 protocol as ICMP attack.</td></tr><tr><td>trap-to-host</td><td>Forward L3 fragment packet with L4 protocol as ICMP attack to FortiOS.</td></tr></table>	Option	Description	allow	Allow L3 fragment packet with L4 protocol as ICMP attack to pass.	drop	Drop L3 fragment packet with L4 protocol as ICMP attack.	trap-to-host	Forward L3 fragment packet with L4 protocol as ICMP attack to FortiOS.			
Option	Description											
allow	Allow L3 fragment packet with L4 protocol as ICMP attack to pass.											
drop	Drop L3 fragment packet with L4 protocol as ICMP attack.											
trap-to-host	Forward L3 fragment packet with L4 protocol as ICMP attack to FortiOS.											
icmp-land	ICMP land anomalies.	option	-	trap-to-host								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>allow</td><td>Allow ICMP land attack to pass.</td></tr><tr><td>drop</td><td>Drop ICMP land attack.</td></tr><tr><td>trap-to-host</td><td>Forward ICMP land attack to FortiOS.</td></tr></table>	Option	Description	allow	Allow ICMP land attack to pass.	drop	Drop ICMP land attack.	trap-to-host	Forward ICMP land attack to FortiOS.			
Option	Description											
allow	Allow ICMP land attack to pass.											
drop	Drop ICMP land attack.											
trap-to-host	Forward ICMP land attack to FortiOS.											
ipv4-csum-err	Invalid IPv4 IP checksum anomalies.	option	-	drop								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>drop</td><td>Drop IPv4 invalid IP checksum.</td></tr><tr><td>trap-to-host</td><td>Forward IPv4 invalid IP checksum to main CPU for processing.</td></tr></table>	Option	Description	drop	Drop IPv4 invalid IP checksum.	trap-to-host	Forward IPv4 invalid IP checksum to main CPU for processing.					
Option	Description											
drop	Drop IPv4 invalid IP checksum.											
trap-to-host	Forward IPv4 invalid IP checksum to main CPU for processing.											
ipv4-land	Land anomalies.	option	-	trap-to-host								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>allow</td><td>Allow IPv4 land attack to pass.</td></tr><tr><td>drop</td><td>Drop IPv4 land attack.</td></tr><tr><td>trap-to-host</td><td>Forward IPv4 land attack to FortiOS.</td></tr></table>	Option	Description	allow	Allow IPv4 land attack to pass.	drop	Drop IPv4 land attack.	trap-to-host	Forward IPv4 land attack to FortiOS.			
Option	Description											
allow	Allow IPv4 land attack to pass.											
drop	Drop IPv4 land attack.											
trap-to-host	Forward IPv4 land attack to FortiOS.											
ipv4-optlrr	Loose source record route option anomalies.	option	-	trap-to-host								

Parameter	Description	Type	Size	Default
	Option Description			
	<i>allow</i>	Allow IPv4 with loose source record route option to pass.		
	<i>drop</i>	Drop IPv4 with loose source record route option.		
	<i>trap-to-host</i>	Forward IPv4 with loose source record route option to FortiOS.		
ipv4-optrr	Record route option anomalies.	option	-	trap-to-host
	Option Description			
	<i>allow</i>	Allow IPv4 with record route option to pass.		
	<i>drop</i>	Drop IPv4 with record route option.		
	<i>trap-to-host</i>	Forward IPv4 with record route option to FortiOS.		
ipv4-optsecurity	Security option anomalies.	option	-	trap-to-host
	Option Description			
	<i>allow</i>	Allow IPv4 with security option to pass.		
	<i>drop</i>	Drop IPv4 with security option.		
	<i>trap-to-host</i>	Forward IPv4 with security option to FortiOS.		
ipv4-optssrr	Strict source record route option anomalies.	option	-	trap-to-host
	Option Description			
	<i>allow</i>	Allow IPv4 with strict source record route option to pass.		
	<i>drop</i>	Drop IPv4 with strict source record route option.		
	<i>trap-to-host</i>	Forward IPv4 with strict source record route option to FortiOS.		
ipv4-optstream	Stream option anomalies.	option	-	trap-to-host
	Option Description			
	<i>allow</i>	Allow IPv4 with stream option to pass.		
	<i>drop</i>	Drop IPv4 with stream option.		
	<i>trap-to-host</i>	Forward IPv4 with stream option to FortiOS.		
ipv4-opttimestamp	Timestamp option anomalies.	option	-	trap-to-host

Parameter	Description	Type	Size	Default								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>allow</i></td><td>Allow IPv4 with timestamp option to pass.</td></tr><tr><td><i>drop</i></td><td>Drop IPv4 with timestamp option.</td></tr><tr><td><i>trap-to-host</i></td><td>Forward IPv4 with timestamp option to FortiOS.</td></tr></table>	Option	Description	<i>allow</i>	Allow IPv4 with timestamp option to pass.	<i>drop</i>	Drop IPv4 with timestamp option.	<i>trap-to-host</i>	Forward IPv4 with timestamp option to FortiOS.			
	Option	Description										
	<i>allow</i>	Allow IPv4 with timestamp option to pass.										
	<i>drop</i>	Drop IPv4 with timestamp option.										
<i>trap-to-host</i>	Forward IPv4 with timestamp option to FortiOS.											
ipv4-proto-err	Invalid layer 4 protocol anomalies.	option	-	trap-to-host								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>allow</i></td><td>Allow IPv4 invalid L4 protocol to pass.</td></tr><tr><td><i>drop</i></td><td>Drop IPv4 invalid L4 protocol.</td></tr><tr><td><i>trap-to-host</i></td><td>Forward IPv4 invalid L4 protocol to FortiOS.</td></tr></table>	Option	Description	<i>allow</i>	Allow IPv4 invalid L4 protocol to pass.	<i>drop</i>	Drop IPv4 invalid L4 protocol.	<i>trap-to-host</i>	Forward IPv4 invalid L4 protocol to FortiOS.			
	Option	Description										
	<i>allow</i>	Allow IPv4 invalid L4 protocol to pass.										
	<i>drop</i>	Drop IPv4 invalid L4 protocol.										
<i>trap-to-host</i>	Forward IPv4 invalid L4 protocol to FortiOS.											
ipv4-unknopt	Unknown option anomalies.	option	-	trap-to-host								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>allow</i></td><td>Allow IPv4 with unknown options to pass.</td></tr><tr><td><i>drop</i></td><td>Drop IPv4 with unknown options.</td></tr><tr><td><i>trap-to-host</i></td><td>Forward IPv4 with unknown options to FortiOS.</td></tr></table>	Option	Description	<i>allow</i>	Allow IPv4 with unknown options to pass.	<i>drop</i>	Drop IPv4 with unknown options.	<i>trap-to-host</i>	Forward IPv4 with unknown options to FortiOS.			
	Option	Description										
	<i>allow</i>	Allow IPv4 with unknown options to pass.										
	<i>drop</i>	Drop IPv4 with unknown options.										
<i>trap-to-host</i>	Forward IPv4 with unknown options to FortiOS.											
ipv6-daddr-err	Destination address as unspecified or loopback address anomalies.	option	-	trap-to-host								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>allow</i></td><td>Allow IPv6 with destination address as unspecified or loopback address to pass.</td></tr><tr><td><i>drop</i></td><td>Drop IPv6 with destination address as unspecified or loopback address.</td></tr><tr><td><i>trap-to-host</i></td><td>Forward IPv6 with destination address as unspecified or loopback address to FortiOS.</td></tr></table>	Option	Description	<i>allow</i>	Allow IPv6 with destination address as unspecified or loopback address to pass.	<i>drop</i>	Drop IPv6 with destination address as unspecified or loopback address.	<i>trap-to-host</i>	Forward IPv6 with destination address as unspecified or loopback address to FortiOS.			
	Option	Description										
	<i>allow</i>	Allow IPv6 with destination address as unspecified or loopback address to pass.										
	<i>drop</i>	Drop IPv6 with destination address as unspecified or loopback address.										
<i>trap-to-host</i>	Forward IPv6 with destination address as unspecified or loopback address to FortiOS.											
ipv6-land	Land anomalies.	option	-	trap-to-host								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>allow</i></td><td>Allow IPv6 land attack to pass.</td></tr><tr><td><i>drop</i></td><td>Drop IPv6 land attack.</td></tr><tr><td><i>trap-to-host</i></td><td>Forward IPv6 land attack to FortiOS.</td></tr></table>	Option	Description	<i>allow</i>	Allow IPv6 land attack to pass.	<i>drop</i>	Drop IPv6 land attack.	<i>trap-to-host</i>	Forward IPv6 land attack to FortiOS.			
	Option	Description										
	<i>allow</i>	Allow IPv6 land attack to pass.										
	<i>drop</i>	Drop IPv6 land attack.										
<i>trap-to-host</i>	Forward IPv6 land attack to FortiOS.											

Parameter	Description	Type	Size	Default								
ipv6-optendpid	End point identification anomalies.	option	-	trap-to-host								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>allow</td><td>Allow IPv6 with end point identification option to pass.</td></tr><tr><td>drop</td><td>Drop IPv6 with end point identification option.</td></tr><tr><td>trap-to-host</td><td>Forward IPv6 with end point identification option to FortiOS.</td></tr></table>	Option	Description	allow	Allow IPv6 with end point identification option to pass.	drop	Drop IPv6 with end point identification option.	trap-to-host	Forward IPv6 with end point identification option to FortiOS.			
Option	Description											
allow	Allow IPv6 with end point identification option to pass.											
drop	Drop IPv6 with end point identification option.											
trap-to-host	Forward IPv6 with end point identification option to FortiOS.											
ipv6-opthomeaddr	Home address option anomalies.	option	-	trap-to-host								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>allow</td><td>Allow IPv6 with home address option to pass.</td></tr><tr><td>drop</td><td>Drop IPv6 with home address option.</td></tr><tr><td>trap-to-host</td><td>Forward IPv6 with home address option to FortiOS.</td></tr></table>	Option	Description	allow	Allow IPv6 with home address option to pass.	drop	Drop IPv6 with home address option.	trap-to-host	Forward IPv6 with home address option to FortiOS.			
Option	Description											
allow	Allow IPv6 with home address option to pass.											
drop	Drop IPv6 with home address option.											
trap-to-host	Forward IPv6 with home address option to FortiOS.											
ipv6-optinvld	Invalid option anomalies.Invalid option anomalies.	option	-	trap-to-host								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>allow</td><td>Allow IPv6 with invalid option to pass.</td></tr><tr><td>drop</td><td>Drop IPv6 with invalid option.</td></tr><tr><td>trap-to-host</td><td>Forward IPv6 with invalid option to FortiOS.</td></tr></table>	Option	Description	allow	Allow IPv6 with invalid option to pass.	drop	Drop IPv6 with invalid option.	trap-to-host	Forward IPv6 with invalid option to FortiOS.			
Option	Description											
allow	Allow IPv6 with invalid option to pass.											
drop	Drop IPv6 with invalid option.											
trap-to-host	Forward IPv6 with invalid option to FortiOS.											
ipv6-optjumbo	Jumbo options anomalies.	option	-	trap-to-host								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>allow</td><td>Allow IPv6 with jumbo option to pass.</td></tr><tr><td>drop</td><td>Drop IPv6 with jumbo option.</td></tr><tr><td>trap-to-host</td><td>Forward IPv6 with jumbo option to FortiOS.</td></tr></table>	Option	Description	allow	Allow IPv6 with jumbo option to pass.	drop	Drop IPv6 with jumbo option.	trap-to-host	Forward IPv6 with jumbo option to FortiOS.			
Option	Description											
allow	Allow IPv6 with jumbo option to pass.											
drop	Drop IPv6 with jumbo option.											
trap-to-host	Forward IPv6 with jumbo option to FortiOS.											
ipv6-optnsap	Network service access point address option anomalies.	option	-	trap-to-host								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>allow</td><td>Allow IPv6 with network service access point address option to pass.</td></tr><tr><td>drop</td><td>Drop IPv6 with network service access point address option.</td></tr><tr><td>trap-to-host</td><td>Forward IPv6 with network service access point address option to FortiOS.</td></tr></table>	Option	Description	allow	Allow IPv6 with network service access point address option to pass.	drop	Drop IPv6 with network service access point address option.	trap-to-host	Forward IPv6 with network service access point address option to FortiOS.			
Option	Description											
allow	Allow IPv6 with network service access point address option to pass.											
drop	Drop IPv6 with network service access point address option.											
trap-to-host	Forward IPv6 with network service access point address option to FortiOS.											

Parameter	Description	Type	Size	Default								
ipv6-optralert	Router alert option anomalies.	option	-	trap-to-host								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>allow</td><td>Allow IPv6 with router alert option to pass.</td></tr><tr><td>drop</td><td>Drop IPv6 with router alert option.</td></tr><tr><td>trap-to-host</td><td>Forward IPv6 with router alert option to FortiOS.</td></tr></table>	Option	Description	allow	Allow IPv6 with router alert option to pass.	drop	Drop IPv6 with router alert option.	trap-to-host	Forward IPv6 with router alert option to FortiOS.			
Option	Description											
allow	Allow IPv6 with router alert option to pass.											
drop	Drop IPv6 with router alert option.											
trap-to-host	Forward IPv6 with router alert option to FortiOS.											
ipv6-opttunnel	Tunnel encapsulation limit option anomalies.	option	-	trap-to-host								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>allow</td><td>Allow IPv6 with tunnel encapsulation limit to pass.</td></tr><tr><td>drop</td><td>Drop IPv6 with tunnel encapsulation limit.</td></tr><tr><td>trap-to-host</td><td>Forward IPv6 with tunnel encapsulation limit to FortiOS.</td></tr></table>	Option	Description	allow	Allow IPv6 with tunnel encapsulation limit to pass.	drop	Drop IPv6 with tunnel encapsulation limit.	trap-to-host	Forward IPv6 with tunnel encapsulation limit to FortiOS.			
Option	Description											
allow	Allow IPv6 with tunnel encapsulation limit to pass.											
drop	Drop IPv6 with tunnel encapsulation limit.											
trap-to-host	Forward IPv6 with tunnel encapsulation limit to FortiOS.											
ipv6-proto-err	Layer 4 invalid protocol anomalies.	option	-	trap-to-host								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>allow</td><td>Allow IPv6 L4 invalid protocol to pass.</td></tr><tr><td>drop</td><td>Drop IPv6 L4 invalid protocol.</td></tr><tr><td>trap-to-host</td><td>Forward IPv6 L4 invalid protocol to FortiOS.</td></tr></table>	Option	Description	allow	Allow IPv6 L4 invalid protocol to pass.	drop	Drop IPv6 L4 invalid protocol.	trap-to-host	Forward IPv6 L4 invalid protocol to FortiOS.			
Option	Description											
allow	Allow IPv6 L4 invalid protocol to pass.											
drop	Drop IPv6 L4 invalid protocol.											
trap-to-host	Forward IPv6 L4 invalid protocol to FortiOS.											
ipv6-saddr-err	Source address as multicast anomalies.	option	-	trap-to-host								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>allow</td><td>Allow IPv6 with source address as multicast to pass.</td></tr><tr><td>drop</td><td>Drop IPv6 with source address as multicast.</td></tr><tr><td>trap-to-host</td><td>Forward IPv6 with source address as multicast to FortiOS.</td></tr></table>	Option	Description	allow	Allow IPv6 with source address as multicast to pass.	drop	Drop IPv6 with source address as multicast.	trap-to-host	Forward IPv6 with source address as multicast to FortiOS.			
Option	Description											
allow	Allow IPv6 with source address as multicast to pass.											
drop	Drop IPv6 with source address as multicast.											
trap-to-host	Forward IPv6 with source address as multicast to FortiOS.											
ipv6-unknpt	Unknown option anomalies.	option	-	trap-to-host								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>allow</td><td>Allow IPv6 with unknown options to pass.</td></tr><tr><td>drop</td><td>Drop IPv6 with unknown options.</td></tr><tr><td>trap-to-host</td><td>Forward IPv6 with unknown options to FortiOS.</td></tr></table>	Option	Description	allow	Allow IPv6 with unknown options to pass.	drop	Drop IPv6 with unknown options.	trap-to-host	Forward IPv6 with unknown options to FortiOS.			
Option	Description											
allow	Allow IPv6 with unknown options to pass.											
drop	Drop IPv6 with unknown options.											
trap-to-host	Forward IPv6 with unknown options to FortiOS.											

Parameter	Description	Type	Size	Default								
tcp-csum-err	Invalid IPv4 TCP checksum anomalies.	option	-	drop								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>drop</td><td>Drop IPv4 invalid TCP checksum.</td></tr><tr><td>trap-to-host</td><td>Forward IPv4 invalid TCP checksum to main CPU for processing.</td></tr></table>	Option	Description	drop	Drop IPv4 invalid TCP checksum.	trap-to-host	Forward IPv4 invalid TCP checksum to main CPU for processing.					
Option	Description											
drop	Drop IPv4 invalid TCP checksum.											
trap-to-host	Forward IPv4 invalid TCP checksum to main CPU for processing.											
tcp-fin-noack	TCP SYN flood with FIN flag set without ACK setting anomalies.	option	-	trap-to-host								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>allow</td><td>Allow TCP packets with FIN flag set without ack setting to pass.</td></tr><tr><td>drop</td><td>Drop TCP packets with FIN flag set without ack setting.</td></tr><tr><td>trap-to-host</td><td>Forward TCP packets with FIN flag set without ack setting to FortiOS.</td></tr></table>	Option	Description	allow	Allow TCP packets with FIN flag set without ack setting to pass.	drop	Drop TCP packets with FIN flag set without ack setting.	trap-to-host	Forward TCP packets with FIN flag set without ack setting to FortiOS.			
Option	Description											
allow	Allow TCP packets with FIN flag set without ack setting to pass.											
drop	Drop TCP packets with FIN flag set without ack setting.											
trap-to-host	Forward TCP packets with FIN flag set without ack setting to FortiOS.											
tcp-fin-only	TCP SYN flood with only FIN flag set anomalies.	option	-	trap-to-host								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>allow</td><td>Allow TCP packets with FIN flag set only to pass.</td></tr><tr><td>drop</td><td>Drop TCP packets with FIN flag set only.</td></tr><tr><td>trap-to-host</td><td>Forward TCP packets with FIN flag set only to FortiOS.</td></tr></table>	Option	Description	allow	Allow TCP packets with FIN flag set only to pass.	drop	Drop TCP packets with FIN flag set only.	trap-to-host	Forward TCP packets with FIN flag set only to FortiOS.			
Option	Description											
allow	Allow TCP packets with FIN flag set only to pass.											
drop	Drop TCP packets with FIN flag set only.											
trap-to-host	Forward TCP packets with FIN flag set only to FortiOS.											
tcp-land	TCP land anomalies.	option	-	trap-to-host								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>allow</td><td>Allow TCP land attack to pass.</td></tr><tr><td>drop</td><td>Drop TCP land attack.</td></tr><tr><td>trap-to-host</td><td>Forward TCP land attack to FortiOS.</td></tr></table>	Option	Description	allow	Allow TCP land attack to pass.	drop	Drop TCP land attack.	trap-to-host	Forward TCP land attack to FortiOS.			
Option	Description											
allow	Allow TCP land attack to pass.											
drop	Drop TCP land attack.											
trap-to-host	Forward TCP land attack to FortiOS.											
tcp-no-flag	TCP SYN flood with no flag set anomalies.	option	-	allow								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>allow</td><td>Allow TCP packets without flag set to pass.</td></tr><tr><td>drop</td><td>Drop TCP packets without flag set.</td></tr><tr><td>trap-to-host</td><td>Forward TCP packets without flag set to FortiOS.</td></tr></table>	Option	Description	allow	Allow TCP packets without flag set to pass.	drop	Drop TCP packets without flag set.	trap-to-host	Forward TCP packets without flag set to FortiOS.			
Option	Description											
allow	Allow TCP packets without flag set to pass.											
drop	Drop TCP packets without flag set.											
trap-to-host	Forward TCP packets without flag set to FortiOS.											
tcp-syn-data	TCP SYN flood packets with data anomalies.	option	-	allow								

Parameter	Description	Type	Size	Default
	Option Description			
	<i>allow</i>	Allow TCP syn packets with data to pass.		
	<i>drop</i>	Drop TCP syn packets with data.		
	<i>trap-to-host</i>	Forward TCP syn packets with data to FortiOS.		
tcp-syn-fin	TCP SYN flood SYN/FIN flag set anomalies.	option	-	allow
	Option Description			
	<i>allow</i>	Allow TCP packets with syn_fin flag set to pass.		
	<i>drop</i>	Drop TCP packets with syn_fin flag set.		
	<i>trap-to-host</i>	Forward TCP packets with syn_fin flag set to FortiOS.		
tcp-winnuke	TCP WinNuke anomalies.	option	-	trap-to-host
	Option Description			
	<i>allow</i>	Allow TCP packets winnuke attack to pass.		
	<i>drop</i>	Drop TCP packets winnuke attack.		
	<i>trap-to-host</i>	Forward TCP packets winnuke attack to FortiOS.		
udp-csum-err	Invalid IPv4 UDP checksum anomalies.	option	-	drop
	Option Description			
	<i>drop</i>	Drop IPv4 invalid UDP checksum.		
	<i>trap-to-host</i>	Forward IPv4 invalid UDP checksum to main CPU for processing.		
udp-land	UDP land anomalies.	option	-	trap-to-host
	Option Description			
	<i>allow</i>	Allow UDP land attack to pass.		
	<i>drop</i>	Drop UDP land attack.		
	<i>trap-to-host</i>	Forward UDP land attack to FortiOS.		

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Parameter	Description	Type	Size	Default						
arp-max	Maximum ARP packet rate (1K - 1G pps, default = 200K pps).	integer	Minimum value: 1000 Maximum value: 1000000000	200000						
enable-shaper	Enable/Disable NPU Host Protection Engine (HPE) for packet type shaper.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Disable NPU HPE shaping based on packet type.</td></tr><tr><td>enable</td><td>Enable NPU HPE shaping based on packet type.</td></tr></table>				Option	Description	disable	Disable NPU HPE shaping based on packet type.	enable	Enable NPU HPE shaping based on packet type.
	Option	Description								
	disable	Disable NPU HPE shaping based on packet type.								
enable	Enable NPU HPE shaping based on packet type.									
esp-max	Maximum ESP packet rate (1K - 1G pps, default = 200K pps).	integer	Minimum value: 1000 Maximum value: 1000000000	200000						
icmp-max	Maximum ICMP packet rate (1K - 1G pps, default = 200K pps).	integer	Minimum value: 1000 Maximum value: 1000000000	200000						
ip-frag-max	Maximum fragmented IP packet rate (1K - 1G pps, default = 200K pps).	integer	Minimum value: 1000 Maximum value: 1000000000	200000						
ip-others-max	Maximum IP packet rate for other packets (packet types that cannot be set with other options) (1K - 1G pps, default = 200K pps).	integer	Minimum value: 1000 Maximum value: 1000000000	200000						
l2-others-max	Maximum L2 packet rate for L2 packets that are not ARP packets (1K - 1G pps, default = 200K pps).	integer	Minimum value: 1000 Maximum value: 1000000000	200000						

Parameter	Description	Type	Size	Default
pri-type-max	Maximum overflow rate of priority type traffic (1K - 1G pps, default = 200K pps). Includes L2: HA, 802.3ad LACP, heartbeats. L3: OSPF. L4_ TCP: BGP. L4_UDP: IKE, SLBC, BFD.	integer	Minimum value: 1000 Maximum value: 10000000000	200000
sctp-max	Maximum SCTP packet rate (1K - 1G pps, default = 200K pps).	integer	Minimum value: 1000 Maximum value: 10000000000	200000
tcp-max	Maximum TCP packet rate (1K - 1G pps, default = 600K pps).	integer	Minimum value: 1000 Maximum value: 10000000000	600000
tcpfin-rst-max	Maximum TCP carries FIN or RST flags packet rate (1K - 1G pps, default = 60K pps).	integer	Minimum value: 1000 Maximum value: 10000000000	600000
tcpsyn-ack-max	Maximum TCP carries SYN and ACK flags packet rate (1K - 1G pps, default = 600K pps).	integer	Minimum value: 1000 Maximum value: 10000000000	600000
tcpsyn-max	Maximum TCP SYN packet rate (1K - 1G pps, default = 600K pps).	integer	Minimum value: 1000 Maximum value: 10000000000	600000
udp-max	Maximum UDP packet rate (1K - 1G pps, default = 600K pps).	integer	Minimum value: 1000 Maximum value: 10000000000	600000

config system np6xlite



This command is available for model(s): FortiGate 100F, FortiGate 101F, FortiGate 200F, FortiGate 201F, FortiGate 40F 3G4G, FortiGate 60F, FortiGate 70F, FortiGate 71F, FortiGate 80F Bypass, FortiGate 80F DSL, FortiGate 80F-POE, FortiGate 80F, FortiGate 81F-POE, FortiGate 81F, FortiGateRugged 60F 3G4G, FortiGateRugged 60F, FortiGateRugged 70F 3G4G, FortiGateRugged 70F, FortiWiFi 40F 3G4G, FortiWiFi 40F, FortiWiFi 60F, FortiWiFi 61F, FortiWiFi 80F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G-POE, FortiWiFi 81F 2R-POE, FortiWiFi 81F 2R.

It is not available for: FortiGate 1000D, FortiGate 1000F, FortiGate 1001F, FortiGate 100EF, FortiGate 100E, FortiGate 1100E, FortiGate 1101E, FortiGate 140E-POE, FortiGate 140E, FortiGate 1500DT, FortiGate 1500D, FortiGate 1800F, FortiGate 1801F, FortiGate 2000E, FortiGate 200E, FortiGate 201E, FortiGate 2201E, FortiGate 2500E, FortiGate 2600F, FortiGate 2601F, FortiGate 3000D, FortiGate 3000F, FortiGate 3001F, FortiGate 300E, FortiGate 301E, FortiGate 3100D, FortiGate 3200D, FortiGate 3200F, FortiGate 3201F, FortiGate 3300E, FortiGate 3301E, FortiGate 3400E, FortiGate 3401E, FortiGate 3501F, FortiGate 3600E, FortiGate 3601E, FortiGate 3700D, FortiGate 3700F, FortiGate 3701F, FortiGate 3960E, FortiGate 3980E, FortiGate 400E Bypass, FortiGate 400E, FortiGate 400F, FortiGate 401E, FortiGate 401F, FortiGate 4200F, FortiGate 4201F, FortiGate 4400F, FortiGate 4401F, FortiGate 5001E1, FortiGate 5001E, FortiGate 500E, FortiGate 501E, FortiGate 600E, FortiGate 601E, FortiGate 60E-POE, FortiGate 60E, FortiGate 61E, FortiGate 800D, FortiGate 80E-POE, FortiGate 80E, FortiGate 81E-POE, FortiGate 81E, FortiGate 900D, FortiGate 90E, FortiGate 91E, FortiGate-VM64 Aliyun, FortiGate-VM64 AWS, FortiGate-VM64 Azure, FortiGate-VM64 GCP, FortiGate-VM64 OPC, FortiGate-VM64, FortiWiFi 60E, FortiWiFi 61E.

Configure NP6XLITE attributes.

```
config system np6xlite
  Description: Configure NP6XLITE attributes.
  edit <name>
    set congestion-handling-mode [flow-control|head-of-line]
    set fastpath [disable|enable]
    config fp-anomaly
      Description: NP6XLITE IPv4 anomaly protection. The trap-to-host forwards anomaly
sessions to the CPU.
      set icmp-csum-err [drop|trap-to-host]
      set icmp-frag [allow|drop|...]
      set icmp-land [allow|drop|...]
      set ipv4-csum-err [drop|trap-to-host]
      set ipv4-land [allow|drop|...]
      set ipv4-optlsrr [allow|drop|...]
      set ipv4-optrr [allow|drop|...]
      set ipv4-optsecurity [allow|drop|...]
      set ipv4-optssrr [allow|drop|...]
      set ipv4-optstream [allow|drop|...]
      set ipv4-opttimestamp [allow|drop|...]
      set ipv4-proto-err [allow|drop|...]
      set ipv4-unknopt [allow|drop|...]
```

```

    set ipv6-daddr-err [allow|drop|...]
    set ipv6-land [allow|drop|...]
    set ipv6-optendpid [allow|drop|...]
    set ipv6-opthomeaddr [allow|drop|...]
    set ipv6-optinvld [allow|drop|...]
    set ipv6-optjumbo [allow|drop|...]
    set ipv6-optnsap [allow|drop|...]
    set ipv6-optralert [allow|drop|...]
    set ipv6-opttunnel [allow|drop|...]
    set ipv6-proto-err [allow|drop|...]
    set ipv6-saddr-err [allow|drop|...]
    set ipv6-unknopt [allow|drop|...]
    set tcp-csum-err [drop|trap-to-host]
    set tcp-fin-noack [allow|drop|...]
    set tcp-fin-only [allow|drop|...]
    set tcp-land [allow|drop|...]
    set tcp-no-flag [allow|drop|...]
    set tcp-syn-data [allow|drop|...]
    set tcp-syn-fin [allow|drop|...]
    set tcp-winnuke [allow|drop|...]
    set udp-csum-err [drop|trap-to-host]
    set udp-land [allow|drop|...]
end
set garbage-session-collector [disable|enable]
config hpe
    Description: HPE configuration.
    set arp-max {integer}
    set enable-shaper [disable|enable]
    set esp-max {integer}
    set icmp-max {integer}
    set ip-frag-max {integer}
    set ip-others-max {integer}
    set l2-others-max {integer}
    set sctp-max {integer}
    set tcp-max {integer}
    set tcpsyn-max {integer}
    set udp-max {integer}
end
set ipsec-inner-fragment [disable|enable]
set ipsec-sts-timeout [1|2|...]
set ipsec-throughput-msg-frequency [disable|32kb|...]
set per-session-accounting [disable|traffic-log-only|...]
set session-collector-interval {integer}
set session-timeout-fixed [disable|enable]
set session-timeout-interval {integer}
set session-timeout-random-range {integer}
next
end

```

config system np6xlite

Parameter	Description	Type	Size	Default								
congestion-handling-mode *	Configure Marvell switch packet congestion handling.	option	-	head-of-line								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>flow-control</td><td>Pausing peer sending additional traffic until congestion is resolved.</td></tr><tr><td>head-of-line</td><td>Dropping excessive traffic until congestion is resolved.</td></tr></table>	Option	Description	flow-control	Pausing peer sending additional traffic until congestion is resolved.	head-of-line	Dropping excessive traffic until congestion is resolved.					
Option	Description											
flow-control	Pausing peer sending additional traffic until congestion is resolved.											
head-of-line	Dropping excessive traffic until congestion is resolved.											
fastpath	Enable/disable NP6XLITE offloading (also called fast path).	option	-	enable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Disable NP6XLITE offloading (fast path).</td></tr><tr><td>enable</td><td>Enable NP6XLITE offloading (fast path).</td></tr></table>	Option	Description	disable	Disable NP6XLITE offloading (fast path).	enable	Enable NP6XLITE offloading (fast path).					
Option	Description											
disable	Disable NP6XLITE offloading (fast path).											
enable	Enable NP6XLITE offloading (fast path).											
garbage-session-collector	Enable/disable garbage session collector.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Disable garbage session collector.</td></tr><tr><td>enable</td><td>Enable garbage session collector.</td></tr></table>	Option	Description	disable	Disable garbage session collector.	enable	Enable garbage session collector.					
Option	Description											
disable	Disable garbage session collector.											
enable	Enable garbage session collector.											
ipsec-inner-fragment	Enable/disable NP6XLite IPsec fragmentation type: inner.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>NP6XLite ipsec fragmentation type: outer.</td></tr><tr><td>enable</td><td>Enable NP6XLite ipsec fragmentation type: inner.</td></tr></table>	Option	Description	disable	NP6XLite ipsec fragmentation type: outer.	enable	Enable NP6XLite ipsec fragmentation type: inner.					
Option	Description											
disable	NP6XLite ipsec fragmentation type: outer.											
enable	Enable NP6XLite ipsec fragmentation type: inner.											
ipsec-sts-timeout	Set NP6XLite IPsec STS message timeout.	option	-	5								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>1</td><td>Set NP6Xlite STS message timeout to 1 sec (recommended for IPSec throughput GUI).</td></tr><tr><td>2</td><td>Set NP6Xlite STS message timeout to 2 sec.</td></tr><tr><td>3</td><td>Set NP6Xlite STS message timeout to 3 sec.</td></tr></table>	Option	Description	1	Set NP6Xlite STS message timeout to 1 sec (recommended for IPSec throughput GUI).	2	Set NP6Xlite STS message timeout to 2 sec.	3	Set NP6Xlite STS message timeout to 3 sec.			
Option	Description											
1	Set NP6Xlite STS message timeout to 1 sec (recommended for IPSec throughput GUI).											
2	Set NP6Xlite STS message timeout to 2 sec.											
3	Set NP6Xlite STS message timeout to 3 sec.											

Parameter	Description	Type	Size	Default																																				
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>4</td><td>Set NP6Xlite STS message timeout to 4 sec.</td></tr><tr><td>5</td><td>Set NP6Xlite STS message timeout to 5 sec (default).</td></tr><tr><td>6</td><td>Set NP6Xlite STS message timeout to 6 sec.</td></tr><tr><td>7</td><td>Set NP6Xlite STS message timeout to 7 sec.</td></tr><tr><td>8</td><td>Set NP6Xlite STS message timeout to 8 sec.</td></tr><tr><td>9</td><td>Set NP6Xlite STS message timeout to 9 sec.</td></tr><tr><td>10</td><td>Set NP6Xlite STS message timeout to 10 sec.</td></tr></table>	Option	Description	4	Set NP6Xlite STS message timeout to 4 sec.	5	Set NP6Xlite STS message timeout to 5 sec (default).	6	Set NP6Xlite STS message timeout to 6 sec.	7	Set NP6Xlite STS message timeout to 7 sec.	8	Set NP6Xlite STS message timeout to 8 sec.	9	Set NP6Xlite STS message timeout to 9 sec.	10	Set NP6Xlite STS message timeout to 10 sec.																							
	Option	Description																																						
	4	Set NP6Xlite STS message timeout to 4 sec.																																						
	5	Set NP6Xlite STS message timeout to 5 sec (default).																																						
	6	Set NP6Xlite STS message timeout to 6 sec.																																						
	7	Set NP6Xlite STS message timeout to 7 sec.																																						
	8	Set NP6Xlite STS message timeout to 8 sec.																																						
	9	Set NP6Xlite STS message timeout to 9 sec.																																						
10	Set NP6Xlite STS message timeout to 10 sec.																																							
ipsec-throughput-msg-frequency	Set NP6Xlite IPsec throughput message frequency (0 = disable).	option	-	disable																																				
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Disable NP6Xlite throughput update message.</td></tr><tr><td>32kb</td><td>Set NP6Xlite throughput update message frequency to 32KB.</td></tr><tr><td>64kb</td><td>Set NP6Xlite throughput update message frequency to 64KB.</td></tr><tr><td>128kb</td><td>Set NP6Xlite throughput update message frequency to 128KB.</td></tr><tr><td>256kb</td><td>Set NP6Xlite throughput update message frequency to 256KB.</td></tr><tr><td>512kb</td><td>Set NP6Xlite throughput update message frequency to 512KB.</td></tr><tr><td>1mb</td><td>Set NP6Xlite throughput update message frequency to 1MB.</td></tr><tr><td>2mb</td><td>Set NP6Xlite throughput update message frequency to 2MB.</td></tr><tr><td>4mb</td><td>Set NP6Xlite throughput update message frequency to 4MB.</td></tr><tr><td>8mb</td><td>Set NP6Xlite throughput update message frequency to 8MB.</td></tr><tr><td>16mb</td><td>Set NP6Xlite throughput update message frequency to 16MB.</td></tr><tr><td>32mb</td><td>Set NP6Xlite throughput update message frequency to 32MB.</td></tr><tr><td>64mb</td><td>Set NP6Xlite throughput update message frequency to 64MB.</td></tr><tr><td>128mb</td><td>Set NP6Xlite throughput update message frequency to 128MB.</td></tr><tr><td>256mb</td><td>Set NP6Xlite throughput update message frequency to 256MB.</td></tr><tr><td>512mb</td><td>Set NP6Xlite throughput update message frequency to 512MB.</td></tr><tr><td>1gb</td><td>Set NP6Xlite throughput update message frequency to 1GB.</td></tr></table>	Option	Description	disable	Disable NP6Xlite throughput update message.	32kb	Set NP6Xlite throughput update message frequency to 32KB.	64kb	Set NP6Xlite throughput update message frequency to 64KB.	128kb	Set NP6Xlite throughput update message frequency to 128KB.	256kb	Set NP6Xlite throughput update message frequency to 256KB.	512kb	Set NP6Xlite throughput update message frequency to 512KB.	1mb	Set NP6Xlite throughput update message frequency to 1MB.	2mb	Set NP6Xlite throughput update message frequency to 2MB.	4mb	Set NP6Xlite throughput update message frequency to 4MB.	8mb	Set NP6Xlite throughput update message frequency to 8MB.	16mb	Set NP6Xlite throughput update message frequency to 16MB.	32mb	Set NP6Xlite throughput update message frequency to 32MB.	64mb	Set NP6Xlite throughput update message frequency to 64MB.	128mb	Set NP6Xlite throughput update message frequency to 128MB.	256mb	Set NP6Xlite throughput update message frequency to 256MB.	512mb	Set NP6Xlite throughput update message frequency to 512MB.	1gb	Set NP6Xlite throughput update message frequency to 1GB.			
	Option	Description																																						
	disable	Disable NP6Xlite throughput update message.																																						
	32kb	Set NP6Xlite throughput update message frequency to 32KB.																																						
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	128kb	Set NP6Xlite throughput update message frequency to 128KB.																																						
	256kb	Set NP6Xlite throughput update message frequency to 256KB.																																						
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	512mb	Set NP6Xlite throughput update message frequency to 512MB.																																						
1gb	Set NP6Xlite throughput update message frequency to 1GB.																																							

Parameter	Description	Type	Size	Default								
name	Device Name.	string	Maximum length: 31									
per-session-accounting	Enable/disable per-session accounting.	option	-	traffic-log-only								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>disable</i></td><td>Disable per-session accounting.</td></tr><tr><td><i>traffic-log-only</i></td><td>Per-session accounting only for sessions with traffic logging enabled in firewall policy.</td></tr><tr><td><i>enable</i></td><td>Per-session accounting for all sessions.</td></tr></table>	Option	Description	<i>disable</i>	Disable per-session accounting.	<i>traffic-log-only</i>	Per-session accounting only for sessions with traffic logging enabled in firewall policy.	<i>enable</i>	Per-session accounting for all sessions.			
Option	Description											
<i>disable</i>	Disable per-session accounting.											
<i>traffic-log-only</i>	Per-session accounting only for sessions with traffic logging enabled in firewall policy.											
<i>enable</i>	Per-session accounting for all sessions.											
session-collector-interval	Set garbage session collection cleanup interval (1 - 100 sec, default 64).	integer	Minimum value: 1 Maximum value: 100	64								
session-timeout-fixed	Enable/disable fixed timeout interval mode.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>disable</i></td><td>Disable NPU session timeout at fixed interval.</td></tr><tr><td><i>enable</i></td><td>Enable NPU session timeout at fixed interval.</td></tr></table>	Option	Description	<i>disable</i>	Disable NPU session timeout at fixed interval.	<i>enable</i>	Enable NPU session timeout at fixed interval.					
Option	Description											
<i>disable</i>	Disable NPU session timeout at fixed interval.											
<i>enable</i>	Enable NPU session timeout at fixed interval.											
session-timeout-interval	Set session timeout interval (0 - 1000 sec, default 40 sec).	integer	Minimum value: 0 Maximum value: 1000	40								
session-timeout-random-range	Set the randomization range (0 - 1000 sec, default 8 sec).	integer	Minimum value: 0 Maximum value: 1000	8								

* This parameter may not exist in some models.

config fp-anomaly

Parameter	Description	Type	Size	Default						
icmp-csum-err	Invalid IPv4 ICMP checksum anomalies.	option	-	drop						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>drop</i></td><td>Drop IPv4 invalid ICMP checksum.</td></tr><tr><td><i>trap-to-host</i></td><td>Forward IPv4 invalid ICMP checksum to main CPU for processing.</td></tr></table>				Option	Description	<i>drop</i>	Drop IPv4 invalid ICMP checksum.	<i>trap-to-host</i>	Forward IPv4 invalid ICMP checksum to main CPU for processing.
Option	Description									
<i>drop</i>	Drop IPv4 invalid ICMP checksum.									
<i>trap-to-host</i>	Forward IPv4 invalid ICMP checksum to main CPU for processing.									

Parameter	Description	Type	Size	Default								
icmp-frag	Layer 3 fragmented packets that could be part of layer 4 ICMP anomalies.	option	-	allow								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>allow</td><td>Allow L3 fragment packet with L4 protocol as ICMP attack to pass.</td></tr><tr><td>drop</td><td>Drop L3 fragment packet with L4 protocol as ICMP attack.</td></tr><tr><td>trap-to-host</td><td>Forward L3 fragment packet with L4 protocol as ICMP attack to FortiOS.</td></tr></table>	Option	Description	allow	Allow L3 fragment packet with L4 protocol as ICMP attack to pass.	drop	Drop L3 fragment packet with L4 protocol as ICMP attack.	trap-to-host	Forward L3 fragment packet with L4 protocol as ICMP attack to FortiOS.			
Option	Description											
allow	Allow L3 fragment packet with L4 protocol as ICMP attack to pass.											
drop	Drop L3 fragment packet with L4 protocol as ICMP attack.											
trap-to-host	Forward L3 fragment packet with L4 protocol as ICMP attack to FortiOS.											
icmp-land	ICMP land anomalies.	option	-	trap-to-host								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>allow</td><td>Allow ICMP land attack to pass.</td></tr><tr><td>drop</td><td>Drop ICMP land attack.</td></tr><tr><td>trap-to-host</td><td>Forward ICMP land attack to FortiOS.</td></tr></table>	Option	Description	allow	Allow ICMP land attack to pass.	drop	Drop ICMP land attack.	trap-to-host	Forward ICMP land attack to FortiOS.			
Option	Description											
allow	Allow ICMP land attack to pass.											
drop	Drop ICMP land attack.											
trap-to-host	Forward ICMP land attack to FortiOS.											
ipv4-csum-err	Invalid IPv4 IP checksum anomalies.	option	-	drop								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>drop</td><td>Drop IPv4 invalid IP checksum.</td></tr><tr><td>trap-to-host</td><td>Forward IPv4 invalid IP checksum to main CPU for processing.</td></tr></table>	Option	Description	drop	Drop IPv4 invalid IP checksum.	trap-to-host	Forward IPv4 invalid IP checksum to main CPU for processing.					
Option	Description											
drop	Drop IPv4 invalid IP checksum.											
trap-to-host	Forward IPv4 invalid IP checksum to main CPU for processing.											
ipv4-land	Land anomalies.	option	-	trap-to-host								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>allow</td><td>Allow IPv4 land attack to pass.</td></tr><tr><td>drop</td><td>Drop IPv4 land attack.</td></tr><tr><td>trap-to-host</td><td>Forward IPv4 land attack to FortiOS.</td></tr></table>	Option	Description	allow	Allow IPv4 land attack to pass.	drop	Drop IPv4 land attack.	trap-to-host	Forward IPv4 land attack to FortiOS.			
Option	Description											
allow	Allow IPv4 land attack to pass.											
drop	Drop IPv4 land attack.											
trap-to-host	Forward IPv4 land attack to FortiOS.											
ipv4-optlsrr	Loose source record route option anomalies.	option	-	trap-to-host								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>allow</td><td>Allow IPv4 with loose source record route option to pass.</td></tr><tr><td>drop</td><td>Drop IPv4 with loose source record route option.</td></tr><tr><td>trap-to-host</td><td>Forward IPv4 with loose source record route option to FortiOS.</td></tr></table>	Option	Description	allow	Allow IPv4 with loose source record route option to pass.	drop	Drop IPv4 with loose source record route option.	trap-to-host	Forward IPv4 with loose source record route option to FortiOS.			
Option	Description											
allow	Allow IPv4 with loose source record route option to pass.											
drop	Drop IPv4 with loose source record route option.											
trap-to-host	Forward IPv4 with loose source record route option to FortiOS.											
ipv4-optrr	Record route option anomalies.	option	-	trap-to-host								

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>allow</i>	Allow IPv4 with record route option to pass.		
	<i>drop</i>	Drop IPv4 with record route option.		
	<i>trap-to-host</i>	Forward IPv4 with record route option to FortiOS.		
ipv4-optsecurity	Security option anomalies.	option	-	trap-to-host
	Option	Description		
	<i>allow</i>	Allow IPv4 with security option to pass.		
	<i>drop</i>	Drop IPv4 with security option.		
	<i>trap-to-host</i>	Forward IPv4 with security option to FortiOS.		
ipv4-optssrr	Strict source record route option anomalies.	option	-	trap-to-host
	Option	Description		
	<i>allow</i>	Allow IPv4 with strict source record route option to pass.		
	<i>drop</i>	Drop IPv4 with strict source record route option.		
	<i>trap-to-host</i>	Forward IPv4 with strict source record route option to FortiOS.		
ipv4-optstream	Stream option anomalies.	option	-	trap-to-host
	Option	Description		
	<i>allow</i>	Allow IPv4 with stream option to pass.		
	<i>drop</i>	Drop IPv4 with stream option.		
	<i>trap-to-host</i>	Forward IPv4 with stream option to FortiOS.		
ipv4-opttimestamp	Timestamp option anomalies.	option	-	trap-to-host
	Option	Description		
	<i>allow</i>	Allow IPv4 with timestamp option to pass.		
	<i>drop</i>	Drop IPv4 with timestamp option.		
	<i>trap-to-host</i>	Forward IPv4 with timestamp option to FortiOS.		
ipv4-proto-err	Invalid layer 4 protocol anomalies.	option	-	trap-to-host

Parameter	Description	Type	Size	Default
	Option Description			
	<i>allow</i>	Allow IPv4 invalid L4 protocol to pass.		
	<i>drop</i>	Drop IPv4 invalid L4 protocol.		
	<i>trap-to-host</i>	Forward IPv4 invalid L4 protocol to FortiOS.		
ipv4-unknopt	Unknown option anomalies.	option	-	trap-to-host
	Option Description			
	<i>allow</i>	Allow IPv4 with unknown options to pass.		
	<i>drop</i>	Drop IPv4 with unknown options.		
	<i>trap-to-host</i>	Forward IPv4 with unknown options to FortiOS.		
ipv6-daddr-err	Destination address as unspecified or loopback address anomalies.	option	-	trap-to-host
	Option Description			
	<i>allow</i>	Allow IPv6 with destination address as unspecified or loopback address to pass.		
	<i>drop</i>	Drop IPv6 with destination address as unspecified or loopback address.		
	<i>trap-to-host</i>	Forward IPv6 with destination address as unspecified or loopback address to FortiOS.		
ipv6-land	Land anomalies.	option	-	trap-to-host
	Option Description			
	<i>allow</i>	Allow IPv6 land attack to pass.		
	<i>drop</i>	Drop IPv6 land attack.		
	<i>trap-to-host</i>	Forward IPv6 land attack to FortiOS.		
ipv6-optendpid	End point identification anomalies.	option	-	trap-to-host
	Option Description			
	<i>allow</i>	Allow IPv6 with end point identification option to pass.		
	<i>drop</i>	Drop IPv6 with end point identification option.		
	<i>trap-to-host</i>	Forward IPv6 with end point identification option to FortiOS.		

Parameter	Description	Type	Size	Default								
ipv6-opthomeaddr	Home address option anomalies.	option	-	trap-to-host								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>allow</td><td>Allow IPv6 with home address option to pass.</td></tr><tr><td>drop</td><td>Drop IPv6 with home address option.</td></tr><tr><td>trap-to-host</td><td>Forward IPv6 with home address option to FortiOS.</td></tr></table>	Option	Description	allow	Allow IPv6 with home address option to pass.	drop	Drop IPv6 with home address option.	trap-to-host	Forward IPv6 with home address option to FortiOS.			
Option	Description											
allow	Allow IPv6 with home address option to pass.											
drop	Drop IPv6 with home address option.											
trap-to-host	Forward IPv6 with home address option to FortiOS.											
ipv6-optinvld	Invalid option anomalies.Invalid option anomalies.	option	-	trap-to-host								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>allow</td><td>Allow IPv6 with invalid option to pass.</td></tr><tr><td>drop</td><td>Drop IPv6 with invalid option.</td></tr><tr><td>trap-to-host</td><td>Forward IPv6 with invalid option to FortiOS.</td></tr></table>	Option	Description	allow	Allow IPv6 with invalid option to pass.	drop	Drop IPv6 with invalid option.	trap-to-host	Forward IPv6 with invalid option to FortiOS.			
Option	Description											
allow	Allow IPv6 with invalid option to pass.											
drop	Drop IPv6 with invalid option.											
trap-to-host	Forward IPv6 with invalid option to FortiOS.											
ipv6-optjumbo	Jumbo options anomalies.	option	-	trap-to-host								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>allow</td><td>Allow IPv6 with jumbo option to pass.</td></tr><tr><td>drop</td><td>Drop IPv6 with jumbo option.</td></tr><tr><td>trap-to-host</td><td>Forward IPv6 with jumbo option to FortiOS.</td></tr></table>	Option	Description	allow	Allow IPv6 with jumbo option to pass.	drop	Drop IPv6 with jumbo option.	trap-to-host	Forward IPv6 with jumbo option to FortiOS.			
Option	Description											
allow	Allow IPv6 with jumbo option to pass.											
drop	Drop IPv6 with jumbo option.											
trap-to-host	Forward IPv6 with jumbo option to FortiOS.											
ipv6-optnsap	Network service access point address option anomalies.	option	-	trap-to-host								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>allow</td><td>Allow IPv6 with network service access point address option to pass.</td></tr><tr><td>drop</td><td>Drop IPv6 with network service access point address option.</td></tr><tr><td>trap-to-host</td><td>Forward IPv6 with network service access point address option to FortiOS.</td></tr></table>	Option	Description	allow	Allow IPv6 with network service access point address option to pass.	drop	Drop IPv6 with network service access point address option.	trap-to-host	Forward IPv6 with network service access point address option to FortiOS.			
Option	Description											
allow	Allow IPv6 with network service access point address option to pass.											
drop	Drop IPv6 with network service access point address option.											
trap-to-host	Forward IPv6 with network service access point address option to FortiOS.											
ipv6-optralert	Router alert option anomalies.	option	-	trap-to-host								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>allow</td><td>Allow IPv6 with router alert option to pass.</td></tr><tr><td>drop</td><td>Drop IPv6 with router alert option.</td></tr><tr><td>trap-to-host</td><td>Forward IPv6 with router alert option to FortiOS.</td></tr></table>	Option	Description	allow	Allow IPv6 with router alert option to pass.	drop	Drop IPv6 with router alert option.	trap-to-host	Forward IPv6 with router alert option to FortiOS.			
Option	Description											
allow	Allow IPv6 with router alert option to pass.											
drop	Drop IPv6 with router alert option.											
trap-to-host	Forward IPv6 with router alert option to FortiOS.											

Parameter	Description	Type	Size	Default								
ipv6-opttunnel	Tunnel encapsulation limit option anomalies.	option	-	trap-to-host								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>allow</td><td>Allow IPv6 with tunnel encapsulation limit to pass.</td></tr><tr><td>drop</td><td>Drop IPv6 with tunnel encapsulation limit.</td></tr><tr><td>trap-to-host</td><td>Forward IPv6 with tunnel encapsulation limit to FortiOS.</td></tr></table>	Option	Description	allow	Allow IPv6 with tunnel encapsulation limit to pass.	drop	Drop IPv6 with tunnel encapsulation limit.	trap-to-host	Forward IPv6 with tunnel encapsulation limit to FortiOS.			
Option	Description											
allow	Allow IPv6 with tunnel encapsulation limit to pass.											
drop	Drop IPv6 with tunnel encapsulation limit.											
trap-to-host	Forward IPv6 with tunnel encapsulation limit to FortiOS.											
ipv6-proto-err	Layer 4 invalid protocol anomalies.	option	-	trap-to-host								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>allow</td><td>Allow IPv6 L4 invalid protocol to pass.</td></tr><tr><td>drop</td><td>Drop IPv6 L4 invalid protocol.</td></tr><tr><td>trap-to-host</td><td>Forward IPv6 L4 invalid protocol to FortiOS.</td></tr></table>	Option	Description	allow	Allow IPv6 L4 invalid protocol to pass.	drop	Drop IPv6 L4 invalid protocol.	trap-to-host	Forward IPv6 L4 invalid protocol to FortiOS.			
Option	Description											
allow	Allow IPv6 L4 invalid protocol to pass.											
drop	Drop IPv6 L4 invalid protocol.											
trap-to-host	Forward IPv6 L4 invalid protocol to FortiOS.											
ipv6-saddr-err	Source address as multicast anomalies.	option	-	trap-to-host								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>allow</td><td>Allow IPv6 with source address as multicast to pass.</td></tr><tr><td>drop</td><td>Drop IPv6 with source address as multicast.</td></tr><tr><td>trap-to-host</td><td>Forward IPv6 with source address as multicast to FortiOS.</td></tr></table>	Option	Description	allow	Allow IPv6 with source address as multicast to pass.	drop	Drop IPv6 with source address as multicast.	trap-to-host	Forward IPv6 with source address as multicast to FortiOS.			
Option	Description											
allow	Allow IPv6 with source address as multicast to pass.											
drop	Drop IPv6 with source address as multicast.											
trap-to-host	Forward IPv6 with source address as multicast to FortiOS.											
ipv6-unknpt	Unknown option anomalies.	option	-	trap-to-host								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>allow</td><td>Allow IPv6 with unknown options to pass.</td></tr><tr><td>drop</td><td>Drop IPv6 with unknown options.</td></tr><tr><td>trap-to-host</td><td>Forward IPv6 with unknown options to FortiOS.</td></tr></table>	Option	Description	allow	Allow IPv6 with unknown options to pass.	drop	Drop IPv6 with unknown options.	trap-to-host	Forward IPv6 with unknown options to FortiOS.			
Option	Description											
allow	Allow IPv6 with unknown options to pass.											
drop	Drop IPv6 with unknown options.											
trap-to-host	Forward IPv6 with unknown options to FortiOS.											
tcp-csum-err	Invalid IPv4 TCP checksum anomalies.	option	-	drop								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>drop</td><td>Drop IPv4 invalid TCP checksum.</td></tr><tr><td>trap-to-host</td><td>Forward IPv4 invalid TCP checksum to main CPU for processing.</td></tr></table>	Option	Description	drop	Drop IPv4 invalid TCP checksum.	trap-to-host	Forward IPv4 invalid TCP checksum to main CPU for processing.					
Option	Description											
drop	Drop IPv4 invalid TCP checksum.											
trap-to-host	Forward IPv4 invalid TCP checksum to main CPU for processing.											
tcp-fin-noack	TCP SYN flood with FIN flag set without ACK setting anomalies.	option	-	trap-to-host								

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>allow</i>	Allow TCP packets with FIN flag set without ack setting to pass.		
	<i>drop</i>	Drop TCP packets with FIN flag set without ack setting.		
	<i>trap-to-host</i>	Forward TCP packets with FIN flag set without ack setting to FortiOS.		
tcp-fin-only	TCP SYN flood with only FIN flag set anomalies.	option	-	trap-to-host
	Option	Description		
	<i>allow</i>	Allow TCP packets with FIN flag set only to pass.		
	<i>drop</i>	Drop TCP packets with FIN flag set only.		
	<i>trap-to-host</i>	Forward TCP packets with FIN flag set only to FortiOS.		
tcp-land	TCP land anomalies.	option	-	trap-to-host
	Option	Description		
	<i>allow</i>	Allow TCP land attack to pass.		
	<i>drop</i>	Drop TCP land attack.		
	<i>trap-to-host</i>	Forward TCP land attack to FortiOS.		
tcp-no-flag	TCP SYN flood with no flag set anomalies.	option	-	allow
	Option	Description		
	<i>allow</i>	Allow TCP packets without flag set to pass.		
	<i>drop</i>	Drop TCP packets without flag set.		
	<i>trap-to-host</i>	Forward TCP packets without flag set to FortiOS.		
tcp-syn-data	TCP SYN flood packets with data anomalies.	option	-	allow
	Option	Description		
	<i>allow</i>	Allow TCP syn packets with data to pass.		
	<i>drop</i>	Drop TCP syn packets with data.		
	<i>trap-to-host</i>	Forward TCP syn packets with data to FortiOS.		
tcp-syn-fin	TCP SYN flood SYN/FIN flag set anomalies.	option	-	allow

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>allow</i>	Allow TCP packets with syn_fin flag set to pass.		
	<i>drop</i>	Drop TCP packets with syn_fin flag set.		
	<i>trap-to-host</i>	Forward TCP packets with syn_fin flag set to FortiOS.		
tcp-winnuke	TCP WinNuke anomalies.	option	-	trap-to-host
	Option	Description		
	<i>allow</i>	Allow TCP packets winnuke attack to pass.		
	<i>drop</i>	Drop TCP packets winnuke attack.		
	<i>trap-to-host</i>	Forward TCP packets winnuke attack to FortiOS.		
udp-csum-err	Invalid IPv4 UDP checksum anomalies.	option	-	drop
	Option	Description		
	<i>drop</i>	Drop IPv4 invalid UDP checksum.		
	<i>trap-to-host</i>	Forward IPv4 invalid UDP checksum to main CPU for processing.		
udp-land	UDP land anomalies.	option	-	trap-to-host
	Option	Description		
	<i>allow</i>	Allow UDP land attack to pass.		
	<i>drop</i>	Drop UDP land attack.		
	<i>trap-to-host</i>	Forward UDP land attack to FortiOS.		

config hpe

Parameter	Description	Type	Size	Default
arp-max	Maximum ARP packet rate (10K - 4G pps, default = 1M pps).	integer	Minimum value: 10000 Maximum value: 40000000000	1000000
enable-shaper	Enable/Disable NPU host protection engine (HPE) shaper.	option	-	disable

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>disable</i>	Disable NPU HPE shaping based on packet type.		
	<i>enable</i>	Enable NPU HPE shaping based on packet type.		
esp-max	Maximum ESP packet rate (10K - 4G pps, default = 1M pps).	integer	Minimum value: 10000 Maximum value: 4000000000	1000000
icmp-max	Maximum ICMP packet rate (10K - 4G pps, default = 1M pps).	integer	Minimum value: 10000 Maximum value: 4000000000	1000000
ip-frag-max	Maximum fragmented IP packet rate (10K - 4G pps, default = 1M pps).	integer	Minimum value: 10000 Maximum value: 4000000000	1000000
ip-others-max	Maximum IP packet rate for other packets (packet types that cannot be set with other options) (10G - 4G pps, default = 1M pps).	integer	Minimum value: 10000 Maximum value: 4000000000	1000000
l2-others-max	Maximum L2 packet rate for L2 packets that are not ARP packets (10K - 4G pps, default = 1M pps).	integer	Minimum value: 10000 Maximum value: 4000000000	1000000
sctp-max	Maximum SCTP packet rate (10K - 4G pps, default = 1M pps).	integer	Minimum value: 10000 Maximum value: 4000000000	1000000
tcp-max	Maximum TCP packet rate (10K - 4G pps, default = 5M pps).	integer	Minimum value: 10000 Maximum value: 4000000000	5000000

Parameter	Description	Type	Size	Default
tcpsyn-max	Maximum TCP SYN packet rate (10K - 4G pps, default = 5M pps).	integer	Minimum value: 10000 Maximum value: 4000000000	5000000
udp-max	Maximum UDP packet rate (10K - 4G pps, default = 5M pps).	integer	Minimum value: 10000 Maximum value: 4000000000	5000000

config system npu



This command is available for model(s): FortiGate 1000D, FortiGate 1000F, FortiGate 1001F, FortiGate 100EF, FortiGate 100E, FortiGate 100F, FortiGate 101F, FortiGate 1100E, FortiGate 1101E, FortiGate 140E-POE, FortiGate 140E, FortiGate 1500DT, FortiGate 1500D, FortiGate 1800F, FortiGate 1801F, FortiGate 2000E, FortiGate 200E, FortiGate 200F, FortiGate 201E, FortiGate 201F, FortiGate 2201E, FortiGate 2500E, FortiGate 2600F, FortiGate 2601F, FortiGate 3000D, FortiGate 3000F, FortiGate 3001F, FortiGate 300E, FortiGate 301E, FortiGate 3100D, FortiGate 3200D, FortiGate 3200F, FortiGate 3201F, FortiGate 3300E, FortiGate 3301E, FortiGate 3400E, FortiGate 3401E, FortiGate 3501F, FortiGate 3600E, FortiGate 3601E, FortiGate 3700D, FortiGate 3700F, FortiGate 3701F, FortiGate 3960E, FortiGate 3980E, FortiGate 400E Bypass, FortiGate 400E, FortiGate 400F, FortiGate 401E, FortiGate 401F, FortiGate 40F 3G4G, FortiGate 4200F, FortiGate 4201F, FortiGate 4400F, FortiGate 4401F, FortiGate 5001E1, FortiGate 5001E, FortiGate 500E, FortiGate 501E, FortiGate 600E, FortiGate 601E, FortiGate 60E-POE, FortiGate 60E, FortiGate 60F, FortiGate 61E, FortiGate 70F, FortiGate 71F, FortiGate 800D, FortiGate 80E-POE, FortiGate 80E, FortiGate 80F Bypass, FortiGate 80F DSL, FortiGate 80F-POE, FortiGate 80F, FortiGate 81E-POE, FortiGate 81E, FortiGate 81F-POE, FortiGate 81F, FortiGate 900D, FortiGateRugged 60F 3G4G, FortiGateRugged 60F, FortiGateRugged 70F 3G4G, FortiGateRugged 70F, FortiWiFi 40F 3G4G, FortiWiFi 40F, FortiWiFi 60E, FortiWiFi 60F, FortiWiFi 61E, FortiWiFi 61F, FortiWiFi 80F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G-POE, FortiWiFi 81F 2R-POE, FortiWiFi 81F 2R.

It is not available for: FortiGate 90E, FortiGate 91E, FortiGate-VM64 Aliyun, FortiGate-VM64 AWS, FortiGate-VM64 Azure, FortiGate-VM64 GCP, FortiGate-VM64 OPC, FortiGate-VM64.

Configure NPU attributes.

```
config system npu
  Description: Configure NPU attributes.
  set capwap-offload [enable|disable]
  set dedicated-lacp-queue [enable|disable]
  set dedicated-management-affinity {string}
```



```

set dedicated-management-cpu [enable|disable]
set default-qos-type [policing|shaping|...]
config dos-options
    Description: NPU DoS configurations.
    set npu-dos-meter-mode [global|local]
    set npu-dos-tpe-mode [enable|disable]
end
set double-level-mcast-offload [enable|disable]
config dsw-dts-profile
    Description: Configure NPU DSW DTS profile.
    edit <profile-id>
        set action [wait|drop|...]
        set min-limit {integer}
        set step {integer}
    next
end
config dsw-queue-dts-profile
    Description: Configure NPU DSW Queue DTS profile.
    edit <name>
        set iport [eif0|eif1|...]
        set oport [eif0|eif1|...]
        set profile-id {integer}
        set queue-select {integer}
    next
end
set fastpath [disable|enable]
config fp-anomaly
    Description: IPv4/IPv6 anomaly protection.
    set icmp-csum-err [drop|trap-to-host]
    set icmp-frag [allow|drop|...]
    set icmp-land [allow|drop|...]
    set ipv4-csum-err [drop|trap-to-host]
    set ipv4-land [allow|drop|...]
    set ipv4-optlsrr [allow|drop|...]
    set ipv4-optrr [allow|drop|...]
    set ipv4-optsecurity [allow|drop|...]
    set ipv4-optssrr [allow|drop|...]
    set ipv4-optstream [allow|drop|...]
    set ipv4-opttimestamp [allow|drop|...]
    set ipv4-proto-err [allow|drop|...]
    set ipv4-unknopt [allow|drop|...]
    set ipv6-daddr-err [allow|drop|...]
    set ipv6-land [allow|drop|...]
    set ipv6-optendpid [allow|drop|...]
    set ipv6-opthomeaddr [allow|drop|...]
    set ipv6-optinvld [allow|drop|...]
    set ipv6-optjumbo [allow|drop|...]
    set ipv6-optnsap [allow|drop|...]
    set ipv6-optralert [allow|drop|...]
    set ipv6-opttunnel [allow|drop|...]
    set ipv6-proto-err [allow|drop|...]
    set ipv6-saddr-err [allow|drop|...]

```

```

set ipv6-unknopt [allow|drop|...]
set sctp-csum-err [allow|drop|...]
set tcp-csum-err [drop|trap-to-host]
set tcp-fin-noack [allow|drop|...]
set tcp-fin-only [allow|drop|...]
set tcp-land [allow|drop|...]
set tcp-no-flag [allow|drop|...]
set tcp-syn-data [allow|drop|...]
set tcp-syn-fin [allow|drop|...]
set tcp-winnuke [allow|drop|...]
set udp-csum-err [drop|trap-to-host]
set udp-land [allow|drop|...]
end
set gtp-enhanced-cpu-range [0|1|...]
set gtp-enhanced-mode [enable|disable]
set gtp-support [enable|disable]
set hash-tbl-spread [enable|disable]
set host-shortcut-mode [bi-directional|host-shortcut]
config hpe
    Description: Host protection engine configuration.
    set all-protocol {integer}
    set arp-max {integer}
    set enable-shaper [disable|enable]
    set esp-max {integer}
    set high-priority {integer}
    set icmp-max {integer}
    set ip-frag-max {integer}
    set ip-others-max {integer}
    set l2-others-max {integer}
    set sctp-max {integer}
    set tcp-max {integer}
    set tcpfin-rst-max {integer}
    set tcpsyn-ack-max {integer}
    set tcpsyn-max {integer}
    set udp-max {integer}
end
set htab-dedi-queue-nr {integer}
set htab-msg-queue [data|idle|...]
set htx-gtse-quota [100Mbps|200Mbps|...]
set htx-icmp-csum-chk [drop|pass]
set inbound-dscp-copy-port <interface1>, <interface2>, ...
set intf-shaping-offload [enable|disable]
set ip-fragment-offload [disable|enable]
config ip-reassembly
    Description: IP reassembly engine configuration.
    set max-timeout {integer}
    set min-timeout {integer}
    set status [disable|enable]
end
set iph-rsvd-re-cksum [enable|disable]
set ipsec-dec-subengine-mask {user}
set ipsec-enc-subengine-mask {user}

```

```

set ipsec-inbound-cache [enable|disable]
set ipsec-mtu-override [disable|enable]
set ipsec-ob-np-sel [rr|Packet|...]
set ipsec-over-vlink [enable|disable]
config isf-np-queues
    Description: Configure queues of switch port connected to NP6 XAUI on ingress path.
    set cos0 {string}
    set cos1 {string}
    set cos2 {string}
    set cos3 {string}
    set cos4 {string}
    set cos5 {string}
    set cos6 {string}
    set cos7 {string}
end
set lag-out-port-select [disable|enable]
set max-session-timeout {integer}
set mcast-session-accounting [tpe-based|session-based|...]
set napi-break-interval {integer}
config np-queues
    Description: Configure queue assignment on NP7.
    config ethernet-type
        Description: Configure a NP7 QoS Ethernet Type.
        edit <name>
            set queue {integer}
            set type {ether-type}
            set weight {integer}
        next
    end
    config ip-protocol
        Description: Configure a NP7 QoS IP Protocol.
        edit <name>
            set protocol {integer}
            set queue {integer}
            set weight {integer}
        next
    end
    config ip-service
        Description: Configure a NP7 QoS IP Service.
        edit <name>
            set dport {integer}
            set protocol {integer}
            set queue {integer}
            set sport {integer}
            set weight {integer}
        next
    end
    config profile
        Description: Configure a NP7 class profile.
        edit <id>
            set cos0 [queue0|queue1|...]
            set cos1 [queue0|queue1|...]

```

```
set cos2 [queue0|queue1|...]
set cos3 [queue0|queue1|...]
set cos4 [queue0|queue1|...]
set cos5 [queue0|queue1|...]
set cos6 [queue0|queue1|...]
set cos7 [queue0|queue1|...]
set dscp0 [queue0|queue1|...]
set dscp1 [queue0|queue1|...]
set dscp10 [queue0|queue1|...]
set dscp11 [queue0|queue1|...]
set dscp12 [queue0|queue1|...]
set dscp13 [queue0|queue1|...]
set dscp14 [queue0|queue1|...]
set dscp15 [queue0|queue1|...]
set dscp16 [queue0|queue1|...]
set dscp17 [queue0|queue1|...]
set dscp18 [queue0|queue1|...]
set dscp19 [queue0|queue1|...]
set dscp2 [queue0|queue1|...]
set dscp20 [queue0|queue1|...]
set dscp21 [queue0|queue1|...]
set dscp22 [queue0|queue1|...]
set dscp23 [queue0|queue1|...]
set dscp24 [queue0|queue1|...]
set dscp25 [queue0|queue1|...]
set dscp26 [queue0|queue1|...]
set dscp27 [queue0|queue1|...]
set dscp28 [queue0|queue1|...]
set dscp29 [queue0|queue1|...]
set dscp3 [queue0|queue1|...]
set dscp30 [queue0|queue1|...]
set dscp31 [queue0|queue1|...]
set dscp32 [queue0|queue1|...]
set dscp33 [queue0|queue1|...]
set dscp34 [queue0|queue1|...]
set dscp35 [queue0|queue1|...]
set dscp36 [queue0|queue1|...]
set dscp37 [queue0|queue1|...]
set dscp38 [queue0|queue1|...]
set dscp39 [queue0|queue1|...]
set dscp4 [queue0|queue1|...]
set dscp40 [queue0|queue1|...]
set dscp41 [queue0|queue1|...]
set dscp42 [queue0|queue1|...]
set dscp43 [queue0|queue1|...]
set dscp44 [queue0|queue1|...]
set dscp45 [queue0|queue1|...]
set dscp46 [queue0|queue1|...]
set dscp47 [queue0|queue1|...]
set dscp48 [queue0|queue1|...]
set dscp49 [queue0|queue1|...]
set dscp5 [queue0|queue1|...]
```

```

        set dscp50 [queue0|queue1|...]
        set dscp51 [queue0|queue1|...]
        set dscp52 [queue0|queue1|...]
        set dscp53 [queue0|queue1|...]
        set dscp54 [queue0|queue1|...]
        set dscp55 [queue0|queue1|...]
        set dscp56 [queue0|queue1|...]
        set dscp57 [queue0|queue1|...]
        set dscp58 [queue0|queue1|...]
        set dscp59 [queue0|queue1|...]
        set dscp6 [queue0|queue1|...]
        set dscp60 [queue0|queue1|...]
        set dscp61 [queue0|queue1|...]
        set dscp62 [queue0|queue1|...]
        set dscp63 [queue0|queue1|...]
        set dscp7 [queue0|queue1|...]
        set dscp8 [queue0|queue1|...]
        set dscp9 [queue0|queue1|...]
        set type [cos|dscp]
        set weight {integer}
    next
end
config scheduler
    Description: Configure a NP7 QoS Scheduler.
    edit <name>
        set mode [none|priority|...]
    next
end
end
set np6-cps-optimization-mode [enable|disable]
set npu-group-effective-scope {integer}
set per-policy-accounting [disable|enable]
set per-session-accounting [traffic-log-only|disable|...]
set policy-offload-level [disable|dos-offload]
config port-cpu-map
    Description: Configure NPU interface to CPU core mapping.
    edit <interface>
        set cpu-core {string}
    next
end
config port-npu-map
    Description: Configure port to NPU group mapping.
    edit <interface>
        set npu-group-index {integer}
    next
end
config port-path-option
    Description: Configure port using NPU or Intel-NIC.
    set ports-using-npu <interface-name1>, <interface-name2>, ...
end
config priority-protocol
    Description: Configure NPU priority protocol.

```

```

        set bfd [enable|disable]
        set bgp [enable|disable]
        set slbc [enable|disable]
    end
    set qos-mode [disable|priority|...]
    set qtm-buf-mode [6ch|4ch]
    set rdp-offload [enable|disable]
    set recover-np6-link [enable|disable]
    set session-acct-interval {integer}
    set session-denied-offload [disable|enable]
    set shaping-stats [disable|enable]
    set split-ipsec-engines [disable|enable]
    set sse-backpressure [enable|disable]
    set strip-clear-text-padding [enable|disable]
    set strip-esp-padding [enable|disable]
    config sw-eh-hash
        Description: Configure switch enhanced hashing.
        set computation [xor16|xor8|...]
        set destination-ip-lower-16 [include|exclude]
        set destination-ip-upper-16 [include|exclude]
        set destination-port [include|exclude]
        set ip-protocol [include|exclude]
        set netmask-length {integer}
        set source-ip-lower-16 [include|exclude]
        set source-ip-upper-16 [include|exclude]
        set source-port [include|exclude]
    end
    set sw-np-bandwidth [0G|2G|...]
    config sw-tr-hash
        Description: Configure switch traditional hashing.
        set draco15 [enable|disable]
        set tcp-udp-port [include|exclude]
    end
    set switch-np-hash [src-ip|dst-ip|...]
    set tunnel-over-vlink [enable|disable]
    set uesp-offload [enable|disable]
    set ull-port-mode [10G|25G]
    set vlan-lookup-cache [enable|disable]
end

```

config system npu

Parameter	Description	Type	Size	Default
capwap-offload *	Enable/disable offloading managed FortiAP and FortiLink CAPWAP sessions.	option	-	enable

Parameter	Description	Type	Size	Default
	Option Description			
	<i>enable</i>	Enable CAPWAP offload.		
	<i>disable</i>	Disable CAPWAP offload.		
dedicated-lacp-queue *	Enable to dedicate one HIF queue for LACP.	option	-	disable
	Option Description			
	<i>enable</i>	Enable dedication of HIF queue #0 for LACP		
	<i>disable</i>	Disable dedication of HIF queue #0 for LACP.		
dedicated-management-affinity *	Affinity setting for management daemons (hexadecimal value up to 256 bits in the format of xxxxxxxxxxxxxxxxx).	string	Maximum length: 79	1
dedicated-management-cpu *	Enable to dedicate one CPU for GUI and CLI connections when NPs are busy.	option	-	disable
	Option Description			
	<i>enable</i>	Enable dedication of CPU #0 for management tasks.		
	<i>disable</i>	Disable dedication of CPU #0 for management tasks.		
default-qos-type *	Set default QoS type.	option	-	shaping
	Option Description			
	<i>policing</i>	QoS type policing.		
	<i>shaping</i>	QoS type shaping.		
	<i>policing-enhanced</i>	Enhanced QoS type policing.		
double-level-mcast-offload *	Enable double level mcast offload.	option	-	disable
	Option Description			
	<i>enable</i>	Enable double level mcast offload.		
	<i>disable</i>	Disable double level mcast offload.		
fastpath *	Enable/disable NP6 offloading (also called fast path).	option	-	enable

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>disable</i>	Disable NP6 offloading (fast path).		
	<i>enable</i>	Enable NP6 offloading (fast path).		
gtp-enhanced-cpu-range *	GTP enhanced CPU range option.	option	-	0
	Option	Description		
	0	Inspect GTPU packets by all CPUs.		
	1	Inspect GTPU packets by Master CPUs.		
	2	Inspect GTPU packets by Slave CPUs.		
gtp-enhanced-mode *	Enable/disable GTP enhanced mode.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable GTP enhanced mode.		
	<i>disable</i>	Disable GTP enhanced mode.		
gtp-support *	Enable/Disable NP7 GTP support	option	-	disable
	Option	Description		
	<i>enable</i>	Enable NP7 GTP support		
	<i>disable</i>	Disable NP7 GTP support		
hash-tbl-spread *	Enable/disable hash table entry spread (default enabled).	option	-	enable
	Option	Description		
	<i>enable</i>	Enable hash table entry spread.		
	<i>disable</i>	Disable hash table entry spread.		
host-shortcut-mode *	Set NP6 host shortcut mode.	option	-	bi-directional
	Option	Description		
	<i>bi-directional</i>	Offload TCP and IP Tunnel sessions in both directions between 10G and 1G interfaces (normal operation).		

Parameter	Description	Type	Size	Default																														
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>host-shortcut</i></td><td>Only offload TCP and IP Tunnel sessions received by 1G interfaces. Select if packets are dropped for offloaded traffic between 10G to 1G interfaces.</td></tr></table>	Option	Description	<i>host-shortcut</i>	Only offload TCP and IP Tunnel sessions received by 1G interfaces. Select if packets are dropped for offloaded traffic between 10G to 1G interfaces.																													
	Option	Description																																
<i>host-shortcut</i>	Only offload TCP and IP Tunnel sessions received by 1G interfaces. Select if packets are dropped for offloaded traffic between 10G to 1G interfaces.																																	
htab-dedi-queue-nr *	Set the number of dedicate queue for hash table messages.	integer	Minimum value: 1 Maximum value: 2	1																														
htab-msg-queue *	Set hash table message queue mode.	option	-	data																														
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>data</i></td><td>Use data queue.</td></tr><tr><td><i>idle</i></td><td>Use idle queue.</td></tr><tr><td><i>dedicated</i></td><td>Use dedicated queue.</td></tr></table>	Option	Description	<i>data</i>	Use data queue.	<i>idle</i>	Use idle queue.	<i>dedicated</i>	Use dedicated queue.																									
	Option	Description																																
	<i>data</i>	Use data queue.																																
	<i>idle</i>	Use idle queue.																																
<i>dedicated</i>	Use dedicated queue.																																	
htx-gtse-quota *	Configure HTX GTSE quota.	option	-	1Gbps																														
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>100Mbps</i></td><td>100Mbps.</td></tr><tr><td><i>200Mbps</i></td><td>200Mbps.</td></tr><tr><td><i>300Mbps</i></td><td>300Mbps.</td></tr><tr><td><i>400Mbps</i></td><td>400Mbps.</td></tr><tr><td><i>500Mbps</i></td><td>500Mbps.</td></tr><tr><td><i>600Mbps</i></td><td>600Mbps.</td></tr><tr><td><i>700Mbps</i></td><td>700Mbps.</td></tr><tr><td><i>800Mbps</i></td><td>800Mbps.</td></tr><tr><td><i>900Mbps</i></td><td>900Mbps.</td></tr><tr><td><i>1Gbps</i></td><td>1Gbps.</td></tr><tr><td><i>2Gbps</i></td><td>2Gbps.</td></tr><tr><td><i>4Gbps</i></td><td>4Gbps.</td></tr><tr><td><i>8Gbps</i></td><td>8Gbps.</td></tr><tr><td><i>10Gbps</i></td><td>10Gbps.</td></tr></table>	Option	Description	<i>100Mbps</i>	100Mbps.	<i>200Mbps</i>	200Mbps.	<i>300Mbps</i>	300Mbps.	<i>400Mbps</i>	400Mbps.	<i>500Mbps</i>	500Mbps.	<i>600Mbps</i>	600Mbps.	<i>700Mbps</i>	700Mbps.	<i>800Mbps</i>	800Mbps.	<i>900Mbps</i>	900Mbps.	<i>1Gbps</i>	1Gbps.	<i>2Gbps</i>	2Gbps.	<i>4Gbps</i>	4Gbps.	<i>8Gbps</i>	8Gbps.	<i>10Gbps</i>	10Gbps.			
	Option	Description																																
	<i>100Mbps</i>	100Mbps.																																
	<i>200Mbps</i>	200Mbps.																																
	<i>300Mbps</i>	300Mbps.																																
	<i>400Mbps</i>	400Mbps.																																
	<i>500Mbps</i>	500Mbps.																																
	<i>600Mbps</i>	600Mbps.																																
	<i>700Mbps</i>	700Mbps.																																
	<i>800Mbps</i>	800Mbps.																																
	<i>900Mbps</i>	900Mbps.																																
	<i>1Gbps</i>	1Gbps.																																
	<i>2Gbps</i>	2Gbps.																																
	<i>4Gbps</i>	4Gbps.																																
	<i>8Gbps</i>	8Gbps.																																
<i>10Gbps</i>	10Gbps.																																	

Parameter	Description	Type	Size	Default						
htx-icmp-csum-chk *	Set HTX icmp csum checking mode.	option	-	drop						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>drop</td><td>Drop bad icmp csum.</td></tr><tr><td>pass</td><td>Pass bad icmp csum.</td></tr></table>	Option	Description	drop	Drop bad icmp csum.	pass	Pass bad icmp csum.			
Option	Description									
drop	Drop bad icmp csum.									
pass	Pass bad icmp csum.									
inbound-dscp-copy-port <interface> *	Physical interfaces that support inbound-dscp-copy. Physical interface name.	string	Maximum length: 15							
intf-shaping-offload *	Enable/disable NPU offload when doing interface-based traffic shaping according to the egress-shaping-profile.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable NPU offload when doing interface-based traffic shaping according to the egress-shaping-profile.</td></tr><tr><td>disable</td><td>Disable NPU offload when doing interface-based traffic shaping according to the egress-shaping-profile.</td></tr></table>	Option	Description	enable	Enable NPU offload when doing interface-based traffic shaping according to the egress-shaping-profile.	disable	Disable NPU offload when doing interface-based traffic shaping according to the egress-shaping-profile.			
Option	Description									
enable	Enable NPU offload when doing interface-based traffic shaping according to the egress-shaping-profile.									
disable	Disable NPU offload when doing interface-based traffic shaping according to the egress-shaping-profile.									
ip-fragment-offload *	Enable/disable NP7 NPU IP fragment offload.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Disable IP fragment offload.</td></tr><tr><td>enable</td><td>Enable IP fragment offload.</td></tr></table>	Option	Description	disable	Disable IP fragment offload.	enable	Enable IP fragment offload.			
Option	Description									
disable	Disable IP fragment offload.									
enable	Enable IP fragment offload.									
iph-rsvd-recksum *	Enable/disable IP checksum re-calculation for packets with iph.reserved bit set.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable IP checksum re-calculation for packets with iph.reserved bit set.</td></tr><tr><td>disable</td><td>Disable IP checksum re-calculation for packets with iph.reserved bit set.</td></tr></table>	Option	Description	enable	Enable IP checksum re-calculation for packets with iph.reserved bit set.	disable	Disable IP checksum re-calculation for packets with iph.reserved bit set.			
Option	Description									
enable	Enable IP checksum re-calculation for packets with iph.reserved bit set.									
disable	Disable IP checksum re-calculation for packets with iph.reserved bit set.									
ipsec-dec-subengine-mask *	IPsec decryption subengine mask (0x1 - 0xff, default 0xff).	user	Not Specified							
ipsec-enc-subengine-mask *	IPsec encryption subengine mask (0x1 - 0xff, default 0xff).	user	Not Specified							

Parameter	Description	Type	Size	Default								
ipsec-inbound-cache *	Enable/disable IPsec inbound cache for anti-replay.	option	-	enable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable inbound cache always.</td></tr><tr><td>disable</td><td>Disable inbound cache when IPsec anti-replay is on.</td></tr></table>	Option	Description	enable	Enable inbound cache always.	disable	Disable inbound cache when IPsec anti-replay is on.					
Option	Description											
enable	Enable inbound cache always.											
disable	Disable inbound cache when IPsec anti-replay is on.											
ipsec-mtu-override *	Enable/disable NP6 IPsec MTU override.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Disable NP6 IPsec MTU override.</td></tr><tr><td>enable</td><td>Enable NP6 IPsec MTU override.</td></tr></table>	Option	Description	disable	Disable NP6 IPsec MTU override.	enable	Enable NP6 IPsec MTU override.					
Option	Description											
disable	Disable NP6 IPsec MTU override.											
enable	Enable NP6 IPsec MTU override.											
ipsec-ob-np-sel *	IPsec NP selection for OB SA offloading.	option	-	rr								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>rr</td><td>Round Robin.</td></tr><tr><td>Packet</td><td>NPU of the first packet.</td></tr><tr><td>Hash</td><td>Hash.</td></tr></table>	Option	Description	rr	Round Robin.	Packet	NPU of the first packet.	Hash	Hash.			
Option	Description											
rr	Round Robin.											
Packet	NPU of the first packet.											
Hash	Hash.											
ipsec-over-vlink *	Enable/disable IPsec over vlink.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable IPSEC over vlink.</td></tr><tr><td>disable</td><td>Disable IPSEC over vlink.</td></tr></table>	Option	Description	enable	Enable IPSEC over vlink.	disable	Disable IPSEC over vlink.					
Option	Description											
enable	Enable IPSEC over vlink.											
disable	Disable IPSEC over vlink.											
lag-out-port-select *	Enable/disable LAG outgoing port selection based on incoming traffic port.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Disable LAG outgoing trunk in switch.</td></tr><tr><td>enable</td><td>Enable LAG outgoing trunk in switch.</td></tr></table>	Option	Description	disable	Disable LAG outgoing trunk in switch.	enable	Enable LAG outgoing trunk in switch.					
Option	Description											
disable	Disable LAG outgoing trunk in switch.											
enable	Enable LAG outgoing trunk in switch.											
max-session-timeout *	Maximum time interval for refreshing NPU-offloaded sessions (10 - 1000 sec, default 40 sec).	integer	Minimum value: 10 Maximum value: 1000	40								

Parameter	Description	Type	Size	Default								
mcast-session-accounting *	Enable/disable traffic accounting for each multicast session through TAE counter.	option	-	tpe-based								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>tpe-based</td><td>Enable TPE-based multicast session accounting.</td></tr><tr><td>session-based</td><td>Enable session-based multicast session accounting.</td></tr><tr><td>disable</td><td>Disable multicast session accounting.</td></tr></table>	Option	Description	tpe-based	Enable TPE-based multicast session accounting.	session-based	Enable session-based multicast session accounting.	disable	Disable multicast session accounting.			
Option	Description											
tpe-based	Enable TPE-based multicast session accounting.											
session-based	Enable session-based multicast session accounting.											
disable	Disable multicast session accounting.											
napi-break-interval *	NAPI break interval (default 0).	integer	Minimum value: 0 Maximum value: 65535	0								
np6-cps-optimization-mode *	Enable/disable NP6 connection per second (CPS) optimization mode.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable NP6 connection per second (CPS) optimization mode.</td></tr><tr><td>disable</td><td>Disable NP6 connection per second (CPS) optimization mode.</td></tr></table>	Option	Description	enable	Enable NP6 connection per second (CPS) optimization mode.	disable	Disable NP6 connection per second (CPS) optimization mode.					
Option	Description											
enable	Enable NP6 connection per second (CPS) optimization mode.											
disable	Disable NP6 connection per second (CPS) optimization mode.											
npu-group-effective-scope *	npu-group-effective-scope defines under which npu-group cmds such as list/purge will be executed. Default scope is for all four HS-ok groups. (0-3, default = 255).	integer	Minimum value: 0 Maximum value: 255	255								
per-policy-accounting *	Set per-policy accounting.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Disable per-policy hit count.</td></tr><tr><td>enable</td><td>Enable per-policy hit count</td></tr></table>	Option	Description	disable	Disable per-policy hit count.	enable	Enable per-policy hit count					
Option	Description											
disable	Disable per-policy hit count.											
enable	Enable per-policy hit count											
per-session-accounting *	Set per-session accounting.	option	-	traffic-log-only								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>traffic-log-only</td><td>Per-session accounting only for sessions with traffic logging</td></tr><tr><td>disable</td><td>Disable per-session accounting.</td></tr><tr><td>enable</td><td>Per-session accounting for all sessions.</td></tr></table>	Option	Description	traffic-log-only	Per-session accounting only for sessions with traffic logging	disable	Disable per-session accounting.	enable	Per-session accounting for all sessions.			
Option	Description											
traffic-log-only	Per-session accounting only for sessions with traffic logging											
disable	Disable per-session accounting.											
enable	Per-session accounting for all sessions.											

Parameter	Description	Type	Size	Default								
policy-offload-level *	Configure firewall policy offload level.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Disable policy offloading</td></tr><tr><td>dos-offload</td><td>Only enable DoS policy offloading</td></tr></table>	Option	Description	disable	Disable policy offloading	dos-offload	Only enable DoS policy offloading					
Option	Description											
disable	Disable policy offloading											
dos-offload	Only enable DoS policy offloading											
qos-mode *	QoS mode on switch and NP.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Disable QoS on switch and NP.</td></tr><tr><td>priority</td><td>Priority based.</td></tr><tr><td>round-robin</td><td>Round Robin Scheduler.</td></tr></table>	Option	Description	disable	Disable QoS on switch and NP.	priority	Priority based.	round-robin	Round Robin Scheduler.			
Option	Description											
disable	Disable QoS on switch and NP.											
priority	Priority based.											
round-robin	Round Robin Scheduler.											
qtm-buf-mode *	QTM channel configuration for packet buffer.	option	-	6ch								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>6ch</td><td>6 DRAM channels for packet buffer.</td></tr><tr><td>4ch</td><td>4 DRAM channels for packet buffer.</td></tr></table>	Option	Description	6ch	6 DRAM channels for packet buffer.	4ch	4 DRAM channels for packet buffer.					
Option	Description											
6ch	6 DRAM channels for packet buffer.											
4ch	4 DRAM channels for packet buffer.											
rdp-offload *	Enable/disable RDP offload.	option	-	enable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable reliable datagram protocol traffic offload.</td></tr><tr><td>disable</td><td>Disable reliable datagram protocol traffic offload.</td></tr></table>	Option	Description	enable	Enable reliable datagram protocol traffic offload.	disable	Disable reliable datagram protocol traffic offload.					
Option	Description											
enable	Enable reliable datagram protocol traffic offload.											
disable	Disable reliable datagram protocol traffic offload.											
recover-np6-link *	Enable/disable internal link failure check and recovery after boot up.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable internal link failure check and recovery after boot up.</td></tr><tr><td>disable</td><td>Disable internal link failure check and recovery after boot up.</td></tr></table>	Option	Description	enable	Enable internal link failure check and recovery after boot up.	disable	Disable internal link failure check and recovery after boot up.					
Option	Description											
enable	Enable internal link failure check and recovery after boot up.											
disable	Disable internal link failure check and recovery after boot up.											
session-acct-interval *	Session accounting update interval (1 - 10 sec, default 5 sec).	integer	Minimum value: 1 Maximum value: 10	5								
session-denied-offload *	Enable/disable offloading of denied sessions. Requires ses-denied-traffic to be set.	option	-	disable								

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>disable</i>	Disable offloading of denied sessions.		
	<i>enable</i>	Enable offloading of denied sessions.		
shaping-stats *	Enable/disable NP7 traffic shaping statistics (default = disable).	option	-	disable
	Option	Description		
	<i>disable</i>	Disable NP7 traffic shaping statistics.		
	<i>enable</i>	Enable NP7 traffic shaping statistics.		
split-ipsec-engines *	Enable/disable Split IPsec Engines.	option	-	disable
	Option	Description		
	<i>disable</i>	Disable Split IPsec Engines.		
	<i>enable</i>	Enable Split IPsec Engines.		
sse-backpressure *	Enable/disable SSE backpressure.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable SSE backpressure.		
	<i>disable</i>	Disable SSE backpressure.		
strip-clear-text-padding *	Enable/disable stripping clear text padding.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable stripping clear text padding.		
	<i>disable</i>	Disable stripping clear text padding.		
strip-esp-padding *	Enable/disable stripping ESP padding.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable stripping ESP padding.		
	<i>disable</i>	Disable stripping ESP padding.		
sw-np-bandwidth *	Bandwidth from switch to NP.	option	-	0G

Parameter	Description	Type	Size	Default																		
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>0G</td><td>Default value. No bandwidth control.</td></tr><tr><td>2G</td><td>2Gbps.</td></tr><tr><td>4G</td><td>4Gbps.</td></tr><tr><td>5G</td><td>5Gbps.</td></tr><tr><td>6G</td><td>6Gbps.</td></tr><tr><td>7G</td><td>7Gbps.</td></tr><tr><td>8G</td><td>8Gbps.</td></tr><tr><td>9G</td><td>9Gbps.</td></tr></table>	Option	Description	0G	Default value. No bandwidth control.	2G	2Gbps.	4G	4Gbps.	5G	5Gbps.	6G	6Gbps.	7G	7Gbps.	8G	8Gbps.	9G	9Gbps.			
	Option	Description																				
	0G	Default value. No bandwidth control.																				
	2G	2Gbps.																				
	4G	4Gbps.																				
	5G	5Gbps.																				
	6G	6Gbps.																				
	7G	7Gbps.																				
	8G	8Gbps.																				
9G	9Gbps.																					
switch-np-hash *	Switch-NP trunk port selection Criteria.	option	-	src-dst-ip																		
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>src-ip</td><td>Source IP address.</td></tr><tr><td>dst-ip</td><td>Destination IP address.</td></tr><tr><td>src-dst-ip</td><td>Source+dest IP address.</td></tr></table>	Option	Description	src-ip	Source IP address.	dst-ip	Destination IP address.	src-dst-ip	Source+dest IP address.													
	Option	Description																				
	src-ip	Source IP address.																				
	dst-ip	Destination IP address.																				
src-dst-ip	Source+dest IP address.																					
tunnel-over-vlink *	Enable/disable selection of which NP6 chip the tunnel uses (default = enable).	option	-	enable																		
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Use the bundled NP6 chip for tunnels.</td></tr><tr><td>disable</td><td>Use the ingress NP6 chip for tunnels.</td></tr></table>	Option	Description	enable	Use the bundled NP6 chip for tunnels.	disable	Use the ingress NP6 chip for tunnels.															
	Option	Description																				
	enable	Use the bundled NP6 chip for tunnels.																				
disable	Use the ingress NP6 chip for tunnels.																					
uesp-offload *	Enable/disable UDP-encapsulated ESP offload (default = disable).	option	-	disable																		
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable UDP-encapsulated ESP traffic offload.</td></tr><tr><td>disable</td><td>Disable UDP-encapsulated ESP traffic offload.</td></tr></table>	Option	Description	enable	Enable UDP-encapsulated ESP traffic offload.	disable	Disable UDP-encapsulated ESP traffic offload.															
	Option	Description																				
	enable	Enable UDP-encapsulated ESP traffic offload.																				
disable	Disable UDP-encapsulated ESP traffic offload.																					
ull-port-mode *	Set ULL port's speed to 10G/25G (default 10G).	option	-	10G																		
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>10G</td><td>10G speed setting for ULL ports.</td></tr><tr><td>25G</td><td>25G speed setting for ULL ports.</td></tr></table>	Option	Description	10G	10G speed setting for ULL ports.	25G	25G speed setting for ULL ports.															
	Option	Description																				
	10G	10G speed setting for ULL ports.																				
25G	25G speed setting for ULL ports.																					

Parameter	Description	Type	Size	Default
vlan-lookup-cache *	Enable/disable vlan lookup cache (default enabled).	option	-	enable
	Option	Description		
	enable	Enable VLAN lookup cache.		
	disable	Disable VLAN lookup cache.		

* This parameter may not exist in some models.

config dos-options

Parameter	Description	Type	Size	Default						
npu-dos-meter-mode	Set DoS meter NPU offloading mode.	option	-	global						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>global</i></td><td>Install DoS meter to all NPs.</td></tr><tr><td><i>local</i></td><td>Install DoS meter only to the NP assigned to the traffic.</td></tr></table>	Option	Description	<i>global</i>	Install DoS meter to all NPs.	<i>local</i>	Install DoS meter only to the NP assigned to the traffic.			
Option	Description									
<i>global</i>	Install DoS meter to all NPs.									
<i>local</i>	Install DoS meter only to the NP assigned to the traffic.									
npu-dos-tpe-mode	Enable/disable insertion of DoS meter ID to session table.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable insertion of DoS meter ID to session table.</td></tr><tr><td><i>disable</i></td><td>Disable insertion of DoS meter ID to session table.</td></tr></table>	Option	Description	<i>enable</i>	Enable insertion of DoS meter ID to session table.	<i>disable</i>	Disable insertion of DoS meter ID to session table.			
Option	Description									
<i>enable</i>	Enable insertion of DoS meter ID to session table.									
<i>disable</i>	Disable insertion of DoS meter ID to session table.									

config dsw-dts-profile

Parameter	Description	Type	Size	Default
action	Set NPU DSW DTS profile action.	option	-	wait
	Option	Description		
	<i>wait</i>	DSW DTS profile WAIT indefinitely.		
	<i>drop</i>	DSW DTS profile DROP immediately.		
	<i>drop_tmr_0</i>	DSW DTS profile DROP after interval #0 time-out.		
	<i>drop_tmr_1</i>	DSW DTS profile DROP after interval #1 time-out.		
	<i>enque</i>	DSW DTS profile ENQUE immediately.		

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>enqueue_0</i>	DSW DTS profile ENQUE after interval #0 time-out.		
	<i>enqueue_1</i>	DSW DTS profile ENQUE after interval #1 time-out.		
min-limit	Set NPU DSW DTS profile min-limit.	integer	Minimum value: 32 Maximum value: 2048	0
profile-id	Set NPU DSW DTS profile profile id.	integer	Minimum value: 1 Maximum value: 32	0
step	Set NPU DSW DTS profile step.	integer	Minimum value: 0 Maximum value: 64	0

config dsw-queue-dts-profile

Parameter	Description	Type	Size	Default
iport	Set NPU DSW DTS in port.	option	-	eif0
	Option	Description		
	<i>eif0</i>	DSW IPORT EIF0.		
	<i>eif1</i>	DSW IPORT EIF1.		
	<i>eif2</i>	DSW IPORT EIF2.		
	<i>eif3</i>	DSW IPORT EIF3.		
	<i>eif4</i>	DSW IPORT EIF4.		
	<i>eif5</i>	DSW IPORT EIF5.		
	<i>eif6</i>	DSW IPORT EIF6.		
	<i>eif7</i>	DSW IPORT EIF7.		
	<i>htx0</i>	DSW IPORT HTX0.		
	<i>htx1</i>	DSW IPORT HTX1.		
	<i>sse0</i>	DSW IPORT SSE0.		
	<i>sse1</i>	DSW IPORT SSE1.		

Parameter	Description	Type	Size	Default																																								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>sse2</i></td><td>DSW IPORT SSE2.</td></tr><tr><td><i>sse3</i></td><td>DSW IPORT SSE3.</td></tr><tr><td><i>rlt</i></td><td>DSW IPORT RLT.</td></tr><tr><td><i>dfr</i></td><td>DSW IPORT DFR.</td></tr><tr><td><i>ipseci</i></td><td>DSW IPORT IPSECI.</td></tr><tr><td><i>ipseco</i></td><td>DSW IPORT IPSECO.</td></tr><tr><td><i>ipti</i></td><td>DSW IPORT IPTI.</td></tr><tr><td><i>ipto</i></td><td>DSW IPORT IPTO.</td></tr><tr><td><i>vep0</i></td><td>DSW IPORT VEP0.</td></tr><tr><td><i>vep2</i></td><td>DSW IPORT VEP2.</td></tr><tr><td><i>vep4</i></td><td>DSW IPORT VEP4.</td></tr><tr><td><i>vep6</i></td><td>DSW IPORT VEP6.</td></tr><tr><td><i>ivs</i></td><td>DSW IPORT IVS.</td></tr><tr><td><i>l2ti1</i></td><td>DSW IPORT L2TI1.</td></tr><tr><td><i>l2to</i></td><td>DSW IPORT L2TO.</td></tr><tr><td><i>l2ti0</i></td><td>DSW IPORT L2TI0.</td></tr><tr><td><i>ple</i></td><td>DSW IPORT PLE.</td></tr><tr><td><i>spath</i></td><td>DSW IPORT SPATH.</td></tr><tr><td><i>qtm</i></td><td>DSW IPORT QTM.</td></tr></table>	Option	Description	<i>sse2</i>	DSW IPORT SSE2.	<i>sse3</i>	DSW IPORT SSE3.	<i>rlt</i>	DSW IPORT RLT.	<i>dfr</i>	DSW IPORT DFR.	<i>ipseci</i>	DSW IPORT IPSECI.	<i>ipseco</i>	DSW IPORT IPSECO.	<i>ipti</i>	DSW IPORT IPTI.	<i>ipto</i>	DSW IPORT IPTO.	<i>vep0</i>	DSW IPORT VEP0.	<i>vep2</i>	DSW IPORT VEP2.	<i>vep4</i>	DSW IPORT VEP4.	<i>vep6</i>	DSW IPORT VEP6.	<i>ivs</i>	DSW IPORT IVS.	<i>l2ti1</i>	DSW IPORT L2TI1.	<i>l2to</i>	DSW IPORT L2TO.	<i>l2ti0</i>	DSW IPORT L2TI0.	<i>ple</i>	DSW IPORT PLE.	<i>spath</i>	DSW IPORT SPATH.	<i>qtm</i>	DSW IPORT QTM.			
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	<i>ivs</i>	DSW IPORT IVS.																																										
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	<i>spath</i>	DSW IPORT SPATH.																																										
<i>qtm</i>	DSW IPORT QTM.																																											
name	Name.	string	Maximum length: 35																																									
oport	Set NPU DSW DTS out port.	option	-	eif0																																								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>eif0</i></td><td>DSW OPORT EIF0.</td></tr><tr><td><i>eif1</i></td><td>DSW OPORT EIF1.</td></tr><tr><td><i>eif2</i></td><td>DSW OPORT EIF2.</td></tr><tr><td><i>eif3</i></td><td>DSW OPORT EIF3.</td></tr><tr><td><i>eif4</i></td><td>DSW OPORT EIF4.</td></tr></table>	Option	Description	<i>eif0</i>	DSW OPORT EIF0.	<i>eif1</i>	DSW OPORT EIF1.	<i>eif2</i>	DSW OPORT EIF2.	<i>eif3</i>	DSW OPORT EIF3.	<i>eif4</i>	DSW OPORT EIF4.																															
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<i>eif4</i>	DSW OPORT EIF4.																																											

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>elf5</i>	DSW OPORT EIF5.		
	<i>elf6</i>	DSW OPORT EIF6.		
	<i>elf7</i>	DSW OPORT EIF7.		
	<i>hrx</i>	DSW OPORT HRX.		
	<i>sse0</i>	DSW OPORT SSE0.		
	<i>sse1</i>	DSW OPORT SSE1.		
	<i>sse2</i>	DSW OPORT SSE2.		
	<i>sse3</i>	DSW OPORT SSE3.		
	<i>rlt</i>	DSW OPORT RLT.		
	<i>dfr</i>	DSW OPORT DFR.		
	<i>ipseci</i>	DSW OPORT IPSECI.		
	<i>ipseco</i>	DSW OPORT IPSECO.		
	<i>ipti</i>	DSW OPORT IPTI.		
	<i>ipto</i>	DSW OPORT IPTO.		
	<i>vep0</i>	DSW OPORT VEP0.		
	<i>vep2</i>	DSW OPORT VEP2.		
	<i>vep4</i>	DSW OPORT VEP4.		
	<i>vep6</i>	DSW OPORT VEP6.		
	<i>ivs</i>	DSW OPORT IVS.		
	<i>l2ti1</i>	DSW OPORT L2TI1.		
	<i>l2to</i>	DSW OPORT L2TO.		
	<i>l2ti0</i>	DSW OPORT L2TI0.		
	<i>ple</i>	DSW OPORT PLE.		
	<i>sync</i>	DSW OPORT SYNK.		
	<i>nss</i>	DSW OPORT NSS.		
	<i>tsk</i>	DSW OPORT TSK.		
	<i>qtm</i>	DSW OPORT QTM.		

Parameter	Description	Type	Size	Default
profile-id	Set NPU DSW DTS profile ID.	integer	Minimum value: 1 Maximum value: 32	0
queue-select	Set NPU DSW DTS queue ID select (0 - reset to default).	integer	Minimum value: 0 Maximum value: 4095	0

config fp-anomaly

Parameter	Description	Type	Size	Default
icmp-csum-err	Invalid IPv4 ICMP checksum anomalies.	option	-	drop
	Option	Description		
	drop	Drop IPv4 invalid ICMP checksum.		
	trap-to-host	Forward IPv4 invalid ICMP checksum to main CPU for processing.		
icmp-frag *	Layer 3 fragmented packets that could be part of layer 4 ICMP anomalies.	option	-	allow
	Option	Description		
	allow	Allow L3 fragment packet with L4 protocol as ICMP attack to pass.		
	drop	Drop L3 fragment packet with L4 protocol as ICMP attack.		
	trap-to-host	Forward L3 fragment packet with L4 protocol as ICMP attack to FortiOS.		
icmp-land *	ICMP land anomalies.	option	-	trap-to-host
	Option	Description		
	allow	Allow ICMP land attack to pass.		
	drop	Drop ICMP land attack.		
	trap-to-host	Forward ICMP land attack to FortiOS.		
ipv4-csum-err	Invalid IPv4 IP checksum anomalies.	option	-	drop
	Option	Description		
	drop	Drop IPv4 invalid IP checksum.		
	trap-to-host	Forward IPv4 invalid IP checksum to main CPU for processing.		

Parameter	Description	Type	Size	Default								
ipv4-land *	Land anomalies.	option	-	trap-to-host								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>allow</i></td><td>Allow IPv4 land attack to pass.</td></tr><tr><td><i>drop</i></td><td>Drop IPv4 land attack.</td></tr><tr><td><i>trap-to-host</i></td><td>Forward IPv4 land attack to FortiOS.</td></tr></table>	Option	Description	<i>allow</i>	Allow IPv4 land attack to pass.	<i>drop</i>	Drop IPv4 land attack.	<i>trap-to-host</i>	Forward IPv4 land attack to FortiOS.			
Option	Description											
<i>allow</i>	Allow IPv4 land attack to pass.											
<i>drop</i>	Drop IPv4 land attack.											
<i>trap-to-host</i>	Forward IPv4 land attack to FortiOS.											
ipv4-optlsrr *	Loose source record route option anomalies.	option	-	trap-to-host								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>allow</i></td><td>Allow IPv4 with loose source record route option to pass.</td></tr><tr><td><i>drop</i></td><td>Drop IPv4 with loose source record route option.</td></tr><tr><td><i>trap-to-host</i></td><td>Forward IPv4 with loose source record route option to FortiOS.</td></tr></table>	Option	Description	<i>allow</i>	Allow IPv4 with loose source record route option to pass.	<i>drop</i>	Drop IPv4 with loose source record route option.	<i>trap-to-host</i>	Forward IPv4 with loose source record route option to FortiOS.			
Option	Description											
<i>allow</i>	Allow IPv4 with loose source record route option to pass.											
<i>drop</i>	Drop IPv4 with loose source record route option.											
<i>trap-to-host</i>	Forward IPv4 with loose source record route option to FortiOS.											
ipv4-optrr *	Record route option anomalies.	option	-	trap-to-host								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>allow</i></td><td>Allow IPv4 with record route option to pass.</td></tr><tr><td><i>drop</i></td><td>Drop IPv4 with record route option.</td></tr><tr><td><i>trap-to-host</i></td><td>Forward IPv4 with record route option to FortiOS.</td></tr></table>	Option	Description	<i>allow</i>	Allow IPv4 with record route option to pass.	<i>drop</i>	Drop IPv4 with record route option.	<i>trap-to-host</i>	Forward IPv4 with record route option to FortiOS.			
Option	Description											
<i>allow</i>	Allow IPv4 with record route option to pass.											
<i>drop</i>	Drop IPv4 with record route option.											
<i>trap-to-host</i>	Forward IPv4 with record route option to FortiOS.											
ipv4-optsecurity *	Security option anomalies.	option	-	trap-to-host								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>allow</i></td><td>Allow IPv4 with security option to pass.</td></tr><tr><td><i>drop</i></td><td>Drop IPv4 with security option.</td></tr><tr><td><i>trap-to-host</i></td><td>Forward IPv4 with security option to FortiOS.</td></tr></table>	Option	Description	<i>allow</i>	Allow IPv4 with security option to pass.	<i>drop</i>	Drop IPv4 with security option.	<i>trap-to-host</i>	Forward IPv4 with security option to FortiOS.			
Option	Description											
<i>allow</i>	Allow IPv4 with security option to pass.											
<i>drop</i>	Drop IPv4 with security option.											
<i>trap-to-host</i>	Forward IPv4 with security option to FortiOS.											
ipv4-optssrr *	Strict source record route option anomalies.	option	-	trap-to-host								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>allow</i></td><td>Allow IPv4 with strict source record route option to pass.</td></tr><tr><td><i>drop</i></td><td>Drop IPv4 with strict source record route option.</td></tr><tr><td><i>trap-to-host</i></td><td>Forward IPv4 with strict source record route option to FortiOS.</td></tr></table>	Option	Description	<i>allow</i>	Allow IPv4 with strict source record route option to pass.	<i>drop</i>	Drop IPv4 with strict source record route option.	<i>trap-to-host</i>	Forward IPv4 with strict source record route option to FortiOS.			
Option	Description											
<i>allow</i>	Allow IPv4 with strict source record route option to pass.											
<i>drop</i>	Drop IPv4 with strict source record route option.											
<i>trap-to-host</i>	Forward IPv4 with strict source record route option to FortiOS.											

Parameter	Description	Type	Size	Default								
ipv4-optstream *	Stream option anomalies.	option	-	trap-to-host								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>allow</td><td>Allow IPv4 with stream option to pass.</td></tr><tr><td>drop</td><td>Drop IPv4 with stream option.</td></tr><tr><td>trap-to-host</td><td>Forward IPv4 with stream option to FortiOS.</td></tr></table>	Option	Description	allow	Allow IPv4 with stream option to pass.	drop	Drop IPv4 with stream option.	trap-to-host	Forward IPv4 with stream option to FortiOS.			
Option	Description											
allow	Allow IPv4 with stream option to pass.											
drop	Drop IPv4 with stream option.											
trap-to-host	Forward IPv4 with stream option to FortiOS.											
ipv4-opttimestamp *	Timestamp option anomalies.	option	-	trap-to-host								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>allow</td><td>Allow IPv4 with timestamp option to pass.</td></tr><tr><td>drop</td><td>Drop IPv4 with timestamp option.</td></tr><tr><td>trap-to-host</td><td>Forward IPv4 with timestamp option to FortiOS.</td></tr></table>	Option	Description	allow	Allow IPv4 with timestamp option to pass.	drop	Drop IPv4 with timestamp option.	trap-to-host	Forward IPv4 with timestamp option to FortiOS.			
Option	Description											
allow	Allow IPv4 with timestamp option to pass.											
drop	Drop IPv4 with timestamp option.											
trap-to-host	Forward IPv4 with timestamp option to FortiOS.											
ipv4-proto-err *	Invalid layer 4 protocol anomalies.	option	-	trap-to-host								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>allow</td><td>Allow IPv4 invalid L4 protocol to pass.</td></tr><tr><td>drop</td><td>Drop IPv4 invalid L4 protocol.</td></tr><tr><td>trap-to-host</td><td>Forward IPv4 invalid L4 protocol to FortiOS.</td></tr></table>	Option	Description	allow	Allow IPv4 invalid L4 protocol to pass.	drop	Drop IPv4 invalid L4 protocol.	trap-to-host	Forward IPv4 invalid L4 protocol to FortiOS.			
Option	Description											
allow	Allow IPv4 invalid L4 protocol to pass.											
drop	Drop IPv4 invalid L4 protocol.											
trap-to-host	Forward IPv4 invalid L4 protocol to FortiOS.											
ipv4-unknopt *	Unknown option anomalies.	option	-	trap-to-host								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>allow</td><td>Allow IPv4 with unknown options to pass.</td></tr><tr><td>drop</td><td>Drop IPv4 with unknown options.</td></tr><tr><td>trap-to-host</td><td>Forward IPv4 with unknown options to FortiOS.</td></tr></table>	Option	Description	allow	Allow IPv4 with unknown options to pass.	drop	Drop IPv4 with unknown options.	trap-to-host	Forward IPv4 with unknown options to FortiOS.			
Option	Description											
allow	Allow IPv4 with unknown options to pass.											
drop	Drop IPv4 with unknown options.											
trap-to-host	Forward IPv4 with unknown options to FortiOS.											
ipv6-daddr-err *	Destination address as unspecified or loopback address anomalies.	option	-	trap-to-host								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>allow</td><td>Allow IPv6 with destination address as unspecified or loopback address to pass.</td></tr><tr><td>drop</td><td>Drop IPv6 with destination address as unspecified or loopback address.</td></tr></table>	Option	Description	allow	Allow IPv6 with destination address as unspecified or loopback address to pass.	drop	Drop IPv6 with destination address as unspecified or loopback address.					
Option	Description											
allow	Allow IPv6 with destination address as unspecified or loopback address to pass.											
drop	Drop IPv6 with destination address as unspecified or loopback address.											

Parameter	Description	Type	Size	Default
	Option Description			
	<i>trap-to-host</i>	Forward IPv6 with destination address as unspecified or loopback address to FortiOS.		
ipv6-land *	Land anomalies.	option	-	trap-to-host
	Option Description			
	<i>allow</i>	Allow IPv6 land attack to pass.		
	<i>drop</i>	Drop IPv6 land attack.		
	<i>trap-to-host</i>	Forward IPv6 land attack to FortiOS.		
ipv6-optendpid *	End point identification anomalies.	option	-	trap-to-host
	Option Description			
	<i>allow</i>	Allow IPv6 with end point identification option to pass.		
	<i>drop</i>	Drop IPv6 with end point identification option.		
	<i>trap-to-host</i>	Forward IPv6 with end point identification option to FortiOS.		
ipv6-opthomeaddr *	Home address option anomalies.	option	-	trap-to-host
	Option Description			
	<i>allow</i>	Allow IPv6 with home address option to pass.		
	<i>drop</i>	Drop IPv6 with home address option.		
	<i>trap-to-host</i>	Forward IPv6 with home address option to FortiOS.		
ipv6-optinvld *	Invalid option anomalies.	option	-	trap-to-host
	Option Description			
	<i>allow</i>	Allow IPv6 with invalid option to pass.		
	<i>drop</i>	Drop IPv6 with invalid option.		
	<i>trap-to-host</i>	Forward IPv6 with invalid option to FortiOS.		
ipv6-optjumbo *	Jumbo options anomalies.	option	-	trap-to-host

Parameter	Description	Type	Size	Default
	Option Description			
	<i>allow</i>	Allow IPv6 with jumbo option to pass.		
	<i>drop</i>	Drop IPv6 with jumbo option.		
	<i>trap-to-host</i>	Forward IPv6 with jumbo option to FortiOS.		
ipv6-optnsap *	Network service access point address option anomalies.	option	-	trap-to-host
	Option Description			
	<i>allow</i>	Allow IPv6 with network service access point address option to pass.		
	<i>drop</i>	Drop IPv6 with network service access point address option.		
	<i>trap-to-host</i>	Forward IPv6 with network service access point address option to FortiOS.		
ipv6-optralert *	Router alert option anomalies.	option	-	trap-to-host
	Option Description			
	<i>allow</i>	Allow IPv6 with router alert option to pass.		
	<i>drop</i>	Drop IPv6 with router alert option.		
	<i>trap-to-host</i>	Forward IPv6 with router alert option to FortiOS.		
ipv6-opttunnel *	Tunnel encapsulation limit option anomalies.	option	-	trap-to-host
	Option Description			
	<i>allow</i>	Allow IPv6 with tunnel encapsulation limit to pass.		
	<i>drop</i>	Drop IPv6 with tunnel encapsulation limit.		
	<i>trap-to-host</i>	Forward IPv6 with tunnel encapsulation limit to FortiOS.		
ipv6-proto-err *	Layer 4 invalid protocol anomalies.	option	-	trap-to-host
	Option Description			
	<i>allow</i>	Allow IPv6 L4 invalid protocol to pass.		
	<i>drop</i>	Drop IPv6 L4 invalid protocol.		
	<i>trap-to-host</i>	Forward IPv6 L4 invalid protocol to FortiOS.		
ipv6-saddr-err *	Source address as multicast anomalies.	option	-	trap-to-host

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>allow</i>	Allow IPv6 with source address as multicast to pass.		
	<i>drop</i>	Drop IPv6 with source address as multicast.		
	<i>trap-to-host</i>	Forward IPv6 with source address as multicast to FortiOS.		
ipv6-unknopt *	Unknown option anomalies.	option	-	trap-to-host
	Option	Description		
	<i>allow</i>	Allow IPv6 with unknown options to pass.		
	<i>drop</i>	Drop IPv6 with unknown options.		
	<i>trap-to-host</i>	Forward IPv6 with unknown options to FortiOS.		
sctp-csum-err *	Invalid IPv4 SCTP checksum anomalies.	option	-	drop
	Option	Description		
	<i>allow</i>	Allow IPv4 invalid SCTP checksum.		
	<i>drop</i>	Drop IPv4 invalid SCTP checksum.		
	<i>trap-to-host</i>	Forward IPv4 invalid SCTP checksum to main CPU for processing.		
tcp-csum-err	Invalid IPv4 TCP checksum anomalies.	option	-	drop
	Option	Description		
	<i>drop</i>	Drop IPv4 invalid TCP checksum.		
	<i>trap-to-host</i>	Forward IPv4 invalid TCP checksum to main CPU for processing.		
tcp-fin-noack *	TCP SYN flood with FIN flag set without ACK setting anomalies.	option	-	trap-to-host
	Option	Description		
	<i>allow</i>	Allow TCP packets with FIN flag set without ack setting to pass.		
	<i>drop</i>	Drop TCP packets with FIN flag set without ack setting.		
	<i>trap-to-host</i>	Forward TCP packets with FIN flag set without ack setting to FortiOS.		
tcp-fin-only *	TCP SYN flood with only FIN flag set anomalies.	option	-	trap-to-host

Parameter	Description	Type	Size	Default
	Option Description			
	<i>allow</i>	Allow TCP packets with FIN flag set only to pass.		
	<i>drop</i>	Drop TCP packets with FIN flag set only.		
	<i>trap-to-host</i>	Forward TCP packets with FIN flag set only to FortiOS.		
tcp-land *	TCP land anomalies.	option	-	trap-to-host
	Option Description			
	<i>allow</i>	Allow TCP land attack to pass.		
	<i>drop</i>	Drop TCP land attack.		
	<i>trap-to-host</i>	Forward TCP land attack to FortiOS.		
tcp-no-flag *	TCP SYN flood with no flag set anomalies.	option	-	allow
	Option Description			
	<i>allow</i>	Allow TCP packets without flag set to pass.		
	<i>drop</i>	Drop TCP packets without flag set.		
	<i>trap-to-host</i>	Forward TCP packets without flag set to FortiOS.		
tcp-syn-data *	TCP SYN flood packets with data anomalies.	option	-	allow
	Option Description			
	<i>allow</i>	Allow TCP syn packets with data to pass.		
	<i>drop</i>	Drop TCP syn packets with data.		
	<i>trap-to-host</i>	Forward TCP syn packets with data to FortiOS.		
tcp-syn-fin *	TCP SYN flood SYN/FIN flag set anomalies.	option	-	allow
	Option Description			
	<i>allow</i>	Allow TCP packets with syn_fin flag set to pass.		
	<i>drop</i>	Drop TCP packets with syn_fin flag set.		
	<i>trap-to-host</i>	Forward TCP packets with syn_fin flag set to FortiOS.		
tcp-winnuke *	TCP WinNuke anomalies.	option	-	trap-to-host

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>allow</i>	Allow TCP packets winnuker attack to pass.		
	<i>drop</i>	Drop TCP packets winnuker attack.		
	<i>trap-to-host</i>	Forward TCP packets winnuker attack to FortiOS.		
udp-csum-err	Invalid IPv4 UDP checksum anomalies.	option	-	drop
	Option	Description		
	<i>drop</i>	Drop IPv4 invalid UDP checksum.		
	<i>trap-to-host</i>	Forward IPv4 invalid UDP checksum to main CPU for processing.		
udp-land *	UDP land anomalies.	option	-	trap-to-host
	Option	Description		
	<i>allow</i>	Allow UDP land attack to pass.		
	<i>drop</i>	Drop UDP land attack.		
	<i>trap-to-host</i>	Forward UDP land attack to FortiOS.		

* This parameter may not exist in some models.

config hpe

Parameter	Description	Type	Size	Default
all-protocol	Maximum packet rate of each host queue except high priority traffic(1K - 32M pps, default = 400K pps), set 0 to disable.	integer	Minimum value: 0 Maximum value: 32000000	400000
arp-max	Maximum ARP packet rate (1K - 32M pps, default = 5K pps). Entry is valid when ARP is removed from high-priority traffic.	integer	Minimum value: 1000 Maximum value: 32000000	5000
enable-shaper	Enable/Disable NPU Host Protection Engine (HPE) for packet type shaper.	option	-	disable
	Option	Description		
	<i>disable</i>	Disable NPU HPE shaping based on packet type.		
	<i>enable</i>	Enable NPU HPE shaping based on packet type.		

Parameter	Description	Type	Size	Default
esp-max	Maximum ESP packet rate (1K - 32M pps, default = 5K pps).	integer	Minimum value: 1000 Maximum value: 32000000	5000
high-priority	Maximum packet rate for high priority traffic packets (1K - 32M pps, default = 400K pps).	integer	Minimum value: 1000 Maximum value: 32000000	400000
icmp-max	Maximum ICMP packet rate (1K - 32M pps, default = 5K pps).	integer	Minimum value: 1000 Maximum value: 32000000	5000
ip-frag-max	Maximum fragmented IP packet rate (1K - 32M pps, default = 5K pps).	integer	Minimum value: 1000 Maximum value: 32000000	5000
ip-others-max	Maximum IP packet rate for other packets (packet types that cannot be set with other options) (1K - 32G pps, default = 5K pps).	integer	Minimum value: 1000 Maximum value: 32000000	5000
l2-others-max	Maximum L2 packet rate for L2 packets that are not ARP packets (1K - 32M pps, default = 5K pps).	integer	Minimum value: 1000 Maximum value: 32000000	5000
sctp-max	Maximum SCTP packet rate (1K - 32M pps, default = 5K pps).	integer	Minimum value: 1000 Maximum value: 32000000	5000
tcp-max	Maximum TCP packet rate (1K - 32M pps, default = 40K pps).	integer	Minimum value: 1000 Maximum value: 32000000	40000

Parameter	Description	Type	Size	Default
tcpfin-rst-max	Maximum TCP carries FIN or RST flags packet rate (1K - 32M pps, default = 40K pps).	integer	Minimum value: 1000 Maximum value: 32000000	40000
tcpsyn-ack-max	Maximum TCP carries SYN and ACK flags packet rate (1K - 32M pps, default = 40K pps).	integer	Minimum value: 1000 Maximum value: 32000000	40000
tcpsyn-max	Maximum TCP SYN packet rate (1K - 40M pps, default = 32K pps).	integer	Minimum value: 1000 Maximum value: 32000000	40000
udp-max	Maximum UDP packet rate (1K - 32M pps, default = 40K pps).	integer	Minimum value: 1000 Maximum value: 32000000	40000

config ip-reassembly

Parameter	Description	Type	Size	Default
max-timeout	Maximum timeout value for IP reassembly (5 us - 600,000,000 us).	integer	Minimum value: 5 Maximum value: 600000000	200000
min-timeout	Minimum timeout value for IP reassembly (5 us - 600,000,000 us).	integer	Minimum value: 5 Maximum value: 600000000	64
status	Set IP reassembly processing status.	option	-	disable
		Option	Description	
		<i>disable</i>	Disable IP reassembly.	
		<i>enable</i>	Enable IP reassembly.	

config isf-np-queues

Parameter	Description	Type	Size	Default
cos0	CoS profile name for CoS 0.	string	Maximum length: 35	
cos1	CoS profile name for CoS 1.	string	Maximum length: 35	
cos2	CoS profile name for CoS 2.	string	Maximum length: 35	
cos3	CoS profile name for CoS 3.	string	Maximum length: 35	
cos4	CoS profile name for CoS 4.	string	Maximum length: 35	
cos5	CoS profile name for CoS 5.	string	Maximum length: 35	
cos6	CoS profile name for CoS 6.	string	Maximum length: 35	
cos7	CoS profile name for CoS 7.	string	Maximum length: 35	

config ethernet-type

Parameter	Description	Type	Size	Default
name	Ethernet Type Name.	string	Maximum length: 35	
queue	Queue Number.	integer	Minimum value: 0 Maximum value: 11	0
type	Ethernet Type.	ether-type	Not Specified	0
weight	Class Weight.	integer	Minimum value: 0 Maximum value: 15	15

config ip-protocol

Parameter	Description	Type	Size	Default
name	IP Protocol Name.	string	Maximum length: 35	
protocol	IP Protocol.	integer	Minimum value: 0 Maximum value: 255	0
queue	Queue Number.	integer	Minimum value: 0 Maximum value: 11	0
weight	Class Weight.	integer	Minimum value: 0 Maximum value: 15	14

config ip-service

Parameter	Description	Type	Size	Default
dport	Destination port.	integer	Minimum value: 0 Maximum value: 65535	0
name	IP service name.	string	Maximum length: 35	
protocol	IP protocol.	integer	Minimum value: 0 Maximum value: 255	0
queue	Queue number.	integer	Minimum value: 0 Maximum value: 11	0
sport	Source port.	integer	Minimum value: 0 Maximum value: 65535	0

Parameter	Description	Type	Size	Default
weight	Class weight.	integer	Minimum value: 0 Maximum value: 15	13

config profile

Parameter	Description	Type	Size	Default
cos0	Queue number of CoS 0.	option	-	queue0
	Option	Description		
	queue0	Queue number 0.		
	queue1	Queue number 1.		
	queue2	Queue number 2.		
	queue3	Queue number 3.		
	queue4	Queue number 4.		
	queue5	Queue number 5.		
	queue6	Queue number 6.		
	queue7	Queue number 7.		
cos1	Queue number of CoS 1.	option	-	queue1
	Option	Description		
	queue0	Queue number 0.		
	queue1	Queue number 1.		
	queue2	Queue number 2.		
	queue3	Queue number 3.		
	queue4	Queue number 4.		
	queue5	Queue number 5.		
	queue6	Queue number 6.		
	queue7	Queue number 7.		
cos2	Queue number of CoS 2.	option	-	queue2
	Option	Description		
	queue0	Queue number 0.		

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>queue1</i>	Queue number 1.		
	<i>queue2</i>	Queue number 2.		
	<i>queue3</i>	Queue number 3.		
	<i>queue4</i>	Queue number 4.		
	<i>queue5</i>	Queue number 5.		
	<i>queue6</i>	Queue number 6.		
	<i>queue7</i>	Queue number 7.		
cos3	Queue number of CoS 3.	option	-	queue3
	Option	Description		
	<i>queue0</i>	Queue number 0.		
	<i>queue1</i>	Queue number 1.		
	<i>queue2</i>	Queue number 2.		
	<i>queue3</i>	Queue number 3.		
	<i>queue4</i>	Queue number 4.		
	<i>queue5</i>	Queue number 5.		
	<i>queue6</i>	Queue number 6.		
	<i>queue7</i>	Queue number 7.		
cos4	Queue number of CoS 4.	option	-	queue4
	Option	Description		
	<i>queue0</i>	Queue number 0.		
	<i>queue1</i>	Queue number 1.		
	<i>queue2</i>	Queue number 2.		
	<i>queue3</i>	Queue number 3.		
	<i>queue4</i>	Queue number 4.		
	<i>queue5</i>	Queue number 5.		
	<i>queue6</i>	Queue number 6.		
	<i>queue7</i>	Queue number 7.		
cos5	Queue number of CoS 5.	option	-	queue5

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>queue0</i>	Queue number 0.		
	<i>queue1</i>	Queue number 1.		
	<i>queue2</i>	Queue number 2.		
	<i>queue3</i>	Queue number 3.		
	<i>queue4</i>	Queue number 4.		
	<i>queue5</i>	Queue number 5.		
	<i>queue6</i>	Queue number 6.		
	<i>queue7</i>	Queue number 7.		
cos6	Queue number of CoS 6.	option	-	queue6
	Option	Description		
	<i>queue0</i>	Queue number 0.		
	<i>queue1</i>	Queue number 1.		
	<i>queue2</i>	Queue number 2.		
	<i>queue3</i>	Queue number 3.		
	<i>queue4</i>	Queue number 4.		
	<i>queue5</i>	Queue number 5.		
	<i>queue6</i>	Queue number 6.		
	<i>queue7</i>	Queue number 7.		
cos7	Queue number of CoS 7.	option	-	queue7
	Option	Description		
	<i>queue0</i>	Queue number 0.		
	<i>queue1</i>	Queue number 1.		
	<i>queue2</i>	Queue number 2.		
	<i>queue3</i>	Queue number 3.		
	<i>queue4</i>	Queue number 4.		
	<i>queue5</i>	Queue number 5.		
	<i>queue6</i>	Queue number 6.		
	<i>queue7</i>	Queue number 7.		

Parameter	Description	Type	Size	Default
dscp0	Queue number of DSCP 0.	option	-	queue0
	Option	Description		
	<i>queue0</i>	Queue number 0.		
	<i>queue1</i>	Queue number 1.		
	<i>queue2</i>	Queue number 2.		
	<i>queue3</i>	Queue number 3.		
	<i>queue4</i>	Queue number 4.		
	<i>queue5</i>	Queue number 5.		
	<i>queue6</i>	Queue number 6.		
	<i>queue7</i>	Queue number 7.		
dscp1	Queue number of DSCP 1.	option	-	queue1
	Option	Description		
	<i>queue0</i>	Queue number 0.		
	<i>queue1</i>	Queue number 1.		
	<i>queue2</i>	Queue number 2.		
	<i>queue3</i>	Queue number 3.		
	<i>queue4</i>	Queue number 4.		
	<i>queue5</i>	Queue number 5.		
	<i>queue6</i>	Queue number 6.		
	<i>queue7</i>	Queue number 7.		
dscp10	Queue number of DSCP 10.	option	-	queue2
	Option	Description		
	<i>queue0</i>	Queue number 0.		
	<i>queue1</i>	Queue number 1.		
	<i>queue2</i>	Queue number 2.		
	<i>queue3</i>	Queue number 3.		
	<i>queue4</i>	Queue number 4.		
	<i>queue5</i>	Queue number 5.		
	<i>queue6</i>	Queue number 6.		

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>queue7</i>	Queue number 7.		
dscp11	Queue number of DSCP 11.	option	-	queue3
	Option	Description		
	<i>queue0</i>	Queue number 0.		
	<i>queue1</i>	Queue number 1.		
	<i>queue2</i>	Queue number 2.		
	<i>queue3</i>	Queue number 3.		
	<i>queue4</i>	Queue number 4.		
	<i>queue5</i>	Queue number 5.		
	<i>queue6</i>	Queue number 6.		
	<i>queue7</i>	Queue number 7.		
dscp12	Queue number of DSCP 12.	option	-	queue4
	Option	Description		
	<i>queue0</i>	Queue number 0.		
	<i>queue1</i>	Queue number 1.		
	<i>queue2</i>	Queue number 2.		
	<i>queue3</i>	Queue number 3.		
	<i>queue4</i>	Queue number 4.		
	<i>queue5</i>	Queue number 5.		
	<i>queue6</i>	Queue number 6.		
	<i>queue7</i>	Queue number 7.		
dscp13	Queue number of DSCP 13.	option	-	queue5
	Option	Description		
	<i>queue0</i>	Queue number 0.		
	<i>queue1</i>	Queue number 1.		
	<i>queue2</i>	Queue number 2.		
	<i>queue3</i>	Queue number 3.		

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>queue4</i>	Queue number 4.		
	<i>queue5</i>	Queue number 5.		
	<i>queue6</i>	Queue number 6.		
	<i>queue7</i>	Queue number 7.		
dscp14	Queue number of DSCP 14.	option	-	queue6
	Option	Description		
	<i>queue0</i>	Queue number 0.		
	<i>queue1</i>	Queue number 1.		
	<i>queue2</i>	Queue number 2.		
	<i>queue3</i>	Queue number 3.		
	<i>queue4</i>	Queue number 4.		
	<i>queue5</i>	Queue number 5.		
	<i>queue6</i>	Queue number 6.		
	<i>queue7</i>	Queue number 7.		
dscp15	Queue number of DSCP 15.	option	-	queue7
	Option	Description		
	<i>queue0</i>	Queue number 0.		
	<i>queue1</i>	Queue number 1.		
	<i>queue2</i>	Queue number 2.		
	<i>queue3</i>	Queue number 3.		
	<i>queue4</i>	Queue number 4.		
	<i>queue5</i>	Queue number 5.		
	<i>queue6</i>	Queue number 6.		
	<i>queue7</i>	Queue number 7.		
dscp16	Queue number of DSCP 16.	option	-	queue0
	Option	Description		
	<i>queue0</i>	Queue number 0.		

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>queue1</i>	Queue number 1.		
	<i>queue2</i>	Queue number 2.		
	<i>queue3</i>	Queue number 3.		
	<i>queue4</i>	Queue number 4.		
	<i>queue5</i>	Queue number 5.		
	<i>queue6</i>	Queue number 6.		
	<i>queue7</i>	Queue number 7.		
dscp17	Queue number of DSCP 17.	option	-	queue1
	Option	Description		
	<i>queue0</i>	Queue number 0.		
	<i>queue1</i>	Queue number 1.		
	<i>queue2</i>	Queue number 2.		
	<i>queue3</i>	Queue number 3.		
	<i>queue4</i>	Queue number 4.		
	<i>queue5</i>	Queue number 5.		
	<i>queue6</i>	Queue number 6.		
	<i>queue7</i>	Queue number 7.		
dscp18	Queue number of DSCP 18.	option	-	queue2
	Option	Description		
	<i>queue0</i>	Queue number 0.		
	<i>queue1</i>	Queue number 1.		
	<i>queue2</i>	Queue number 2.		
	<i>queue3</i>	Queue number 3.		
	<i>queue4</i>	Queue number 4.		
	<i>queue5</i>	Queue number 5.		
	<i>queue6</i>	Queue number 6.		
	<i>queue7</i>	Queue number 7.		
dscp19	Queue number of DSCP 19.	option	-	queue3

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>queue0</i>	Queue number 0.		
	<i>queue1</i>	Queue number 1.		
	<i>queue2</i>	Queue number 2.		
	<i>queue3</i>	Queue number 3.		
	<i>queue4</i>	Queue number 4.		
	<i>queue5</i>	Queue number 5.		
	<i>queue6</i>	Queue number 6.		
	<i>queue7</i>	Queue number 7.		
dscp2	Queue number of DSCP 2.	option	-	queue2
	Option	Description		
	<i>queue0</i>	Queue number 0.		
	<i>queue1</i>	Queue number 1.		
	<i>queue2</i>	Queue number 2.		
	<i>queue3</i>	Queue number 3.		
	<i>queue4</i>	Queue number 4.		
	<i>queue5</i>	Queue number 5.		
	<i>queue6</i>	Queue number 6.		
	<i>queue7</i>	Queue number 7.		
dscp20	Queue number of DSCP 20.	option	-	queue4
	Option	Description		
	<i>queue0</i>	Queue number 0.		
	<i>queue1</i>	Queue number 1.		
	<i>queue2</i>	Queue number 2.		
	<i>queue3</i>	Queue number 3.		
	<i>queue4</i>	Queue number 4.		
	<i>queue5</i>	Queue number 5.		
	<i>queue6</i>	Queue number 6.		
	<i>queue7</i>	Queue number 7.		

Parameter	Description	Type	Size	Default
dscp21	Queue number of DSCP 21.	option	-	queue5
	Option	Description		
	<i>queue0</i>	Queue number 0.		
	<i>queue1</i>	Queue number 1.		
	<i>queue2</i>	Queue number 2.		
	<i>queue3</i>	Queue number 3.		
	<i>queue4</i>	Queue number 4.		
	<i>queue5</i>	Queue number 5.		
	<i>queue6</i>	Queue number 6.		
	<i>queue7</i>	Queue number 7.		
dscp22	Queue number of DSCP 22.	option	-	queue6
	Option	Description		
	<i>queue0</i>	Queue number 0.		
	<i>queue1</i>	Queue number 1.		
	<i>queue2</i>	Queue number 2.		
	<i>queue3</i>	Queue number 3.		
	<i>queue4</i>	Queue number 4.		
	<i>queue5</i>	Queue number 5.		
	<i>queue6</i>	Queue number 6.		
	<i>queue7</i>	Queue number 7.		
dscp23	Queue number of DSCP 23.	option	-	queue7
	Option	Description		
	<i>queue0</i>	Queue number 0.		
	<i>queue1</i>	Queue number 1.		
	<i>queue2</i>	Queue number 2.		
	<i>queue3</i>	Queue number 3.		
	<i>queue4</i>	Queue number 4.		
	<i>queue5</i>	Queue number 5.		
	<i>queue6</i>	Queue number 6.		

Parameter	Description	Type	Size	Default																		
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>queue7</td><td>Queue number 7.</td></tr></table>	Option	Description	queue7	Queue number 7.																	
Option	Description																					
queue7	Queue number 7.																					
dscp24	Queue number of DSCP 24.	option	-	queue0																		
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>queue0</td><td>Queue number 0.</td></tr><tr><td>queue1</td><td>Queue number 1.</td></tr><tr><td>queue2</td><td>Queue number 2.</td></tr><tr><td>queue3</td><td>Queue number 3.</td></tr><tr><td>queue4</td><td>Queue number 4.</td></tr><tr><td>queue5</td><td>Queue number 5.</td></tr><tr><td>queue6</td><td>Queue number 6.</td></tr><tr><td>queue7</td><td>Queue number 7.</td></tr></table>	Option	Description	queue0	Queue number 0.	queue1	Queue number 1.	queue2	Queue number 2.	queue3	Queue number 3.	queue4	Queue number 4.	queue5	Queue number 5.	queue6	Queue number 6.	queue7	Queue number 7.			
Option	Description																					
queue0	Queue number 0.																					
queue1	Queue number 1.																					
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queue3	Queue number 3.																					
queue4	Queue number 4.																					
queue5	Queue number 5.																					
queue6	Queue number 6.																					
queue7	Queue number 7.																					
dscp25	Queue number of DSCP 25.	option	-	queue1																		
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>queue0</td><td>Queue number 0.</td></tr><tr><td>queue1</td><td>Queue number 1.</td></tr><tr><td>queue2</td><td>Queue number 2.</td></tr><tr><td>queue3</td><td>Queue number 3.</td></tr><tr><td>queue4</td><td>Queue number 4.</td></tr><tr><td>queue5</td><td>Queue number 5.</td></tr><tr><td>queue6</td><td>Queue number 6.</td></tr><tr><td>queue7</td><td>Queue number 7.</td></tr></table>	Option	Description	queue0	Queue number 0.	queue1	Queue number 1.	queue2	Queue number 2.	queue3	Queue number 3.	queue4	Queue number 4.	queue5	Queue number 5.	queue6	Queue number 6.	queue7	Queue number 7.			
Option	Description																					
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queue1	Queue number 1.																					
queue2	Queue number 2.																					
queue3	Queue number 3.																					
queue4	Queue number 4.																					
queue5	Queue number 5.																					
queue6	Queue number 6.																					
queue7	Queue number 7.																					
dscp26	Queue number of DSCP 26.	option	-	queue2																		
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>queue0</td><td>Queue number 0.</td></tr><tr><td>queue1</td><td>Queue number 1.</td></tr><tr><td>queue2</td><td>Queue number 2.</td></tr><tr><td>queue3</td><td>Queue number 3.</td></tr></table>	Option	Description	queue0	Queue number 0.	queue1	Queue number 1.	queue2	Queue number 2.	queue3	Queue number 3.											
Option	Description																					
queue0	Queue number 0.																					
queue1	Queue number 1.																					
queue2	Queue number 2.																					
queue3	Queue number 3.																					

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>queue4</i>	Queue number 4.		
	<i>queue5</i>	Queue number 5.		
	<i>queue6</i>	Queue number 6.		
	<i>queue7</i>	Queue number 7.		
dscp27	Queue number of DSCP 27.	option	-	queue3
	Option	Description		
	<i>queue0</i>	Queue number 0.		
	<i>queue1</i>	Queue number 1.		
	<i>queue2</i>	Queue number 2.		
	<i>queue3</i>	Queue number 3.		
	<i>queue4</i>	Queue number 4.		
	<i>queue5</i>	Queue number 5.		
	<i>queue6</i>	Queue number 6.		
	<i>queue7</i>	Queue number 7.		
dscp28	Queue number of DSCP 28.	option	-	queue4
	Option	Description		
	<i>queue0</i>	Queue number 0.		
	<i>queue1</i>	Queue number 1.		
	<i>queue2</i>	Queue number 2.		
	<i>queue3</i>	Queue number 3.		
	<i>queue4</i>	Queue number 4.		
	<i>queue5</i>	Queue number 5.		
	<i>queue6</i>	Queue number 6.		
	<i>queue7</i>	Queue number 7.		
dscp29	Queue number of DSCP 29.	option	-	queue5
	Option	Description		
	<i>queue0</i>	Queue number 0.		

Parameter	Description	Type	Size	Default																		
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>queue1</td><td>Queue number 1.</td></tr><tr><td>queue2</td><td>Queue number 2.</td></tr><tr><td>queue3</td><td>Queue number 3.</td></tr><tr><td>queue4</td><td>Queue number 4.</td></tr><tr><td>queue5</td><td>Queue number 5.</td></tr><tr><td>queue6</td><td>Queue number 6.</td></tr><tr><td>queue7</td><td>Queue number 7.</td></tr></table>	Option	Description	queue1	Queue number 1.	queue2	Queue number 2.	queue3	Queue number 3.	queue4	Queue number 4.	queue5	Queue number 5.	queue6	Queue number 6.	queue7	Queue number 7.					
	Option	Description																				
	queue1	Queue number 1.																				
	queue2	Queue number 2.																				
	queue3	Queue number 3.																				
	queue4	Queue number 4.																				
	queue5	Queue number 5.																				
	queue6	Queue number 6.																				
queue7	Queue number 7.																					
dscp3	Queue number of DSCP 3.	option	-	queue3																		
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>queue0</td><td>Queue number 0.</td></tr><tr><td>queue1</td><td>Queue number 1.</td></tr><tr><td>queue2</td><td>Queue number 2.</td></tr><tr><td>queue3</td><td>Queue number 3.</td></tr><tr><td>queue4</td><td>Queue number 4.</td></tr><tr><td>queue5</td><td>Queue number 5.</td></tr><tr><td>queue6</td><td>Queue number 6.</td></tr><tr><td>queue7</td><td>Queue number 7.</td></tr></table>	Option	Description	queue0	Queue number 0.	queue1	Queue number 1.	queue2	Queue number 2.	queue3	Queue number 3.	queue4	Queue number 4.	queue5	Queue number 5.	queue6	Queue number 6.	queue7	Queue number 7.			
	Option	Description																				
	queue0	Queue number 0.																				
	queue1	Queue number 1.																				
	queue2	Queue number 2.																				
	queue3	Queue number 3.																				
	queue4	Queue number 4.																				
	queue5	Queue number 5.																				
queue6	Queue number 6.																					
queue7	Queue number 7.																					
dscp30	Queue number of DSCP 30.	option	-	queue6																		
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>queue0</td><td>Queue number 0.</td></tr><tr><td>queue1</td><td>Queue number 1.</td></tr><tr><td>queue2</td><td>Queue number 2.</td></tr><tr><td>queue3</td><td>Queue number 3.</td></tr><tr><td>queue4</td><td>Queue number 4.</td></tr><tr><td>queue5</td><td>Queue number 5.</td></tr><tr><td>queue6</td><td>Queue number 6.</td></tr><tr><td>queue7</td><td>Queue number 7.</td></tr></table>	Option	Description	queue0	Queue number 0.	queue1	Queue number 1.	queue2	Queue number 2.	queue3	Queue number 3.	queue4	Queue number 4.	queue5	Queue number 5.	queue6	Queue number 6.	queue7	Queue number 7.			
	Option	Description																				
	queue0	Queue number 0.																				
	queue1	Queue number 1.																				
	queue2	Queue number 2.																				
	queue3	Queue number 3.																				
	queue4	Queue number 4.																				
	queue5	Queue number 5.																				
queue6	Queue number 6.																					
queue7	Queue number 7.																					
dscp31	Queue number of DSCP 31.	option	-	queue7																		

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>queue0</i>	Queue number 0.		
	<i>queue1</i>	Queue number 1.		
	<i>queue2</i>	Queue number 2.		
	<i>queue3</i>	Queue number 3.		
	<i>queue4</i>	Queue number 4.		
	<i>queue5</i>	Queue number 5.		
	<i>queue6</i>	Queue number 6.		
	<i>queue7</i>	Queue number 7.		
dscp32	Queue number of DSCP 32.	option	-	queue0
	Option	Description		
	<i>queue0</i>	Queue number 0.		
	<i>queue1</i>	Queue number 1.		
	<i>queue2</i>	Queue number 2.		
	<i>queue3</i>	Queue number 3.		
	<i>queue4</i>	Queue number 4.		
	<i>queue5</i>	Queue number 5.		
	<i>queue6</i>	Queue number 6.		
	<i>queue7</i>	Queue number 7.		
dscp33	Queue number of DSCP 33.	option	-	queue1
	Option	Description		
	<i>queue0</i>	Queue number 0.		
	<i>queue1</i>	Queue number 1.		
	<i>queue2</i>	Queue number 2.		
	<i>queue3</i>	Queue number 3.		
	<i>queue4</i>	Queue number 4.		
	<i>queue5</i>	Queue number 5.		
	<i>queue6</i>	Queue number 6.		
	<i>queue7</i>	Queue number 7.		

Parameter	Description	Type	Size	Default
dscp34	Queue number of DSCP 34.	option	-	queue2
	Option	Description		
	<i>queue0</i>	Queue number 0.		
	<i>queue1</i>	Queue number 1.		
	<i>queue2</i>	Queue number 2.		
	<i>queue3</i>	Queue number 3.		
	<i>queue4</i>	Queue number 4.		
	<i>queue5</i>	Queue number 5.		
	<i>queue6</i>	Queue number 6.		
	<i>queue7</i>	Queue number 7.		
dscp35	Queue number of DSCP 35.	option	-	queue3
	Option	Description		
	<i>queue0</i>	Queue number 0.		
	<i>queue1</i>	Queue number 1.		
	<i>queue2</i>	Queue number 2.		
	<i>queue3</i>	Queue number 3.		
	<i>queue4</i>	Queue number 4.		
	<i>queue5</i>	Queue number 5.		
	<i>queue6</i>	Queue number 6.		
	<i>queue7</i>	Queue number 7.		
dscp36	Queue number of DSCP 36.	option	-	queue4
	Option	Description		
	<i>queue0</i>	Queue number 0.		
	<i>queue1</i>	Queue number 1.		
	<i>queue2</i>	Queue number 2.		
	<i>queue3</i>	Queue number 3.		
	<i>queue4</i>	Queue number 4.		
	<i>queue5</i>	Queue number 5.		
	<i>queue6</i>	Queue number 6.		

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>queue7</i>	Queue number 7.		
dscp37	Queue number of DSCP 37.	option	-	queue5
	Option	Description		
	<i>queue0</i>	Queue number 0.		
	<i>queue1</i>	Queue number 1.		
	<i>queue2</i>	Queue number 2.		
	<i>queue3</i>	Queue number 3.		
	<i>queue4</i>	Queue number 4.		
	<i>queue5</i>	Queue number 5.		
	<i>queue6</i>	Queue number 6.		
	<i>queue7</i>	Queue number 7.		
dscp38	Queue number of DSCP 38.	option	-	queue6
	Option	Description		
	<i>queue0</i>	Queue number 0.		
	<i>queue1</i>	Queue number 1.		
	<i>queue2</i>	Queue number 2.		
	<i>queue3</i>	Queue number 3.		
	<i>queue4</i>	Queue number 4.		
	<i>queue5</i>	Queue number 5.		
	<i>queue6</i>	Queue number 6.		
	<i>queue7</i>	Queue number 7.		
dscp39	Queue number of DSCP 39.	option	-	queue7
	Option	Description		
	<i>queue0</i>	Queue number 0.		
	<i>queue1</i>	Queue number 1.		
	<i>queue2</i>	Queue number 2.		
	<i>queue3</i>	Queue number 3.		

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>queue4</i>	Queue number 4.		
	<i>queue5</i>	Queue number 5.		
	<i>queue6</i>	Queue number 6.		
	<i>queue7</i>	Queue number 7.		
dscp4	Queue number of DSCP 4.	option	-	queue4
	Option	Description		
	<i>queue0</i>	Queue number 0.		
	<i>queue1</i>	Queue number 1.		
	<i>queue2</i>	Queue number 2.		
	<i>queue3</i>	Queue number 3.		
	<i>queue4</i>	Queue number 4.		
	<i>queue5</i>	Queue number 5.		
	<i>queue6</i>	Queue number 6.		
	<i>queue7</i>	Queue number 7.		
dscp40	Queue number of DSCP 40.	option	-	queue0
	Option	Description		
	<i>queue0</i>	Queue number 0.		
	<i>queue1</i>	Queue number 1.		
	<i>queue2</i>	Queue number 2.		
	<i>queue3</i>	Queue number 3.		
	<i>queue4</i>	Queue number 4.		
	<i>queue5</i>	Queue number 5.		
	<i>queue6</i>	Queue number 6.		
	<i>queue7</i>	Queue number 7.		
dscp41	Queue number of DSCP 41.	option	-	queue1
	Option	Description		
	<i>queue0</i>	Queue number 0.		

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>queue1</i>	Queue number 1.		
	<i>queue2</i>	Queue number 2.		
	<i>queue3</i>	Queue number 3.		
	<i>queue4</i>	Queue number 4.		
	<i>queue5</i>	Queue number 5.		
	<i>queue6</i>	Queue number 6.		
	<i>queue7</i>	Queue number 7.		
dscp42	Queue number of DSCP 42.	option	-	queue2
	Option	Description		
	<i>queue0</i>	Queue number 0.		
	<i>queue1</i>	Queue number 1.		
	<i>queue2</i>	Queue number 2.		
	<i>queue3</i>	Queue number 3.		
	<i>queue4</i>	Queue number 4.		
	<i>queue5</i>	Queue number 5.		
	<i>queue6</i>	Queue number 6.		
	<i>queue7</i>	Queue number 7.		
dscp43	Queue number of DSCP 43.	option	-	queue3
	Option	Description		
	<i>queue0</i>	Queue number 0.		
	<i>queue1</i>	Queue number 1.		
	<i>queue2</i>	Queue number 2.		
	<i>queue3</i>	Queue number 3.		
	<i>queue4</i>	Queue number 4.		
	<i>queue5</i>	Queue number 5.		
	<i>queue6</i>	Queue number 6.		
	<i>queue7</i>	Queue number 7.		
dscp44	Queue number of DSCP 44.	option	-	queue4

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>queue0</i>	Queue number 0.		
	<i>queue1</i>	Queue number 1.		
	<i>queue2</i>	Queue number 2.		
	<i>queue3</i>	Queue number 3.		
	<i>queue4</i>	Queue number 4.		
	<i>queue5</i>	Queue number 5.		
	<i>queue6</i>	Queue number 6.		
	<i>queue7</i>	Queue number 7.		
dscp45	Queue number of DSCP 45.	option	-	queue5
	Option	Description		
	<i>queue0</i>	Queue number 0.		
	<i>queue1</i>	Queue number 1.		
	<i>queue2</i>	Queue number 2.		
	<i>queue3</i>	Queue number 3.		
	<i>queue4</i>	Queue number 4.		
	<i>queue5</i>	Queue number 5.		
	<i>queue6</i>	Queue number 6.		
	<i>queue7</i>	Queue number 7.		
dscp46	Queue number of DSCP 46.	option	-	queue6
	Option	Description		
	<i>queue0</i>	Queue number 0.		
	<i>queue1</i>	Queue number 1.		
	<i>queue2</i>	Queue number 2.		
	<i>queue3</i>	Queue number 3.		
	<i>queue4</i>	Queue number 4.		
	<i>queue5</i>	Queue number 5.		
	<i>queue6</i>	Queue number 6.		
	<i>queue7</i>	Queue number 7.		

Parameter	Description	Type	Size	Default
dscp47	Queue number of DSCP 47.	option	-	queue7
	Option	Description		
	<i>queue0</i>	Queue number 0.		
	<i>queue1</i>	Queue number 1.		
	<i>queue2</i>	Queue number 2.		
	<i>queue3</i>	Queue number 3.		
	<i>queue4</i>	Queue number 4.		
	<i>queue5</i>	Queue number 5.		
	<i>queue6</i>	Queue number 6.		
	<i>queue7</i>	Queue number 7.		
dscp48	Queue number of DSCP 48.	option	-	queue0
	Option	Description		
	<i>queue0</i>	Queue number 0.		
	<i>queue1</i>	Queue number 1.		
	<i>queue2</i>	Queue number 2.		
	<i>queue3</i>	Queue number 3.		
	<i>queue4</i>	Queue number 4.		
	<i>queue5</i>	Queue number 5.		
	<i>queue6</i>	Queue number 6.		
	<i>queue7</i>	Queue number 7.		
dscp49	Queue number of DSCP 49.	option	-	queue1
	Option	Description		
	<i>queue0</i>	Queue number 0.		
	<i>queue1</i>	Queue number 1.		
	<i>queue2</i>	Queue number 2.		
	<i>queue3</i>	Queue number 3.		
	<i>queue4</i>	Queue number 4.		
	<i>queue5</i>	Queue number 5.		
	<i>queue6</i>	Queue number 6.		

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>queue7</i>	Queue number 7.		
dscp5	Queue number of DSCP 5.	option	-	queue5
	Option	Description		
	<i>queue0</i>	Queue number 0.		
	<i>queue1</i>	Queue number 1.		
	<i>queue2</i>	Queue number 2.		
	<i>queue3</i>	Queue number 3.		
	<i>queue4</i>	Queue number 4.		
	<i>queue5</i>	Queue number 5.		
	<i>queue6</i>	Queue number 6.		
	<i>queue7</i>	Queue number 7.		
dscp50	Queue number of DSCP 50.	option	-	queue2
	Option	Description		
	<i>queue0</i>	Queue number 0.		
	<i>queue1</i>	Queue number 1.		
	<i>queue2</i>	Queue number 2.		
	<i>queue3</i>	Queue number 3.		
	<i>queue4</i>	Queue number 4.		
	<i>queue5</i>	Queue number 5.		
	<i>queue6</i>	Queue number 6.		
	<i>queue7</i>	Queue number 7.		
dscp51	Queue number of DSCP 51.	option	-	queue3
	Option	Description		
	<i>queue0</i>	Queue number 0.		
	<i>queue1</i>	Queue number 1.		
	<i>queue2</i>	Queue number 2.		
	<i>queue3</i>	Queue number 3.		

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>queue4</i>	Queue number 4.		
	<i>queue5</i>	Queue number 5.		
	<i>queue6</i>	Queue number 6.		
	<i>queue7</i>	Queue number 7.		
dscp52	Queue number of DSCP 52.	option	-	queue4
	Option	Description		
	<i>queue0</i>	Queue number 0.		
	<i>queue1</i>	Queue number 1.		
	<i>queue2</i>	Queue number 2.		
	<i>queue3</i>	Queue number 3.		
	<i>queue4</i>	Queue number 4.		
	<i>queue5</i>	Queue number 5.		
	<i>queue6</i>	Queue number 6.		
	<i>queue7</i>	Queue number 7.		
dscp53	Queue number of DSCP 53.	option	-	queue5
	Option	Description		
	<i>queue0</i>	Queue number 0.		
	<i>queue1</i>	Queue number 1.		
	<i>queue2</i>	Queue number 2.		
	<i>queue3</i>	Queue number 3.		
	<i>queue4</i>	Queue number 4.		
	<i>queue5</i>	Queue number 5.		
	<i>queue6</i>	Queue number 6.		
	<i>queue7</i>	Queue number 7.		
dscp54	Queue number of DSCP 54.	option	-	queue6
	Option	Description		
	<i>queue0</i>	Queue number 0.		

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>queue1</i>	Queue number 1.		
	<i>queue2</i>	Queue number 2.		
	<i>queue3</i>	Queue number 3.		
	<i>queue4</i>	Queue number 4.		
	<i>queue5</i>	Queue number 5.		
	<i>queue6</i>	Queue number 6.		
	<i>queue7</i>	Queue number 7.		
dscp55	Queue number of DSCP 55.	option	-	queue7
	Option	Description		
	<i>queue0</i>	Queue number 0.		
	<i>queue1</i>	Queue number 1.		
	<i>queue2</i>	Queue number 2.		
	<i>queue3</i>	Queue number 3.		
	<i>queue4</i>	Queue number 4.		
	<i>queue5</i>	Queue number 5.		
	<i>queue6</i>	Queue number 6.		
	<i>queue7</i>	Queue number 7.		
dscp56	Queue number of DSCP 56.	option	-	queue0
	Option	Description		
	<i>queue0</i>	Queue number 0.		
	<i>queue1</i>	Queue number 1.		
	<i>queue2</i>	Queue number 2.		
	<i>queue3</i>	Queue number 3.		
	<i>queue4</i>	Queue number 4.		
	<i>queue5</i>	Queue number 5.		
	<i>queue6</i>	Queue number 6.		
	<i>queue7</i>	Queue number 7.		
dscp57	Queue number of DSCP 57.	option	-	queue1

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>queue0</i>	Queue number 0.		
	<i>queue1</i>	Queue number 1.		
	<i>queue2</i>	Queue number 2.		
	<i>queue3</i>	Queue number 3.		
	<i>queue4</i>	Queue number 4.		
	<i>queue5</i>	Queue number 5.		
	<i>queue6</i>	Queue number 6.		
	<i>queue7</i>	Queue number 7.		
dscp58	Queue number of DSCP 58.	option	-	queue2
	Option	Description		
	<i>queue0</i>	Queue number 0.		
	<i>queue1</i>	Queue number 1.		
	<i>queue2</i>	Queue number 2.		
	<i>queue3</i>	Queue number 3.		
	<i>queue4</i>	Queue number 4.		
	<i>queue5</i>	Queue number 5.		
	<i>queue6</i>	Queue number 6.		
	<i>queue7</i>	Queue number 7.		
dscp59	Queue number of DSCP 59.	option	-	queue3
	Option	Description		
	<i>queue0</i>	Queue number 0.		
	<i>queue1</i>	Queue number 1.		
	<i>queue2</i>	Queue number 2.		
	<i>queue3</i>	Queue number 3.		
	<i>queue4</i>	Queue number 4.		
	<i>queue5</i>	Queue number 5.		
	<i>queue6</i>	Queue number 6.		
	<i>queue7</i>	Queue number 7.		

Parameter	Description	Type	Size	Default
dscp6	Queue number of DSCP 6.	option	-	queue6
	Option	Description		
	<i>queue0</i>	Queue number 0.		
	<i>queue1</i>	Queue number 1.		
	<i>queue2</i>	Queue number 2.		
	<i>queue3</i>	Queue number 3.		
	<i>queue4</i>	Queue number 4.		
	<i>queue5</i>	Queue number 5.		
	<i>queue6</i>	Queue number 6.		
	<i>queue7</i>	Queue number 7.		
dscp60	Queue number of DSCP 60.	option	-	queue4
	Option	Description		
	<i>queue0</i>	Queue number 0.		
	<i>queue1</i>	Queue number 1.		
	<i>queue2</i>	Queue number 2.		
	<i>queue3</i>	Queue number 3.		
	<i>queue4</i>	Queue number 4.		
	<i>queue5</i>	Queue number 5.		
	<i>queue6</i>	Queue number 6.		
	<i>queue7</i>	Queue number 7.		
dscp61	Queue number of DSCP 61.	option	-	queue5
	Option	Description		
	<i>queue0</i>	Queue number 0.		
	<i>queue1</i>	Queue number 1.		
	<i>queue2</i>	Queue number 2.		
	<i>queue3</i>	Queue number 3.		
	<i>queue4</i>	Queue number 4.		
	<i>queue5</i>	Queue number 5.		
	<i>queue6</i>	Queue number 6.		

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>queue7</i>	Queue number 7.		
dscp62	Queue number of DSCP 62.	option	-	queue6
	Option	Description		
	<i>queue0</i>	Queue number 0.		
	<i>queue1</i>	Queue number 1.		
	<i>queue2</i>	Queue number 2.		
	<i>queue3</i>	Queue number 3.		
	<i>queue4</i>	Queue number 4.		
	<i>queue5</i>	Queue number 5.		
	<i>queue6</i>	Queue number 6.		
	<i>queue7</i>	Queue number 7.		
dscp63	Queue number of DSCP 63.	option	-	queue7
	Option	Description		
	<i>queue0</i>	Queue number 0.		
	<i>queue1</i>	Queue number 1.		
	<i>queue2</i>	Queue number 2.		
	<i>queue3</i>	Queue number 3.		
	<i>queue4</i>	Queue number 4.		
	<i>queue5</i>	Queue number 5.		
	<i>queue6</i>	Queue number 6.		
	<i>queue7</i>	Queue number 7.		
dscp7	Queue number of DSCP 7.	option	-	queue7
	Option	Description		
	<i>queue0</i>	Queue number 0.		
	<i>queue1</i>	Queue number 1.		
	<i>queue2</i>	Queue number 2.		
	<i>queue3</i>	Queue number 3.		

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>queue4</i>	Queue number 4.		
	<i>queue5</i>	Queue number 5.		
	<i>queue6</i>	Queue number 6.		
	<i>queue7</i>	Queue number 7.		
dscp8	Queue number of DSCP 8.	option	-	queue0
	Option	Description		
	<i>queue0</i>	Queue number 0.		
	<i>queue1</i>	Queue number 1.		
	<i>queue2</i>	Queue number 2.		
	<i>queue3</i>	Queue number 3.		
	<i>queue4</i>	Queue number 4.		
	<i>queue5</i>	Queue number 5.		
	<i>queue6</i>	Queue number 6.		
	<i>queue7</i>	Queue number 7.		
dscp9	Queue number of DSCP 9.	option	-	queue1
	Option	Description		
	<i>queue0</i>	Queue number 0.		
	<i>queue1</i>	Queue number 1.		
	<i>queue2</i>	Queue number 2.		
	<i>queue3</i>	Queue number 3.		
	<i>queue4</i>	Queue number 4.		
	<i>queue5</i>	Queue number 5.		
	<i>queue6</i>	Queue number 6.		
	<i>queue7</i>	Queue number 7.		
id	Profile ID.	integer	Minimum value: 0 Maximum value: 255	0
type	Profile type.	option	-	cos

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>cos</i>	VLAN priority.		
	<i>dscp</i>	IP differentiated services code point.		
weight	Class weight.	integer	Minimum value: 0 Maximum value: 15	6

config scheduler

Parameter	Description	Type	Size	Default
mode	Scheduler mode.	option	-	none
	Option	Description		
	<i>none</i>	Disable QoS on NP7.		
	<i>priority</i>	Priority Based.		
	<i>round-robin</i>	Round Robin Scheduler.		
name	Scheduler name.	string	Maximum length: 35	

config port-cpu-map

Parameter	Description	Type	Size	Default
cpu-core	The CPU core to map to an interface.	string	Maximum length: 31	all
interface	The interface to map to a CPU core.	string	Maximum length: 15	

config port-npu-map

Parameter	Description	Type	Size	Default
interface	Set NPU interface port for NPU group mapping.	string	Maximum length: 15	
npu-group-index	Mapping NPU group index.	integer	Minimum value: 0 Maximum value: 4294967295	0

config port-path-option

Parameter	Description	Type	Size	Default
ports-using-npu	Set ha/aux ports to handle traffic with NPU (otherwise traffic goes to Intel-NIC and then CPU).	string	Maximum length: 15	
<interface-name>	Available interfaces for NPU path.			

config priority-protocol

Parameter	Description	Type	Size	Default						
bfd	Enable/disable NPU BFD priority protocol.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable NPU BFD priority protocol.</td></tr><tr><td><i>disable</i></td><td>Disable NPU BFD priority protocol.</td></tr></table>	Option	Description	<i>enable</i>	Enable NPU BFD priority protocol.	<i>disable</i>	Disable NPU BFD priority protocol.			
Option	Description									
<i>enable</i>	Enable NPU BFD priority protocol.									
<i>disable</i>	Disable NPU BFD priority protocol.									
bgp	Enable/disable NPU BGP priority protocol.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable NPU BGP priority protocol.</td></tr><tr><td><i>disable</i></td><td>Disable NPU BGP priority protocol.</td></tr></table>	Option	Description	<i>enable</i>	Enable NPU BGP priority protocol.	<i>disable</i>	Disable NPU BGP priority protocol.			
Option	Description									
<i>enable</i>	Enable NPU BGP priority protocol.									
<i>disable</i>	Disable NPU BGP priority protocol.									
slbc	Enable/disable NPU SLBC priority protocol.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable NPU SLBC priority protocol.</td></tr><tr><td><i>disable</i></td><td>Disable NPU SLBC priority protocol.</td></tr></table>	Option	Description	<i>enable</i>	Enable NPU SLBC priority protocol.	<i>disable</i>	Disable NPU SLBC priority protocol.			
Option	Description									
<i>enable</i>	Enable NPU SLBC priority protocol.									
<i>disable</i>	Disable NPU SLBC priority protocol.									

config sw-eh-hash

Parameter	Description	Type	Size	Default										
computation	Set hashing computation.	option	-	xor16										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>xor16</td><td>Use XOR operator to make 16 bits hash.</td></tr><tr><td>xor8</td><td>Use XOR operator to make 8 bits hash.</td></tr><tr><td>xor4</td><td>Use XOR operator to make 4 bits hash.</td></tr><tr><td>crc16</td><td>Use CRC-16-CCITT polynomial to make 16 bits hash.</td></tr></table>	Option	Description	xor16	Use XOR operator to make 16 bits hash.	xor8	Use XOR operator to make 8 bits hash.	xor4	Use XOR operator to make 4 bits hash.	crc16	Use CRC-16-CCITT polynomial to make 16 bits hash.			
Option	Description													
xor16	Use XOR operator to make 16 bits hash.													
xor8	Use XOR operator to make 8 bits hash.													
xor4	Use XOR operator to make 4 bits hash.													
crc16	Use CRC-16-CCITT polynomial to make 16 bits hash.													

Parameter	Description	Type	Size	Default						
destination-ip-lower-16	Include/exclude destination IP address lower 16 bits.	option	-	include						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>include</td><td>Include destination IP address lower 16 bits.</td></tr><tr><td>exclude</td><td>Exclude destination IP address lower 16 bits.</td></tr></table>	Option	Description	include	Include destination IP address lower 16 bits.	exclude	Exclude destination IP address lower 16 bits.			
Option	Description									
include	Include destination IP address lower 16 bits.									
exclude	Exclude destination IP address lower 16 bits.									
destination-ip-upper-16	Include/exclude destination IP address upper 16 bits.	option	-	include						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>include</td><td>Include destination IP address upper 16 bits.</td></tr><tr><td>exclude</td><td>Exclude destination IP address upper 16 bits.</td></tr></table>	Option	Description	include	Include destination IP address upper 16 bits.	exclude	Exclude destination IP address upper 16 bits.			
Option	Description									
include	Include destination IP address upper 16 bits.									
exclude	Exclude destination IP address upper 16 bits.									
destination-port	Include/exclude destination port if TCP/UDP.	option	-	include						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>include</td><td>Include destination port if TCP/UDP.</td></tr><tr><td>exclude</td><td>Exclude destination port if TCP/UDP.</td></tr></table>	Option	Description	include	Include destination port if TCP/UDP.	exclude	Exclude destination port if TCP/UDP.			
Option	Description									
include	Include destination port if TCP/UDP.									
exclude	Exclude destination port if TCP/UDP.									
ip-protocol	Include/exclude IP protocol.	option	-	include						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>include</td><td>Include IP protocol.</td></tr><tr><td>exclude</td><td>Exclude IP protocol.</td></tr></table>	Option	Description	include	Include IP protocol.	exclude	Exclude IP protocol.			
Option	Description									
include	Include IP protocol.									
exclude	Exclude IP protocol.									
netmask-length	Network mask length.	integer	Minimum value: 17 Maximum value: 32	32						
source-ip-lower-16	Include/exclude source IP address lower 16 bits.	option	-	include						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>include</td><td>Include source IP address lower 16 bits.</td></tr><tr><td>exclude</td><td>Exclude source IP address lower 16 bits.</td></tr></table>	Option	Description	include	Include source IP address lower 16 bits.	exclude	Exclude source IP address lower 16 bits.			
Option	Description									
include	Include source IP address lower 16 bits.									
exclude	Exclude source IP address lower 16 bits.									
source-ip-upper-16	Include/exclude source IP address upper 16 bits.	option	-	include						

Parameter	Description	Type	Size	Default
	Option Description			
	<i>include</i>	Include source IP address upper 16 bits.		
	<i>exclude</i>	Exclude source IP address upper 16 bits.		
source-port	Include/exclude source port if TCP/UDP.	option	-	include
	Option Description			
	<i>include</i>	Include source port if TCP/UDP.		
	<i>exclude</i>	Exclude source port if TCP/UDP.		

config sw-tr-hash

Parameter	Description	Type	Size	Default
draco15	Enable/disable DRACO15 hashing.	option	-	enable
	Option Description			
	<i>enable</i>	Enable using DRACO15 hashing for unicast trunk traffic.		
	<i>disable</i>	Enable using DRACO15 hashing for unicast trunk traffic.		
tcp-udp-port	Include/exclude TCP/UDP source and destination port for unicast trunk traffic.	option	-	exclude
	Option Description			
	<i>include</i>	Include TCP/UDP source and destination port for unicast trunk traffic.		
	<i>exclude</i>	Exclude TCP/UDP source and destination port for unicast trunk traffic.		

config system npu-setting prp



This command is available for model(s): FortiGate 100F, FortiGate 101F, FortiGate 60F, FortiGate 70F, FortiGate 71F, FortiGateRugged 60F 3G4G, FortiGateRugged 60F, FortiGateRugged 70F 3G4G, FortiGateRugged 70F, FortiWiFi 60F, FortiWiFi 61F.

It is not available for: FortiGate 1000D, FortiGate 1000F, FortiGate 1001F, FortiGate 100EF, FortiGate 100E, FortiGate 1100E, FortiGate 1101E, FortiGate 140E-POE, FortiGate 140E, FortiGate 1500DT, FortiGate 1500D, FortiGate 1800F, FortiGate 1801F, FortiGate 2000E, FortiGate 200E, FortiGate 200F, FortiGate 201E, FortiGate 201F, FortiGate 2201E, FortiGate 2500E, FortiGate 2600F, FortiGate 2601F, FortiGate 3000D, FortiGate 3000F, FortiGate 3001F, FortiGate 300E, FortiGate 301E, FortiGate 3100D, FortiGate 3200D, FortiGate 3200F, FortiGate 3201F, FortiGate 3300E, FortiGate 3301E, FortiGate 3400E, FortiGate 3401E, FortiGate 3501F, FortiGate 3600E, FortiGate 3601E, FortiGate 3700D, FortiGate 3700F, FortiGate 3701F, FortiGate 3960E, FortiGate 3980E, FortiGate 400E Bypass, FortiGate 400E, FortiGate 400F, FortiGate 401E, FortiGate 401F, FortiGate 40F 3G4G, FortiGate 4200F, FortiGate 4201F, FortiGate 4400F, FortiGate 4401F, FortiGate 5001E1, FortiGate 5001E, FortiGate 500E, FortiGate 501E, FortiGate 600E, FortiGate 601E, FortiGate 60E-POE, FortiGate 60E, FortiGate 61E, FortiGate 800D, FortiGate 80E-POE, FortiGate 80E, FortiGate 80F Bypass, FortiGate 80F DSL, FortiGate 80F-POE, FortiGate 80F, FortiGate 81E-POE, FortiGate 81E, FortiGate 81F-POE, FortiGate 81F, FortiGate 900D, FortiGate 90E, FortiGate 91E, FortiGate-VM64 Aliyun, FortiGate-VM64 AWS, FortiGate-VM64 Azure, FortiGate-VM64 GCP, FortiGate-VM64 OPC, FortiGate-VM64, FortiWiFi 40F 3G4G, FortiWiFi 40F, FortiWiFi 60E, FortiWiFi 61E, FortiWiFi 80F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G-POE, FortiWiFi 81F 2R-POE, FortiWiFi 81F 2R.

Configure NPU PRP attributes.

```
config system npu-setting prp
  Description: Configure NPU PRP attributes.
  set prp-port-in <interface-name1>, <interface-name2>, ...
  set prp-port-out <interface-name1>, <interface-name2>, ...
end
```

config system npu-setting prp

Parameter	Description	Type	Size	Default
prp-port-in <interface-name>	Ingress port configured to allow the PRP trailer not be stripped off when the PRP packets come in. All of the traffic originating from these ports will always be sent to the host. Physical interface name.	string	Maximum length: 35	
prp-port-out <interface-name>	Egress port configured to allow the PRP trailer not be stripped off when the PRP packets go out. Physical interface name.	string	Maximum length: 35	

config system npu-vlink



This command is available for model(s): FortiGate 1000F, FortiGate 1001F, FortiGate 1800F, FortiGate 1801F, FortiGate 2600F, FortiGate 2601F, FortiGate 3000F, FortiGate 3001F, FortiGate 3200F, FortiGate 3201F, FortiGate 3501F, FortiGate 3700F, FortiGate 3701F, FortiGate 400F, FortiGate 401F, FortiGate 4200F, FortiGate 4201F, FortiGate 4400F, FortiGate 4401F.

It is not available for: FortiGate 1000D, FortiGate 100EF, FortiGate 100E, FortiGate 100F, FortiGate 101F, FortiGate 1100E, FortiGate 1101E, FortiGate 140E-POE, FortiGate 140E, FortiGate 1500DT, FortiGate 1500D, FortiGate 2000E, FortiGate 200E, FortiGate 200F, FortiGate 201E, FortiGate 201F, FortiGate 2201E, FortiGate 2500E, FortiGate 3000D, FortiGate 300E, FortiGate 301E, FortiGate 3100D, FortiGate 3200D, FortiGate 3300E, FortiGate 3301E, FortiGate 3400E, FortiGate 3401E, FortiGate 3600E, FortiGate 3601E, FortiGate 3700D, FortiGate 3960E, FortiGate 3980E, FortiGate 400E Bypass, FortiGate 400E, FortiGate 401E, FortiGate 40F 3G4G, FortiGate 5001E1, FortiGate 5001E, FortiGate 500E, FortiGate 501E, FortiGate 600E, FortiGate 601E, FortiGate 60E-POE, FortiGate 60E, FortiGate 60F, FortiGate 61E, FortiGate 70F, FortiGate 71F, FortiGate 800D, FortiGate 80E-POE, FortiGate 80E, FortiGate 80F Bypass, FortiGate 80F DSL, FortiGate 80F-POE, FortiGate 80F, FortiGate 81E-POE, FortiGate 81E, FortiGate 81F-POE, FortiGate 81F, FortiGate 900D, FortiGate 90E, FortiGate 91E, FortiGate-VM64 Aliyun, FortiGate-VM64 AWS, FortiGate-VM64 Azure, FortiGate-VM64 GCP, FortiGate-VM64 OPC, FortiGate-VM64, FortiGateRugged 60F 3G4G, FortiGateRugged 60F, FortiGateRugged 70F 3G4G, FortiGateRugged 70F, FortiWiFi 40F 3G4G, FortiWiFi 40F, FortiWiFi 60E, FortiWiFi 60F, FortiWiFi 61E, FortiWiFi 61F, FortiWiFi 80F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G-POE, FortiWiFi 81F 2R-POE, FortiWiFi 81F 2R.

Configure NPU VDOM link.

```
config system npu-vlink
  Description: Configure NPU VDOM link.
  edit <name>
  next
end
```

config system npu-vlink

Parameter	Description	Type	Size	Default
name	NPU VDOM link name (maximum = 14 characters).	string	Maximum length: 19	

config system ntp

Configure system NTP information.

```

config system ntp
    Description: Configure system NTP information.
    set authentication [enable|disable]
    set interface <interface-name1>, <interface-name2>, ...
    set key {password}
    set key-id {integer}
    set key-type [MD5|SHA1]
config ntpserver
    Description: Configure the FortiGate to connect to any available third-party NTP server.
    edit <id>
        set authentication [enable|disable]
        set interface {string}
        set interface-select-method [auto|sdwan|...]
        set key {password}
        set key-id {integer}
        set ntpv3 [enable|disable]
        set server {string}
    next
end
set ntpsync [enable|disable]
set server-mode [enable|disable]
set source-ip {ipv4-address}
set source-ip6 {ipv6-address}
set syncinterval {integer}
set type [fortiguard|custom]
end

```

config system ntp

Parameter	Description	Type	Size	Default						
authentication	Enable/disable authentication.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable authentication.</td></tr><tr><td><i>disable</i></td><td>Disable authentication.</td></tr></table>				Option	Description	<i>enable</i>	Enable authentication.	<i>disable</i>	Disable authentication.
	Option	Description								
	<i>enable</i>	Enable authentication.								
	<i>disable</i>	Disable authentication.								
interface <interface-name>	FortiGate interface(s) with NTP server mode enabled. Devices on your network can contact these interfaces for NTP services. Interface name.	string	Maximum length: 79							
key	Key for authentication.	password	Not Specified							
key-id	Key ID for authentication.	integer	Minimum value: 0 Maximum value: 4294967295							

Parameter	Description	Type	Size	Default						
key-type	Key type for authentication (MD5, SHA1).	option	-	MD5						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>MD5</td><td>Use MD5 to authenticate the message.</td></tr><tr><td>SHA1</td><td>Use SHA1 to authenticate the message.</td></tr></table>	Option	Description	MD5	Use MD5 to authenticate the message.	SHA1	Use SHA1 to authenticate the message.			
	Option	Description								
	MD5	Use MD5 to authenticate the message.								
SHA1	Use SHA1 to authenticate the message.									
ntpsync	Enable/disable setting the FortiGate system time by synchronizing with an NTP Server.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable synchronization with NTP Server.</td></tr><tr><td>disable</td><td>Disable synchronization with NTP Server.</td></tr></table>	Option	Description	enable	Enable synchronization with NTP Server.	disable	Disable synchronization with NTP Server.			
	Option	Description								
	enable	Enable synchronization with NTP Server.								
disable	Disable synchronization with NTP Server.									
server-mode	Enable/disable FortiGate NTP Server Mode. Your FortiGate becomes an NTP server for other devices on your network. The FortiGate relays NTP requests to its configured NTP server.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable FortiGate NTP Server Mode.</td></tr><tr><td>disable</td><td>Disable FortiGate NTP Server Mode.</td></tr></table>	Option	Description	enable	Enable FortiGate NTP Server Mode.	disable	Disable FortiGate NTP Server Mode.			
	Option	Description								
	enable	Enable FortiGate NTP Server Mode.								
disable	Disable FortiGate NTP Server Mode.									
source-ip	Source IP address for communication to the NTP server.	ipv4-address	Not Specified	0.0.0.0						
source-ip6	Source IPv6 address for communication to the NTP server.	ipv6-address	Not Specified	::						
syncinterval	NTP synchronization interval (1 - 1440 min).	integer	Minimum value: 60 1 Maximum value: 1440							
type	Use the FortiGuard NTP server or any other available NTP Server.	option	-	fortiguard						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>fortiguard</td><td>Use the FortiGuard NTP server.</td></tr><tr><td>custom</td><td>Use any other available NTP server.</td></tr></table>	Option	Description	fortiguard	Use the FortiGuard NTP server.	custom	Use any other available NTP server.			
	Option	Description								
	fortiguard	Use the FortiGuard NTP server.								
custom	Use any other available NTP server.									

config ntpserver

Parameter	Description	Type	Size	Default
authentication	Enable/disable MD5(NTPv3)/SHA1(NTPv4) authentication.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable MD5(NTPv3)/SHA1(NTPv4) authentication.		
	<i>disable</i>	Disable MD5(NTPv3)/SHA1(NTPv4) authentication.		
id	NTP server ID.	integer	Minimum value: 0 Maximum value: 4294967295	
interface	Specify outgoing interface to reach server.	string	Maximum length: 15	
interface-select-method	Specify how to select outgoing interface to reach server.	option	-	auto
	Option	Description		
	<i>auto</i>	Set outgoing interface automatically.		
	<i>sdwan</i>	Set outgoing interface by SD-WAN or policy routing rules.		
	<i>specify</i>	Set outgoing interface manually.		
key	Key for MD5(NTPv3)/SHA1(NTPv4) authentication.	password	Not Specified	
key-id	Key ID for authentication.	integer	Minimum value: 0 Maximum value: 4294967295	
ntp3	Enable to use NTPv3 instead of NTPv4.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable NTPv3.		
	<i>disable</i>	Disable NTPv3 (use NTPv4).		
server	IP address or hostname of the NTP Server.	string	Maximum length: 63	

config system object-tagging

Configure object tagging.

```

config system object-tagging
  Description: Configure object tagging.
  edit <category>
    set address [disable|mandatory|...]
    set color {integer}
    set device [disable|mandatory|...]
    set interface [disable|mandatory|...]
    set multiple [enable|disable]
    set tags <name1>, <name2>, ...
  next
end

```

config system object-tagging

Parameter	Description	Type	Size	Default
address	Address.	option	-	optional
	Option	Description		
	<i>disable</i>	Disable.		
	<i>mandatory</i>	Mandatory.		
	<i>optional</i>	Optional.		
category	Tag Category.	string	Maximum length: 63	
color	Color of icon on the GUI.	integer	Minimum value: 0 Maximum value: 32	0
device	Device.	option	-	optional
	Option	Description		
	<i>disable</i>	Disable.		
	<i>mandatory</i>	Mandatory.		
	<i>optional</i>	Optional.		
interface	Interface.	option	-	optional
	Option	Description		
	<i>disable</i>	Disable.		
	<i>mandatory</i>	Mandatory.		
	<i>optional</i>	Optional.		

Parameter	Description	Type	Size	Default						
multiple	Allow multiple tag selection.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable multi-tagging.</td></tr><tr><td>disable</td><td>Disable multi-tagging.</td></tr></table>				Option	Description	enable	Enable multi-tagging.	disable	Disable multi-tagging.
	Option	Description								
	enable	Enable multi-tagging.								
	disable	Disable multi-tagging.								
tags <name>	Tags. Tag name.	string	Maximum length: 79							

config system password-policy

Configure password policy for locally defined administrator passwords and IPsec VPN pre-shared keys.

```

config system password-policy
    Description: Configure password policy for locally defined administrator passwords and IPsec
VPN pre-shared keys.
    set apply-to {option1}, {option2}, ...
    set expire-day {integer}
    set expire-status [enable|disable]
    set login-lockout-upon-downgrade [enable|disable]
    set min-change-characters {integer}
    set min-lower-case-letter {integer}
    set min-non-alphanumeric {integer}
    set min-number {integer}
    set min-upper-case-letter {integer}
    set minimum-length {integer}
    set reuse-password [enable|disable]
    set status [enable|disable]
end

```

config system password-policy

Parameter	Description	Type	Size	Default						
apply-to	Apply password policy to administrator passwords or IPsec pre-shared keys or both. Separate entries with a space.	option	-	admin-password						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>admin-password</td><td>Apply to administrator passwords.</td></tr><tr><td>ipsec-preshared-key</td><td>Apply to IPsec pre-shared keys.</td></tr></table>				Option	Description	admin-password	Apply to administrator passwords.	ipsec-preshared-key	Apply to IPsec pre-shared keys.
Option	Description									
admin-password	Apply to administrator passwords.									
ipsec-preshared-key	Apply to IPsec pre-shared keys.									

Parameter	Description	Type	Size	Default						
expire-day	Number of days after which passwords expire (1 - 999 days, default = 90).	integer	Minimum value: 1 Maximum value: 999	90						
expire-status	Enable/disable password expiration.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Passwords expire after expire-day days.</td></tr><tr><td>disable</td><td>Passwords do not expire.</td></tr></table>				Option	Description	enable	Passwords expire after expire-day days.	disable	Passwords do not expire.
Option	Description									
enable	Passwords expire after expire-day days.									
disable	Passwords do not expire.									
login-lockout-upon-downgrade	Enable/disable administrative user login lockout upon downgrade (default = disable). If enabled, downgrading the FortiOS firmware to a lower version where safer passwords are unsupported will lock out administrative users.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable administrative user login lockout upon downgrade.</td></tr><tr><td>disable</td><td>Disable administrative user login lockout upon downgrade.</td></tr></table>				Option	Description	enable	Enable administrative user login lockout upon downgrade.	disable	Disable administrative user login lockout upon downgrade.
Option	Description									
enable	Enable administrative user login lockout upon downgrade.									
disable	Disable administrative user login lockout upon downgrade.									
min-change-characters	Minimum number of unique characters in new password which do not exist in old password (0 - 128, default = 0. This attribute overrides reuse-password if both are enabled).	integer	Minimum value: 0 Maximum value: 128	0						
min-lower-case-letter	Minimum number of lowercase characters in password (0 - 128, default = 0).	integer	Minimum value: 0 Maximum value: 128	0						
min-non-alphanumeric	Minimum number of non-alphanumeric characters in password (0 - 128, default = 0).	integer	Minimum value: 0 Maximum value: 128	0						
min-number	Minimum number of numeric characters in password (0 - 128, default = 0).	integer	Minimum value: 0 Maximum value: 128	0						
min-upper-case-letter	Minimum number of uppercase characters in password (0 - 128, default = 0).	integer	Minimum value: 0 Maximum value: 128	0						

Parameter	Description	Type	Size	Default						
minimum-length	Minimum password length (8 - 128, default = 8).	integer	Minimum value: 8 Maximum value: 128	8						
reuse-password	Enable/disable reuse of password. If both reuse-password and min-change-characters are enabled, min-change-characters overrides.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Administrators are allowed to reuse the same password.</td></tr><tr><td>disable</td><td>Administrators must create a new password.</td></tr></table>				Option	Description	enable	Administrators are allowed to reuse the same password.	disable	Administrators must create a new password.
Option	Description									
enable	Administrators are allowed to reuse the same password.									
disable	Administrators must create a new password.									
status	Enable/disable setting a password policy for locally defined administrator passwords and IPsec VPN pre-shared keys.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable password policy.</td></tr><tr><td>disable</td><td>Disable password policy.</td></tr></table>				Option	Description	enable	Enable password policy.	disable	Disable password policy.
Option	Description									
enable	Enable password policy.									
disable	Disable password policy.									

config system password-policy-guest-admin

Configure the password policy for guest administrators.

```

config system password-policy-guest-admin
  Description: Configure the password policy for guest administrators.
  set apply-to {option1}, {option2}, ...
  set expire-day {integer}
  set expire-status [enable|disable]
  set min-change-characters {integer}
  set min-lower-case-letter {integer}
  set min-non-alphanumeric {integer}
  set min-number {integer}
  set min-upper-case-letter {integer}
  set minimum-length {integer}
  set reuse-password [enable|disable]
  set status [enable|disable]
end

```

config system password-policy-guest-admin

Parameter	Description	Type	Size	Default						
apply-to	Guest administrator to which this password policy applies.	option	-	guest-admin-password						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>guest-admin-password</i></td><td>Apply to guest administrator password.</td></tr></table>	Option	Description	<i>guest-admin-password</i>	Apply to guest administrator password.					
Option	Description									
<i>guest-admin-password</i>	Apply to guest administrator password.									
expire-day	Number of days after which passwords expire (1 - 999 days, default = 90).	integer	Minimum value: 1 Maximum value: 999	90						
expire-status	Enable/disable password expiration.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Passwords expire after expire-day days.</td></tr><tr><td><i>disable</i></td><td>Passwords do not expire.</td></tr></table>	Option	Description	<i>enable</i>	Passwords expire after expire-day days.	<i>disable</i>	Passwords do not expire.			
Option	Description									
<i>enable</i>	Passwords expire after expire-day days.									
<i>disable</i>	Passwords do not expire.									
min-change-characters	Minimum number of unique characters in new password which do not exist in old password (0 - 128, default = 0. This attribute overrides reuse-password if both are enabled).	integer	Minimum value: 0 Maximum value: 128	0						
min-lower-case-letter	Minimum number of lowercase characters in password (0 - 128, default = 0).	integer	Minimum value: 0 Maximum value: 128	0						
min-non-alphanumeric	Minimum number of non-alphanumeric characters in password (0 - 128, default = 0).	integer	Minimum value: 0 Maximum value: 128	0						
min-number	Minimum number of numeric characters in password (0 - 128, default = 0).	integer	Minimum value: 0 Maximum value: 128	0						
min-upper-case-letter	Minimum number of uppercase characters in password (0 - 128, default = 0).	integer	Minimum value: 0 Maximum value: 128	0						

Parameter	Description	Type	Size	Default						
minimum-length	Minimum password length (8 - 128, default = 8).	integer	Minimum value: 8 Maximum value: 128	8						
reuse-password	Enable/disable reuse of password. If both reuse-password and min-change-characters are enabled, min-change-characters overrides.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Administrators are allowed to reuse the same password.</td></tr><tr><td>disable</td><td>Administrators must create a new password.</td></tr></table>				Option	Description	enable	Administrators are allowed to reuse the same password.	disable	Administrators must create a new password.
Option	Description									
enable	Administrators are allowed to reuse the same password.									
disable	Administrators must create a new password.									
status	Enable/disable setting a password policy for locally defined administrator passwords and IPsec VPN pre-shared keys.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable password policy.</td></tr><tr><td>disable</td><td>Disable password policy.</td></tr></table>				Option	Description	enable	Enable password policy.	disable	Disable password policy.
Option	Description									
enable	Enable password policy.									
disable	Disable password policy.									

config system physical-switch



This command is available for model(s): FortiGate 1000F, FortiGate 1001F, FortiGate 100EF, FortiGate 100E, FortiGate 100F, FortiGate 101F, FortiGate 1100E, FortiGate 1101E, FortiGate 140E-POE, FortiGate 140E, FortiGate 1800F, FortiGate 1801F, FortiGate 200F, FortiGate 201F, FortiGate 2600F, FortiGate 2601F, FortiGate 3000F, FortiGate 3001F, FortiGate 300E, FortiGate 301E, FortiGate 3200F, FortiGate 3201F, FortiGate 3501F, FortiGate 3700F, FortiGate 3701F, FortiGate 400E Bypass, FortiGate 400E, FortiGate 400F, FortiGate 401E, FortiGate 401F, FortiGate 40F 3G4G, FortiGate 4200F, FortiGate 4201F, FortiGate 4400F, FortiGate 4401F, FortiGate 60E-POE, FortiGate 60E, FortiGate 60F, FortiGate 61E, FortiGate 70F, FortiGate 71F, FortiGate 80E-POE, FortiGate 80E, FortiGate 80F Bypass, FortiGate 80F DSL, FortiGate 80F-POE, FortiGate 80F, FortiGate 81E-POE, FortiGate 81E, FortiGate 81F-POE, FortiGate 81F, FortiGate 90E, FortiGate 91E, FortiGateRugged 60F 3G4G, FortiGateRugged 60F, FortiGateRugged 70F 3G4G, FortiGateRugged 70F, FortiWiFi 40F 3G4G, FortiWiFi 40F, FortiWiFi 60E, FortiWiFi 60F, FortiWiFi 61E, FortiWiFi 61F, FortiWiFi 80F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G-POE, FortiWiFi 81F 2R-POE, FortiWiFi 81F 2R.

It is not available for: FortiGate 1000D, FortiGate 1500DT, FortiGate 1500D, FortiGate 2000E, FortiGate 200E, FortiGate 201E, FortiGate 2201E, FortiGate 2500E, FortiGate 3000D, FortiGate 3100D, FortiGate 3200D, FortiGate 3300E, FortiGate 3301E, FortiGate 3400E, FortiGate 3401E, FortiGate 3600E, FortiGate 3601E, FortiGate 3700D, FortiGate 3960E, FortiGate 3980E, FortiGate 5001E1, FortiGate 5001E, FortiGate 500E, FortiGate 501E, FortiGate 600E, FortiGate 601E, FortiGate 800D, FortiGate 900D, FortiGate-VM64 Aliyun, FortiGate-VM64 AWS, FortiGate-VM64 Azure, FortiGate-VM64 GCP, FortiGate-VM64 OPC, FortiGate-VM64.

Configure physical switches.

```
config system physical-switch
  Description: Configure physical switches.
  edit <name>
    set age-enable [enable|disable]
    set age-val {integer}
  next
end
```

config system physical-switch

Parameter	Description	Type	Size	Default
age-enable	Enable/disable layer 2 age timer.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable layer 2 ageing timer.		

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>disable</i>	Disable layer 2 ageing timer.		
age-val	Layer 2 table age timer value.	integer	Minimum value: 0 Maximum value: 4294967295	3158067
name	Name.	string	Maximum length: 15	

config system pppoe-interface

Configure the PPPoE interfaces.

```

config system pppoe-interface
  Description: Configure the PPPoE interfaces.
  edit <name>
    set ac-name {string}
    set auth-type [auto|pap|...]
    set device {string}
    set dial-on-demand [enable|disable]
    set disc-retry-timeout {integer}
    set idle-timeout {integer}
    set ipunnumbered {ipv4-address}
    set ipv6 [enable|disable]
    set lcp-echo-interval {integer}
    set lcp-max-echo-fails {integer}
    set padt-retry-timeout {integer}
    set password {password}
    set pppoe-unnumbered-negotiate [enable|disable]
    set service-name {string}
    set username {string}
  next
end

```

config system pppoe-interface

Parameter	Description	Type	Size	Default
ac-name	PPPoE AC name.	string	Maximum length: 63	
auth-type	PPP authentication type to use.	option	-	auto

Parameter	Description	Type	Size	Default												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>auto</td><td>Automatically choose the authentication method.</td></tr><tr><td>pap</td><td>PAP authentication.</td></tr><tr><td>chap</td><td>CHAP authentication.</td></tr><tr><td>mschapv1</td><td>MS-CHAPv1 authentication.</td></tr><tr><td>mschapv2</td><td>MS-CHAPv2 authentication.</td></tr></table>	Option	Description	auto	Automatically choose the authentication method.	pap	PAP authentication.	chap	CHAP authentication.	mschapv1	MS-CHAPv1 authentication.	mschapv2	MS-CHAPv2 authentication.			
	Option	Description														
	auto	Automatically choose the authentication method.														
	pap	PAP authentication.														
	chap	CHAP authentication.														
	mschapv1	MS-CHAPv1 authentication.														
mschapv2	MS-CHAPv2 authentication.															
device	Name for the physical interface.	string	Maximum length: 15													
dial-on-demand	Enable/disable dial on demand to dial the PPPoE interface when packets are routed to the PPPoE interface.	option	-	disable												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable dial on demand.</td></tr><tr><td>disable</td><td>Disable dial on demand.</td></tr></table>	Option	Description	enable	Enable dial on demand.	disable	Disable dial on demand.									
	Option	Description														
	enable	Enable dial on demand.														
disable	Disable dial on demand.															
disc-retry-timeout	PPPoE discovery init timeout value in (0-4294967295 sec).	integer	Minimum value: 1 0 Maximum value: 4294967295													
idle-timeout	PPPoE auto disconnect after idle timeout (0-4294967295 sec).	integer	Minimum value: 0 0 Maximum value: 4294967295													
ipunnumbered	PPPoE unnumbered IP.	ipv4-address	Not Specified	0.0.0.0												
ipv6	Enable/disable IPv6 Control Protocol (IPv6CP).	option	-	disable												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable IPv6CP.</td></tr><tr><td>disable</td><td>Disable IPv6CP.</td></tr></table>	Option	Description	enable	Enable IPv6CP.	disable	Disable IPv6CP.									
	Option	Description														
	enable	Enable IPv6CP.														
disable	Disable IPv6CP.															
lcp-echo-interval	Time in seconds between PPPoE Link Control Protocol (LCP) echo requests.	integer	Minimum value: 5 0 Maximum value: 32767													

Parameter	Description	Type	Size	Default						
lcp-max-echo-fails	Maximum missed LCP echo messages before disconnect.	integer	Minimum value: 0 Maximum value: 32767	3						
name	Name of the PPPoE interface.	string	Maximum length: 15							
padt-retry-timeout	PPPoE terminate timeout value in (0-4294967295 sec).	integer	Minimum value: 0 Maximum value: 4294967295	1						
password	Enter the password.	password	Not Specified							
pppoe-unnumbered-negotiate	Enable/disable PPPoE unnumbered negotiation.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable PPPoE unnumbered negotiation.</td></tr><tr><td>disable</td><td>Disable PPPoE unnumbered negotiation.</td></tr></table>				Option	Description	enable	Enable PPPoE unnumbered negotiation.	disable	Disable PPPoE unnumbered negotiation.
Option	Description									
enable	Enable PPPoE unnumbered negotiation.									
disable	Disable PPPoE unnumbered negotiation.									
service-name	PPPoE service name.	string	Maximum length: 63							
username	User name.	string	Maximum length: 64							

config system probe-response

Configure system probe response.

```

config system probe-response
    Description: Configure system probe response.
    set http-probe-value {string}
    set mode [none|http-probe|...]
    set password {password}
    set port {integer}
    set security-mode [none|authentication]
    set timeout {integer}
    set ttl-mode [reinit|decrease|...]
end

```

config system probe-response

Parameter	Description	Type	Size	Default
http-probe-value	Value to respond to the monitoring server.	string	Maximum length: 1024	OK
mode	SLA response mode.	option	-	none
	Option	Description		
	<i>none</i>	Disable probe.		
	<i>http-probe</i>	HTTP probe.		
	<i>twamp</i>	Two way active measurement protocol.		
password	TWAMP responder password in authentication mode.	password	Not Specified	
port	Port number to response.	integer	Minimum value: 1 Maximum value: 65535	8008
security-mode	TWAMP responder security mode.	option	-	none
	Option	Description		
	<i>none</i>	Unauthenticated mode.		
	<i>authentication</i>	Authenticated mode.		
timeout	An inactivity timer for a twamp test session.	integer	Minimum value: 10 Maximum value: 3600	300
ttl-mode	Mode for TWAMP packet TTL modification.	option	-	retain
	Option	Description		
	<i>reinit</i>	Reinitialize TTL.		
	<i>decrease</i>	Decrease TTL.		
	<i>retain</i>	Retain TTL.		

config system proxy-arp

Configure proxy-ARP.

```

config system proxy-arp
  Description: Configure proxy-ARP.
  edit <id>
    set end-ip {ipv4-address}
    set interface {string}
    set ip {ipv4-address}
  next
end

```

config system proxy-arp

Parameter	Description	Type	Size	Default
end-ip	End IP of IP range to be proxied.	ipv4-address	Not Specified	0.0.0.0
id	Unique integer ID of the entry.	integer	Minimum value: 0 Maximum value: 4294967295	
interface	Interface acting proxy-ARP.	string	Maximum length: 15	
ip	IP address or start IP to be proxied.	ipv4-address	Not Specified	0.0.0.0

config system ptp

Configure system PTP information.

```

config system ptp
  Description: Configure system PTP information.
  set delay-mechanism [E2E|P2P]
  set interface {string}
  set mode [multicast|hybrid]
  set request-interval {integer}
  config server-interface
    Description: FortiGate interface(s) with PTP server mode enabled. Devices on your network
    can contact these interfaces for PTP services.
    edit <id>
      set delay-mechanism [E2E|P2P]
      set server-interface-name {string}
    next
  end
  set server-mode [enable|disable]
  set status [enable|disable]
end

```

config system ptp

Parameter	Description	Type	Size	Default						
delay-mechanism	End to end delay detection or peer to peer delay detection.	option	-	E2E						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>E2E</td><td>End to end delay detection.</td></tr><tr><td>P2P</td><td>Peer to peer delay detection.</td></tr></table>	Option	Description	E2E	End to end delay detection.	P2P	Peer to peer delay detection.			
Option	Description									
E2E	End to end delay detection.									
P2P	Peer to peer delay detection.									
interface	PTP client will reply through this interface.	string	Maximum length: 15							
mode	Multicast transmission or hybrid transmission.	option	-	multicast						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>multicast</td><td>Send PTP packets with multicast.</td></tr><tr><td>hybrid</td><td>Send PTP packets with unicast and multicast.</td></tr></table>	Option	Description	multicast	Send PTP packets with multicast.	hybrid	Send PTP packets with unicast and multicast.			
Option	Description									
multicast	Send PTP packets with multicast.									
hybrid	Send PTP packets with unicast and multicast.									
request-interval	The delay request value is the logarithmic mean interval in seconds between the delay request messages sent by the slave to the master.	integer	Minimum value: 1 Maximum value: 6	1						
server-mode	Enable/disable FortiGate PTP server mode. Your FortiGate becomes an PTP server for other devices on your network.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable FortiGate PTP server mode.</td></tr><tr><td>disable</td><td>Disable FortiGate PTP server mode.</td></tr></table>	Option	Description	enable	Enable FortiGate PTP server mode.	disable	Disable FortiGate PTP server mode.			
Option	Description									
enable	Enable FortiGate PTP server mode.									
disable	Disable FortiGate PTP server mode.									
status	Enable/disable setting the FortiGate system time by synchronizing with an PTP Server.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable synchronization with PTP Server.</td></tr><tr><td>disable</td><td>Disable synchronization with PTP Server.</td></tr></table>	Option	Description	enable	Enable synchronization with PTP Server.	disable	Disable synchronization with PTP Server.			
Option	Description									
enable	Enable synchronization with PTP Server.									
disable	Disable synchronization with PTP Server.									

config server-interface

Parameter	Description	Type	Size	Default
delay-mechanism	End to end delay detection or peer to peer delay detection.	option	-	E2E
	Option		Description	
	E2E		End to end delay detection.	
	P2P		Peer to peer delay detection.	
id	ID.	integer	Minimum value: 0 Maximum value: 4294967295	0
server-interface-name	Interface name.	string	Maximum length: 15	

config system replacemsg admin

Replacement messages. Read-only.

```
config system replacemsg admin
  Description: Replacement messages. Read-only.
  edit <msg-type>
    set buffer {var-string}
    set format [none|text|...]
    set header [none|http|...]
  next
end
```

config system replacemsg admin

Parameter	Description	Type	Size	Default
buffer	Message string.	var-string	Maximum length: 32768	
format	Format flag.	option	-	none
	Option		Description	
	none		No format type.	

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>text</i>	Text format.		
	<i>html</i>	HTML format.		
header	Header flag.	option	-	none
	Option	Description		
	<i>none</i>	No header type.		
	<i>http</i>	HTTP		
	<i>8bit</i>	8 bit.		
msg-type	Message type.	string	Maximum length: 28	

config system replacemsg alertmail

Replacement messages. Read-only.

```

config system replacemsg alertmail
  Description: Replacement messages. Read-only.
  edit <msg-type>
    set buffer {var-string}
    set format [none|text|...]
    set header [none|http|...]
  next
end

```

config system replacemsg alertmail

Parameter	Description	Type	Size	Default
buffer	Message string.	var-string	Maximum length: 32768	
format	Format flag.	option	-	none
	Option	Description		
	<i>none</i>	No format type.		
	<i>text</i>	Text format.		
	<i>html</i>	HTML format.		

Parameter	Description	Type	Size	Default								
header	Header flag.	option	-	none								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>none</i></td><td>No header type.</td></tr><tr><td><i>http</i></td><td>HTTP</td></tr><tr><td><i>8bit</i></td><td>8 bit.</td></tr></table>				Option	Description	<i>none</i>	No header type.	<i>http</i>	HTTP	<i>8bit</i>	8 bit.
	Option	Description										
	<i>none</i>	No header type.										
	<i>http</i>	HTTP										
<i>8bit</i>	8 bit.											
msg-type	Message type.	string	Maximum length: 28									

config system replacemsg auth

Replacement messages. Read-only.

```

config system replacemsg auth
  Description: Replacement messages. Read-only.
  edit <msg-type>
    set buffer {var-string}
    set format [none|text|...]
    set header [none|http|...]
  next
end

```

config system replacemsg auth

Parameter	Description	Type	Size	Default								
buffer	Message string.	var-string	Maximum length: 32768									
format	Format flag.	option	-	none								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>none</i></td><td>No format type.</td></tr><tr><td><i>text</i></td><td>Text format.</td></tr><tr><td><i>html</i></td><td>HTML format.</td></tr></table>				Option	Description	<i>none</i>	No format type.	<i>text</i>	Text format.	<i>html</i>	HTML format.
	Option	Description										
	<i>none</i>	No format type.										
	<i>text</i>	Text format.										
<i>html</i>	HTML format.											
header	Header flag.	option	-	none								

Parameter	Description	Type	Size	Default
	Option Description			
	<i>none</i>	No header type.		
	<i>http</i>	HTTP		
	<i>8bit</i>	8 bit.		
msg-type	Message type.	string	Maximum length: 28	

config system replacemsg automation

Replacement messages. Read-only.

```

config system replacemsg automation
  Description: Replacement messages. Read-only.
  edit <msg-type>
    set buffer {var-string}
    set format [none|text|...]
    set header [none|http|...]
  next
end

```

config system replacemsg automation

Parameter	Description	Type	Size	Default
buffer	Message string.	var-string	Maximum length: 32768	
format	Format flag.	option	-	none
	Option Description			
	<i>none</i>	No format type.		
	<i>text</i>	Text format.		
	<i>html</i>	HTML format.		
header	Header flag.	option	-	none
	Option Description			
	<i>none</i>	No header type.		

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>http</i>	HTTP		
	<i>8bit</i>	8 bit.		
msg-type	Message type.	string	Maximum length: 28	

config system replacemsg custom-message

Replacement messages. Read-only.

```

config system replacemsg custom-message
  Description: Replacement messages. Read-only.
  edit <msg-type>
    set buffer {var-string}
    set format [none|text|...]
    set header [none|http|...]
  next
end

```

config system replacemsg custom-message

Parameter	Description	Type	Size	Default
buffer	Message string.	var-string	Maximum length: 32768	
format	Format flag.	option	-	none
	Option	Description		
	<i>none</i>	No format type.		
	<i>text</i>	Text format.		
	<i>html</i>	HTML format.		
header	Header flag.	option	-	none
	Option	Description		
	<i>none</i>	No header type.		
	<i>http</i>	HTTP		
	<i>8bit</i>	8 bit.		

Parameter	Description	Type	Size	Default
msg-type	Message type.	string	Maximum length: 28	

config system replacemsg fortiguard-wf

Replacement messages. Read-only.

```

config system replacemsg fortiguard-wf
  Description: Replacement messages. Read-only.
  edit <msg-type>
    set buffer {var-string}
    set format [none|text|...]
    set header [none|http|...]
  next
end

```

config system replacemsg fortiguard-wf

Parameter	Description	Type	Size	Default
buffer	Message string.	var-string	Maximum length: 32768	
format	Format flag.	option	-	none
	Option	Description		
	<i>none</i>	No format type.		
	<i>text</i>	Text format.		
	<i>html</i>	HTML format.		
header	Header flag.	option	-	none
	Option	Description		
	<i>none</i>	No header type.		
	<i>http</i>	HTTP		
	<i>8bit</i>	8 bit.		
msg-type	Message type.	string	Maximum length: 28	

config system replacemsg ftp

Replacement messages. Read-only.

```
config system replacemsg ftp
  Description: Replacement messages. Read-only.
  edit <msg-type>
    set buffer {var-string}
    set format [none|text|...]
    set header [none|http|...]
  next
end
```

config system replacemsg ftp

Parameter	Description	Type	Size	Default
buffer	Message string.	var-string	Maximum length: 32768	
format	Format flag.	option	-	none
	Option	Description		
	none	No format type.		
	text	Text format.		
	html	HTML format.		
header	Header flag.	option	-	none
	Option	Description		
	none	No header type.		
	http	HTTP		
	8bit	8 bit.		
msg-type	Message type.	string	Maximum length: 28	

config system replacemsg http

Replacement messages. Read-only.

```
config system replacemsg http
  Description: Replacement messages. Read-only.
```

```

edit <msg-type>
    set buffer {var-string}
    set format [none|text|...]
    set header [none|http|...]
next
end

```

config system replacemsg http

Parameter	Description	Type	Size	Default
buffer	Message string.	var-string	Maximum length: 32768	
format	Format flag.	option	-	none
	Option Description			
	<i>none</i>	No format type.		
	<i>text</i>	Text format.		
	<i>html</i>	HTML format.		
header	Header flag.	option	-	none
	Option Description			
	<i>none</i>	No header type.		
	<i>http</i>	HTTP		
	<i>8bit</i>	8 bit.		
msg-type	Message type.	string	Maximum length: 28	

config system replacemsg icap

Replacement messages. Read-only.

```

config system replacemsg icap
    Description: Replacement messages. Read-only.
    edit <msg-type>
        set buffer {var-string}
        set format [none|text|...]
        set header [none|http|...]
    next
end

```

config system replacemsg icap

Parameter	Description	Type	Size	Default
buffer	Message string.	var-string	Maximum length: 32768	
format	Format flag.	option	-	none
	Option	Description		
	<i>none</i>	No format type.		
	<i>text</i>	Text format.		
	<i>html</i>	HTML format.		
header	Header flag.	option	-	none
	Option	Description		
	<i>none</i>	No header type.		
	<i>http</i>	HTTP		
	<i>8bit</i>	8 bit.		
msg-type	Message type.	string	Maximum length: 28	

config system replacemsg mail

Replacement messages. Read-only.

```
config system replacemsg mail
  Description: Replacement messages. Read-only.
  edit <msg-type>
    set buffer {var-string}
    set format [none|text|...]
    set header [none|http|...]
  next
end
```


config system replacemsg mail

Parameter	Description	Type	Size	Default
buffer	Message string.	var-string	Maximum length: 32768	
format	Format flag.	option	-	none
	Option	Description		
	none	No format type.		
	text	Text format.		
	html	HTML format.		
header	Header flag.	option	-	none
	Option	Description		
	none	No header type.		
	http	HTTP		
	8bit	8 bit.		
msg-type	Message type.	string	Maximum length: 28	

config system replacemsg nac-quar

Replacement messages. Read-only.

```
config system replacemsg nac-quar
  Description: Replacement messages. Read-only.
  edit <msg-type>
    set buffer {var-string}
    set format [none|text|...]
    set header [none|http|...]
  next
end
```

config system replacemsg nac-quar

Parameter	Description	Type	Size	Default
buffer	Message string.	var-string	Maximum length: 32768	
format	Format flag.	option	-	none
	Option	Description		
	none	No format type.		
	text	Text format.		
	html	HTML format.		
header	Header flag.	option	-	none
	Option	Description		
	none	No header type.		
	http	HTTP		
	8bit	8 bit.		
msg-type	Message type.	string	Maximum length: 28	

config system replacemsg spam

Replacement messages. Read-only.

```
config system replacemsg spam
  Description: Replacement messages. Read-only.
  edit <msg-type>
    set buffer {var-string}
    set format [none|text|...]
    set header [none|http|...]
  next
end
```

config system replacemsg spam

Parameter	Description	Type	Size	Default
buffer	Message string.	var-string	Maximum length: 32768	
format	Format flag.	option	-	none
	Option	Description		
	none	No format type.		
	text	Text format.		
	html	HTML format.		
header	Header flag.	option	-	none
	Option	Description		
	none	No header type.		
	http	HTTP		
	8bit	8 bit.		
msg-type	Message type.	string	Maximum length: 28	

config system replacemsg sslvpn

Replacement messages. Read-only.

```
config system replacemsg sslvpn
  Description: Replacement messages. Read-only.
  edit <msg-type>
    set buffer {var-string}
    set format [none|text|...]
    set header [none|http|...]
  next
end
```

config system replacemsg sslvpn

Parameter	Description	Type	Size	Default
buffer	Message string.	var-string	Maximum length: 32768	
format	Format flag.	option	-	none
	Option	Description		
	none	No format type.		
	text	Text format.		
	html	HTML format.		
header	Header flag.	option	-	none
	Option	Description		
	none	No header type.		
	http	HTTP		
	8bit	8 bit.		
msg-type	Message type.	string	Maximum length: 28	

config system replacemsg traffic-quota

Replacement messages. Read-only.

```
config system replacemsg traffic-quota
  Description: Replacement messages. Read-only.
  edit <msg-type>
    set buffer {var-string}
    set format [none|text|...]
    set header [none|http|...]
  next
end
```

config system replacemsg traffic-quota

Parameter	Description	Type	Size	Default
buffer	Message string.	var-string	Maximum length: 32768	
format	Format flag.	option	-	none
	Option	Description		
	none	No format type.		
	text	Text format.		
	html	HTML format.		
header	Header flag.	option	-	none
	Option	Description		
	none	No header type.		
	http	HTTP		
	8bit	8 bit.		
msg-type	Message type.	string	Maximum length: 28	

config system replacemsg utm

Replacement messages. Read-only.

```
config system replacemsg utm
  Description: Replacement messages. Read-only.
  edit <msg-type>
    set buffer {var-string}
    set format [none|text|...]
    set header [none|http|...]
  next
end
```

config system replacemsg utm

Parameter	Description	Type	Size	Default
buffer	Message string.	var-string	Maximum length: 32768	
format	Format flag.	option	-	none
	Option	Description		
	none	No format type.		
	text	Text format.		
	html	HTML format.		
header	Header flag.	option	-	none
	Option	Description		
	none	No header type.		
	http	HTTP		
	8bit	8 bit.		
msg-type	Message type.	string	Maximum length: 28	

config system replacemsg webproxy

Replacement messages. Read-only.

```
config system replacemsg webproxy
  Description: Replacement messages. Read-only.
  edit <msg-type>
    set buffer {var-string}
    set format [none|text|...]
    set header [none|http|...]
  next
end
```

config system replacemsg webproxy

Parameter	Description	Type	Size	Default
buffer	Message string.	var-string	Maximum length: 32768	
format	Format flag.	option	-	none
	Option	Description		
	<i>none</i>	No format type.		
	<i>text</i>	Text format.		
	<i>html</i>	HTML format.		
header	Header flag.	option	-	none
	Option	Description		
	<i>none</i>	No header type.		
	<i>http</i>	HTTP		
	<i>8bit</i>	8 bit.		
msg-type	Message type.	string	Maximum length: 28	

config system replacemsg-group

Configure replacement message groups.

```
config system replacemsg-group
  Description: Configure replacement message groups.
  edit <name>
    config admin
      Description: Replacement message table entries.
      edit <msg-type>
        set buffer {var-string}
        set format [none|text|...]
        set header [none|http|...]
      next
    end
  config alertmail
    Description: Replacement message table entries.
    edit <msg-type>
      set buffer {var-string}
      set format [none|text|...]
      set header [none|http|...]
```

```

        next
    end
    config auth
        Description: Replacement message table entries.
        edit <msg-type>
            set buffer {var-string}
            set format [none|text|...]
            set header [none|http|...]
        next
    end
    config automation
        Description: Replacement message table entries.
        edit <msg-type>
            set buffer {var-string}
            set format [none|text|...]
            set header [none|http|...]
        next
    end
    set comment {var-string}
    config custom-message
        Description: Replacement message table entries.
        edit <msg-type>
            set buffer {var-string}
            set format [none|text|...]
            set header [none|http|...]
        next
    end
    config fortiguard-wf
        Description: Replacement message table entries.
        edit <msg-type>
            set buffer {var-string}
            set format [none|text|...]
            set header [none|http|...]
        next
    end
    config ftp
        Description: Replacement message table entries.
        edit <msg-type>
            set buffer {var-string}
            set format [none|text|...]
            set header [none|http|...]
        next
    end
    set group-type [default|utm|...]
    config http
        Description: Replacement message table entries.
        edit <msg-type>
            set buffer {var-string}
            set format [none|text|...]
            set header [none|http|...]
        next
    end
end

```



```

config icap
    Description: Replacement message table entries.
    edit <msg-type>
        set buffer {var-string}
        set format [none|text|...]
        set header [none|http|...]
    next
end
config mail
    Description: Replacement message table entries.
    edit <msg-type>
        set buffer {var-string}
        set format [none|text|...]
        set header [none|http|...]
    next
end
config nac-quar
    Description: Replacement message table entries.
    edit <msg-type>
        set buffer {var-string}
        set format [none|text|...]
        set header [none|http|...]
    next
end
config spam
    Description: Replacement message table entries.
    edit <msg-type>
        set buffer {var-string}
        set format [none|text|...]
        set header [none|http|...]
    next
end
config sslvpn
    Description: Replacement message table entries.
    edit <msg-type>
        set buffer {var-string}
        set format [none|text|...]
        set header [none|http|...]
    next
end
config traffic-quota
    Description: Replacement message table entries.
    edit <msg-type>
        set buffer {var-string}
        set format [none|text|...]
        set header [none|http|...]
    next
end
config utm
    Description: Replacement message table entries.
    edit <msg-type>
        set buffer {var-string}

```

```

        set format [none|text|...]
        set header [none|http|...]
    next
end
config webproxy
    Description: Replacement message table entries.
    edit <msg-type>
        set buffer {var-string}
        set format [none|text|...]
        set header [none|http|...]
    next
end
next
end

```

config system replacemsg-group

Parameter	Description	Type	Size	Default
comment	Comment.	var-string	Maximum length: 255	
group-type	Group type.	option	-	default
	Option		Description	
	default	Per-vdom replacement messages.		
	utm	For use with UTM settings in firewall policies.		
	auth	For use with authentication pages in firewall policies.		
name	Group name.	string	Maximum length: 35	

config admin

Parameter	Description	Type	Size	Default								
buffer	Message string.	var-string	Maximum length: 32768									
format	Format flag.	option	-	none								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>none</i></td><td>No format type.</td></tr><tr><td><i>text</i></td><td>Text format.</td></tr><tr><td><i>html</i></td><td>HTML format.</td></tr></table>				Option	Description	<i>none</i>	No format type.	<i>text</i>	Text format.	<i>html</i>	HTML format.
Option	Description											
<i>none</i>	No format type.											
<i>text</i>	Text format.											
<i>html</i>	HTML format.											

Parameter	Description	Type	Size	Default
header	Header flag.	option	-	none
	Option Description			
	<i>none</i>	No header type.		
	<i>http</i>	HTTP		
	<i>8bit</i>	8 bit.		
msg-type	Message type.	string	Maximum length: 28	

config alertmail

Parameter	Description	Type	Size	Default
buffer	Message string.	var-string	Maximum length: 32768	
format	Format flag.	option	-	none
	Option Description			
	<i>none</i>	No format type.		
	<i>text</i>	Text format.		
	<i>html</i>	HTML format.		
header	Header flag.	option	-	none
	Option Description			
	<i>none</i>	No header type.		
	<i>http</i>	HTTP		
	<i>8bit</i>	8 bit.		
msg-type	Message type.	string	Maximum length: 28	

config auth

Parameter	Description	Type	Size	Default
buffer	Message string.	var-string	Maximum length: 32768	
format	Format flag.	option	-	none

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>none</i>	No format type.		
	<i>text</i>	Text format.		
	<i>html</i>	HTML format.		
header	Header flag.	option	-	none
	Option	Description		
	<i>none</i>	No header type.		
	<i>http</i>	HTTP		
	<i>8bit</i>	8 bit.		
msg-type	Message type.	string	Maximum length: 28	

config automation

Parameter	Description	Type	Size	Default
buffer	Message string.	var-string	Maximum length: 32768	
format	Format flag.	option	-	none
	Option	Description		
	<i>none</i>	No format type.		
	<i>text</i>	Text format.		
	<i>html</i>	HTML format.		
header	Header flag.	option	-	none
	Option	Description		
	<i>none</i>	No header type.		
	<i>http</i>	HTTP		
	<i>8bit</i>	8 bit.		
msg-type	Message type.	string	Maximum length: 28	

config custom-message

Parameter	Description	Type	Size	Default
buffer	Message string.	var-string	Maximum length: 32768	
format	Format flag.	option	-	none
	Option	Description		
	none	No format type.		
	text	Text format.		
	html	HTML format.		
header	Header flag.	option	-	none
	Option	Description		
	none	No header type.		
	http	HTTP		
	8bit	8 bit.		
msg-type	Message type.	string	Maximum length: 28	

config fortiguard-wf

Parameter	Description	Type	Size	Default
buffer	Message string.	var-string	Maximum length: 32768	
format	Format flag.	option	-	none
	Option	Description		
	<i>none</i>	No format type.		
	<i>text</i>	Text format.		
	<i>html</i>	HTML format.		
header	Header flag.	option	-	none
	Option	Description		
	<i>none</i>	No header type.		

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>http</i>	HTTP		
	<i>8bit</i>	8 bit.		
msg-type	Message type.	string	Maximum length: 28	

config ftp

Parameter	Description	Type	Size	Default
buffer	Message string.	var-string	Maximum length: 32768	
format	Format flag.	option	-	none
	Option	Description		
	<i>none</i>	No format type.		
	<i>text</i>	Text format.		
	<i>html</i>	HTML format.		
header	Header flag.	option	-	none
	Option	Description		
	<i>none</i>	No header type.		
	<i>http</i>	HTTP		
	<i>8bit</i>	8 bit.		
msg-type	Message type.	string	Maximum length: 28	

config http

Parameter	Description	Type	Size	Default
buffer	Message string.	var-string	Maximum length: 32768	
format	Format flag.	option	-	none

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>none</i>	No format type.		
	<i>text</i>	Text format.		
	<i>html</i>	HTML format.		
header	Header flag.	option	-	none
	Option	Description		
	<i>none</i>	No header type.		
	<i>http</i>	HTTP		
	<i>8bit</i>	8 bit.		
msg-type	Message type.	string	Maximum length: 28	

config icap

Parameter	Description	Type	Size	Default
buffer	Message string.	var-string	Maximum length: 32768	
format	Format flag.	option	-	none
	Option	Description		
	<i>none</i>	No format type.		
	<i>text</i>	Text format.		
	<i>html</i>	HTML format.		
header	Header flag.	option	-	none
	Option	Description		
	<i>none</i>	No header type.		
	<i>http</i>	HTTP		
	<i>8bit</i>	8 bit.		
msg-type	Message type.	string	Maximum length: 28	

config mail

Parameter	Description	Type	Size	Default
buffer	Message string.	var-string	Maximum length: 32768	
format	Format flag.	option	-	none
	Option	Description		
	none	No format type.		
	text	Text format.		
	html	HTML format.		
header	Header flag.	option	-	none
	Option	Description		
	none	No header type.		
	http	HTTP		
	8bit	8 bit.		
msg-type	Message type.	string	Maximum length: 28	

config nac-quar

Parameter	Description	Type	Size	Default
buffer	Message string.	var-string	Maximum length: 32768	
format	Format flag.	option	-	none
	Option	Description		
	<i>none</i>	No format type.		
	<i>text</i>	Text format.		
	<i>html</i>	HTML format.		
header	Header flag.	option	-	none
	Option	Description		
	<i>none</i>	No header type.		

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>http</i>	HTTP		
	<i>8bit</i>	8 bit.		
msg-type	Message type.	string	Maximum length: 28	

config spam

Parameter	Description	Type	Size	Default
buffer	Message string.	var-string	Maximum length: 32768	
format	Format flag.	option	-	none
	Option	Description		
	<i>none</i>	No format type.		
	<i>text</i>	Text format.		
	<i>html</i>	HTML format.		
header	Header flag.	option	-	none
	Option	Description		
	<i>none</i>	No header type.		
	<i>http</i>	HTTP		
	<i>8bit</i>	8 bit.		
msg-type	Message type.	string	Maximum length: 28	

config sslvpn

Parameter	Description	Type	Size	Default
buffer	Message string.	var-string	Maximum length: 32768	
format	Format flag.	option	-	none

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>none</i>	No format type.		
	<i>text</i>	Text format.		
	<i>html</i>	HTML format.		
header	Header flag.	option	-	none
	Option	Description		
	<i>none</i>	No header type.		
	<i>http</i>	HTTP		
	<i>8bit</i>	8 bit.		
msg-type	Message type.	string	Maximum length: 28	

config traffic-quota

Parameter	Description	Type	Size	Default
buffer	Message string.	var-string	Maximum length: 32768	
format	Format flag.	option	-	none
	Option	Description		
	<i>none</i>	No format type.		
	<i>text</i>	Text format.		
	<i>html</i>	HTML format.		
header	Header flag.	option	-	none
	Option	Description		
	<i>none</i>	No header type.		
	<i>http</i>	HTTP		
	<i>8bit</i>	8 bit.		
msg-type	Message type.	string	Maximum length: 28	

config utm

Parameter	Description	Type	Size	Default
buffer	Message string.	var-string	Maximum length: 32768	
format	Format flag.	option	-	none
	Option	Description		
	none	No format type.		
	text	Text format.		
	html	HTML format.		
header	Header flag.	option	-	none
	Option	Description		
	none	No header type.		
	http	HTTP		
	8bit	8 bit.		
msg-type	Message type.	string	Maximum length: 28	

config webproxy

Parameter	Description	Type	Size	Default
buffer	Message string.	var-string	Maximum length: 32768	
format	Format flag.	option	-	none
	Option Description			
	<i>none</i>	No format type.		
	<i>text</i>	Text format.		
	<i>html</i>	HTML format.		
header	Header flag.	option	-	none
	Option Description			
	<i>none</i>	No header type.		

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>http</i>	HTTP		
	<i>8bit</i>	8 bit.		
msg-type	Message type.	string	Maximum length: 28	

config system replacemsg-image

Configure replacement message images.

```
config system replacemsg-image
  Description: Configure replacement message images.
  edit <name>
    set image-base64 {var-string}
    set image-type [gif|jpg|...]
  next
end
```

config system replacemsg-image

Parameter	Description	Type	Size	Default
image-base64	Image data.	var-string	Maximum length: 32768	
image-type	Image type.	option	-	png
	Option	Description		
	<i>gif</i>	GIF image.		
	<i>jpg</i>	JPEG image.		
	<i>tiff</i>	TIFF image.		
	<i>png</i>	PNG image.		
name	Image name.	string	Maximum length: 23	

config system resource-limits

Configure resource limits.

```

config system resource-limits
  Description: Configure resource limits.
  set custom-service {integer}
  set dialup-tunnel {integer}
  set firewall-address {integer}
  set firewall-addrgrp {integer}
  set firewall-policy {integer}
  set ipsec-phase1 {integer}
  set ipsec-phase1-interface {integer}
  set ipsec-phase2 {integer}
  set ipsec-phase2-interface {integer}
  set log-disk-quota {integer}
  set onetime-schedule {integer}
  set proxy {integer}
  set recurring-schedule {integer}
  set service-group {integer}
  set session {integer}
  set sslvpn {integer}
  set user {integer}
  set user-group {integer}
end

```

config system resource-limits

Parameter	Description	Type	Size	Default
custom-service	Maximum number of firewall custom services.	integer	Minimum value: 0 Maximum value: 4294967295	
dialup-tunnel	Maximum number of dial-up tunnels.	integer	Minimum value: 0 Maximum value: 4294967295	
firewall-address	Maximum number of firewall addresses (IPv4, IPv6, multicast).	integer	Minimum value: 0 Maximum value: 4294967295	
firewall-addrgrp	Maximum number of firewall address groups (IPv4, IPv6).	integer	Minimum value: 0 Maximum value: 4294967295	
firewall-policy	Maximum number of firewall policies (policy, DoS-policy4, DoS-policy6, multicast).	integer	Minimum value: 0 Maximum value: 4294967295	

Parameter	Description	Type	Size	Default
ipsec-phase1	Maximum number of VPN IPsec phase1 tunnels.	integer	Minimum value: 0 Maximum value: 4294967295	
ipsec-phase1-interface	Maximum number of VPN IPsec phase1 interface tunnels.	integer	Minimum value: 0 Maximum value: 4294967295	
ipsec-phase2	Maximum number of VPN IPsec phase2 tunnels.	integer	Minimum value: 0 Maximum value: 4294967295	
ipsec-phase2-interface	Maximum number of VPN IPsec phase2 interface tunnels.	integer	Minimum value: 0 Maximum value: 4294967295	
log-disk-quota	Log disk quota in megabytes (MB).	integer	Minimum value: 0 Maximum value: 4294967295 **	0
onetime-schedule	Maximum number of firewall one-time schedules.	integer	Minimum value: 0 Maximum value: 4294967295	
proxy	Maximum number of concurrent proxy users.	integer	Minimum value: 0 Maximum value: 4294967295	
recurring-schedule	Maximum number of firewall recurring schedules.	integer	Minimum value: 0 Maximum value: 4294967295	
service-group	Maximum number of firewall service groups.	integer	Minimum value: 0 Maximum value: 4294967295	
session	Maximum number of sessions.	integer	Minimum value: 0 Maximum value: 4294967295	

Parameter	Description	Type	Size	Default
sslvpn	Maximum number of SSL-VPN.	integer	Minimum value: 0 Maximum value: 4294967295	
user	Maximum number of local users.	integer	Minimum value: 0 Maximum value: 4294967295	
user-group	Maximum number of user groups.	integer	Minimum value: 0 Maximum value: 4294967295	

** Values may differ between models.

config system saml

Global settings for SAML authentication.

```

config system saml
  Description: Global settings for SAML authentication.
  set binding-protocol [post|redirect]
  set cert {string}
  set default-login-page [normal|sso]
  set default-profile {string}
  set entity-id {string}
  set idp-cert {string}
  set idp-entity-id {string}
  set idp-single-logout-url {string}
  set idp-single-sign-on-url {string}
  set life {integer}
  set portal-url {string}
  set role [identity-provider|service-provider]
  set server-address {string}
  config service-providers
    Description: Authorized service providers.
    edit <name>
      config assertion-attributes
        Description: Customized SAML attributes to send along with assertion.
        edit <name>
          set type [username|email|...]
        next
      end
      set idp-entity-id {string}
      set idp-single-logout-url {string}
      set idp-single-sign-on-url {string}
      set prefix {string}
    end
  end
end

```

```

        set sp-binding-protocol [post|redirect]
        set sp-cert {string}
        set sp-entity-id {string}
        set sp-portal-url {string}
        set sp-single-logout-url {string}
        set sp-single-sign-on-url {string}
    next
end
set single-logout-url {string}
set single-sign-on-url {string}
set status [enable|disable]
set tolerance {integer}
end

```

config system saml

Parameter	Description	Type	Size	Default
binding-protocol	IdP Binding protocol.	option	-	redirect
	Option	Description		
	<i>post</i>	HTTP POST binding.		
	<i>redirect</i>	HTTP Redirect binding.		
cert	Certificate to sign SAML messages.	string	Maximum length: 35	
default-login-page	Choose default login page.	option	-	normal
	Option	Description		
	<i>normal</i>	Use local login page as default.		
	<i>sso</i>	Use IdP's Single Sign-On page as default.		
default-profile	Default profile for new SSO admin.	string	Maximum length: 35	
entity-id	SP entity ID. Read-only.	string	Maximum length: 255	
idp-cert	IDP certificate name.	string	Maximum length: 35	
idp-entity-id	IDP entity ID.	string	Maximum length: 255	
idp-single-logout-url	IDP single logout URL.	string	Maximum length: 255	

Parameter	Description	Type	Size	Default
idp-single-sign-on-url	IDP single sign-on URL.	string	Maximum length: 255	
life	Length of the range of time when the assertion is valid (in minutes).	integer	Minimum value: 0 Maximum value: 4294967295	30
portal-url	SP portal URL. Read-only.	string	Maximum length: 255	
role	SAML role.	option	-	service-provider
	Option		Description	
	<i>identity-provider</i>		Identity Provider.	
	<i>service-provider</i>		Service Provider.	
server-address	Server address.	string	Maximum length: 63	
single-logout-url	SP single logout URL. Read-only.	string	Maximum length: 255	
single-sign-on-url	SP single sign-on URL. Read-only.	string	Maximum length: 255	
status	Enable/disable SAML authentication (default = disable).	option	-	disable
	Option		Description	
	<i>enable</i>		Enable SAML authentication.	
	<i>disable</i>		Disable SAML authentication.	
tolerance	Tolerance to the range of time when the assertion is valid (in minutes).	integer	Minimum value: 0 Maximum value: 4294967295	5

config service-providers

Parameter	Description	Type	Size	Default
idp-entity-id	IDP entity ID. Read-only.	string	Maximum length: 255	

Parameter	Description	Type	Size	Default						
idp-single-logout-url	IDP single logout URL. Read-only.	string	Maximum length: 255							
idp-single-sign-on-url	IDP single sign-on URL. Read-only.	string	Maximum length: 255							
name	Name.	string	Maximum length: 35							
prefix	Prefix.	string	Maximum length: 35							
sp-binding-protocol	SP binding protocol.	option	-	post						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>post</i></td><td>HTTP POST binding.</td></tr><tr><td><i>redirect</i></td><td>HTTP Redirect binding.</td></tr></table>				Option	Description	<i>post</i>	HTTP POST binding.	<i>redirect</i>	HTTP Redirect binding.
	Option	Description								
	<i>post</i>	HTTP POST binding.								
<i>redirect</i>	HTTP Redirect binding.									
sp-cert	SP certificate name.	string	Maximum length: 35							
sp-entity-id	SP entity ID.	string	Maximum length: 255							
sp-portal-url	SP portal URL.	string	Maximum length: 255							
sp-single-logout-url	SP single logout URL.	string	Maximum length: 255							
sp-single-sign-on-url	SP single sign-on URL.	string	Maximum length: 255							

config assertion-attributes

Parameter	Description	Type	Size	Default								
name	Name.	string	Maximum length: 35									
type	Type.	option	-	username								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>username</td><td>User Name.</td></tr><tr><td>email</td><td>Email Address.</td></tr><tr><td>profile-name</td><td>Profile Name.</td></tr></table>				Option	Description	username	User Name.	email	Email Address.	profile-name	Profile Name.
	Option	Description										
	username	User Name.										
	email	Email Address.										
profile-name	Profile Name.											

config system sdn-connector

Configure connection to SDN Connector.

```
config system sdn-connector
  Description: Configure connection to SDN Connector.
  edit <name>
    set access-key {string}
    set alt-resource-ip [disable|enable]
    set api-key {password}
    set azure-region [global|china|...]
    set client-id {string}
    set client-secret {password}
    set compartment-id {string}
    set compute-generation {integer}
    set domain {string}
  config external-account-list
    Description: Configure AWS external account list.
    edit <role-arn>
      set external-id {string}
      set region-list <region1>, <region2>, ...
    next
  end
  config external-ip
    Description: Configure GCP external IP.
    edit <name>
      next
    end
  config forwarding-rule
    Description: Configure GCP forwarding rule.
    edit <rule-name>
      set target {string}
    next
  end
  config gcp-project-list
    Description: Configure GCP project list.
    edit <id>
      set gcp-zone-list <name1>, <name2>, ...
    next
  end
  set group-name {string}
  set ha-status [disable|enable]
  set ibm-region [dallas|washington-dc|...]
  set login-endpoint {string}
  config nic
    Description: Configure Azure network interface.
    edit <name>
      config ip
        Description: Configure IP configuration.
        edit <name>
          set public-ip {string}
```

```

        set resource-group {string}
    next
end
next
end
set oci-cert {string}
set oci-fingerprint {string}
set oci-region {string}
set oci-region-type [commercial|government]
set password {password_aes256}
set private-key {user}
set region {string}
set resource-group {string}
set resource-url {string}
config route
    Description: Configure GCP route.
    edit <name>
    next
end
config route-table
    Description: Configure Azure route table.
    edit <name>
        set resource-group {string}
        config route
            Description: Configure Azure route.
            edit <name>
                set next-hop {string}
            next
        end
        set subscription-id {string}
    next
end
set secret-key {password}
set secret-token {user}
set server {string}
set server-ca-cert {string}
set server-cert {string}
set server-list <ip1>, <ip2>, ...
set server-port {integer}
set service-account {string}
set status [disable|enable]
set subscription-id {string}
set tenant-id {string}
set type [aci|alicloud|...]
set update-interval {integer}
set use-metadata-iam [disable|enable]
set user-id {string}
set username {string}
set vcenter-password {password_aes256}
set vcenter-server {string}
set vcenter-username {string}
set verify-certificate [disable|enable]

```

```

        set vpc-id {string}
    next
end

```

config system sdn-connector

Parameter	Description	Type	Size	Default
access-key	AWS / ACS access key ID.	string	Maximum length: 31	
alt-resource-ip	Enable/disable AWS alternative resource IP.	option	-	disable
	Option	Description		
	<i>disable</i>	Disable AWS alternative resource IP.		
	<i>enable</i>	Enable AWS alternative resource IP.		
api-key	IBM cloud API key or service ID API key.	password	Not Specified	
azure-region	Azure server region.	option	-	global
	Option	Description		
	<i>global</i>	Global Azure Server.		
	<i>china</i>	China Azure Server.		
	<i>germany</i>	Germany Azure Server.		
	<i>usgov</i>	US Government Azure Server.		
	<i>local</i>	Azure Stack Local Server.		
client-id	Azure client ID (application ID).	string	Maximum length: 63	
client-secret	Azure client secret (application key).	password	Not Specified	
compartment-id	Compartment ID.	string	Maximum length: 127	
compute-generation	Compute generation for IBM cloud infrastructure.	integer	Minimum value: 1 Maximum value: 2	2
domain	Domain name.	string	Maximum length: 127	

Parameter	Description	Type	Size	Default																				
group-name	Full path group name of computers.	string	Maximum length: 127																					
ha-status	Enable/disable use for FortiGate HA service.	option	-	disable																				
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Disable use for FortiGate HA service.</td></tr><tr><td>enable</td><td>Enable use for FortiGate HA service.</td></tr></table>	Option	Description	disable	Disable use for FortiGate HA service.	enable	Enable use for FortiGate HA service.																	
Option	Description																							
disable	Disable use for FortiGate HA service.																							
enable	Enable use for FortiGate HA service.																							
ibm-region	IBM cloud region name.	option	-	dallas																				
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>dallas</td><td>US South (Dallas) Public Endpoint.</td></tr><tr><td>washington-dc</td><td>US East (Washington DC) Public Endpoint.</td></tr><tr><td>london</td><td>United Kingdom (London) Public Endpoint.</td></tr><tr><td>frankfurt</td><td>Germany (Frankfurt) Public Endpoint.</td></tr><tr><td>sydney</td><td>Australia (Sydney) Public Endpoint.</td></tr><tr><td>tokyo</td><td>Japan (Tokyo) Public Endpoint.</td></tr><tr><td>osaka</td><td>Japan (Osaka) Public Endpoint.</td></tr><tr><td>toronto</td><td>Canada (Toronto) Public Endpoint.</td></tr><tr><td>sao-paulo</td><td>Brazil (Sao Paulo) Public Endpoint.</td></tr></table>	Option	Description	dallas	US South (Dallas) Public Endpoint.	washington-dc	US East (Washington DC) Public Endpoint.	london	United Kingdom (London) Public Endpoint.	frankfurt	Germany (Frankfurt) Public Endpoint.	sydney	Australia (Sydney) Public Endpoint.	tokyo	Japan (Tokyo) Public Endpoint.	osaka	Japan (Osaka) Public Endpoint.	toronto	Canada (Toronto) Public Endpoint.	sao-paulo	Brazil (Sao Paulo) Public Endpoint.			
Option	Description																							
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osaka	Japan (Osaka) Public Endpoint.																							
toronto	Canada (Toronto) Public Endpoint.																							
sao-paulo	Brazil (Sao Paulo) Public Endpoint.																							
login-endpoint	Azure Stack login endpoint.	string	Maximum length: 127																					
name	SDN connector name.	string	Maximum length: 35																					
oci-cert	OCI certificate.	string	Maximum length: 63																					
oci-fingerprint	OCI pubkey fingerprint. Read-only.	string	Maximum length: 63																					
oci-region	OCI server region.	string	Maximum length: 31																					
oci-region-type	OCI region type.	option	-	commercial																				
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>commercial</td><td>Commercial region.</td></tr><tr><td>government</td><td>Government region.</td></tr></table>	Option	Description	commercial	Commercial region.	government	Government region.																	
Option	Description																							
commercial	Commercial region.																							
government	Government region.																							

Parameter	Description	Type	Size	Default
password	Password of the remote SDN connector as login credentials.	password_aes256	Not Specified	
private-key	Private key of GCP service account.	user	Not Specified	
region	AWS / ACS region name.	string	Maximum length: 31	
resource-group	Azure resource group.	string	Maximum length: 63	
resource-url	Azure Stack resource URL.	string	Maximum length: 127	
secret-key	AWS / ACS secret access key.	password	Not Specified	
secret-token	Secret token of Kubernetes service account.	user	Not Specified	
server	Server address of the remote SDN connector.	string	Maximum length: 127	
server-ca-cert	Trust only those servers whose certificate is directly/indirectly signed by this certificate.	string	Maximum length: 127	
server-cert	Trust servers that contain this certificate only.	string	Maximum length: 127	
server-list <ip>	Server address list of the remote SDN connector. IPv4 address.	string	Maximum length: 15	
server-port	Port number of the remote SDN connector.	integer	Minimum value: 0 Maximum value: 65535	0
service-account	GCP service account email.	string	Maximum length: 127	
status	Enable/disable connection to the remote SDN connector.	option	-	enable
		Option	Description	
		<i>disable</i>	Disable connection to this SDN Connector.	
		<i>enable</i>	Enable connection to this SDN Connector.	

Parameter	Description	Type	Size	Default																																		
subscription-id	Azure subscription ID.	string	Maximum length: 63																																			
tenant-id	Tenant ID (directory ID).	string	Maximum length: 127																																			
type	Type of SDN connector.	option	-	aws																																		
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>aci</td><td>Application Centric Infrastructure (ACI).</td></tr><tr><td>alicloud</td><td>AliCloud Service (ACS).</td></tr><tr><td>aws</td><td>Amazon Web Services (AWS).</td></tr><tr><td>azure</td><td>Microsoft Azure.</td></tr><tr><td>gcp</td><td>Google Cloud Platform (GCP).</td></tr><tr><td>nsx</td><td>VMware NSX.</td></tr><tr><td>nuage</td><td>Nuage VSP.</td></tr><tr><td>oci</td><td>Oracle Cloud Infrastructure.</td></tr><tr><td>openstack</td><td>OpenStack.</td></tr><tr><td>kubernetes</td><td>Kubernetes.</td></tr><tr><td>vmware</td><td>VMware vSphere (vCenter & ESXi).</td></tr><tr><td>sepm</td><td>Symantec Endpoint Protection Manager.</td></tr><tr><td>aci-direct</td><td>Application Centric Infrastructure (ACI Direct Connection).</td></tr><tr><td>ibm</td><td>IBM Cloud Infrastructure.</td></tr><tr><td>nutanix</td><td>Nutanix Prism Central.</td></tr><tr><td>sap</td><td>SAP Control.</td></tr></table>				Option	Description	aci	Application Centric Infrastructure (ACI).	alicloud	AliCloud Service (ACS).	aws	Amazon Web Services (AWS).	azure	Microsoft Azure.	gcp	Google Cloud Platform (GCP).	nsx	VMware NSX.	nuage	Nuage VSP.	oci	Oracle Cloud Infrastructure.	openstack	OpenStack.	kubernetes	Kubernetes.	vmware	VMware vSphere (vCenter & ESXi).	sepm	Symantec Endpoint Protection Manager.	aci-direct	Application Centric Infrastructure (ACI Direct Connection).	ibm	IBM Cloud Infrastructure.	nutanix	Nutanix Prism Central.	sap	SAP Control.
Option	Description																																					
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nsx	VMware NSX.																																					
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ibm	IBM Cloud Infrastructure.																																					
nutanix	Nutanix Prism Central.																																					
sap	SAP Control.																																					
update-interval	Dynamic object update interval (30 - 3600 sec, default = 60, 0 = disabled).	integer	Minimum value: 0 Maximum value: 3600	60																																		
use-metadata-iam	Enable/disable use of IAM role from metadata to call API.	option	-	disable **																																		
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Disable using IAM role to call API.</td></tr><tr><td>enable</td><td>Enable using IAM role to call API.</td></tr></table>				Option	Description	disable	Disable using IAM role to call API.	enable	Enable using IAM role to call API.																												
Option	Description																																					
disable	Disable using IAM role to call API.																																					
enable	Enable using IAM role to call API.																																					

Parameter	Description	Type	Size	Default						
user-id	User ID.	string	Maximum length: 127							
username	Username of the remote SDN connector as login credentials.	string	Maximum length: 64							
vcenter-password	vCenter server password for NSX quarantine.	password_aes256	Not Specified							
vcenter-server	vCenter server address for NSX quarantine.	string	Maximum length: 127							
vcenter-username	vCenter server username for NSX quarantine.	string	Maximum length: 64							
verify-certificate	Enable/disable server certificate verification.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Disable server certificate verification.</td></tr><tr><td>enable</td><td>Enable server certificate verification.</td></tr></table>				Option	Description	disable	Disable server certificate verification.	enable	Enable server certificate verification.
Option	Description									
disable	Disable server certificate verification.									
enable	Enable server certificate verification.									
vpc-id	AWS VPC ID.	string	Maximum length: 31							

** Values may differ between models.

config external-account-list

Parameter	Description	Type	Size	Default
external-id	AWS external ID.	string	Maximum length: 1399	
region-list <region>	AWS region name list. AWS region name.	string	Maximum length: 31	
role-arn	AWS role ARN to assume.	string	Maximum length: 2047	

config external-ip

Parameter	Description	Type	Size	Default
name	External IP name.	string	Maximum length: 63	

config forwarding-rule

Parameter	Description	Type	Size	Default
rule-name	Forwarding rule name.	string	Maximum length: 63	
target	Target instance name.	string	Maximum length: 63	

config gcp-project-list

Parameter	Description	Type	Size	Default
gcp-zone-list <name>	Configure GCP zone list. GCP zone name.	string	Maximum length: 127	
id	GCP project ID.	string	Maximum length: 127	

config nic

Parameter	Description	Type	Size	Default
name	Network interface name.	string	Maximum length: 63	

config ip

Parameter	Description	Type	Size	Default
name	IP configuration name.	string	Maximum length: 63	
public-ip	Public IP name.	string	Maximum length: 63	
resource-group	Resource group of Azure public IP.	string	Maximum length: 63	

config route

Parameter	Description	Type	Size	Default
name	Route name.	string	Maximum length: 63	

config route-table

Parameter	Description	Type	Size	Default
name	Route table name.	string	Maximum length: 63	
resource-group	Resource group of Azure route table.	string	Maximum length: 63	
subscription-id	Subscription ID of Azure route table.	string	Maximum length: 63	

config route

Parameter	Description	Type	Size	Default
name	Route name.	string	Maximum length: 63	
next-hop	Next hop address.	string	Maximum length: 127	

config system sdwan

Configure redundant Internet connections with multiple outbound links and health-check profiles.

```
config system sdwan
  Description: Configure redundant Internet connections with multiple outbound links and health-check profiles.
  config duplication
    Description: Create SD-WAN duplication rule.
    edit <id>
      set dstaddr <name1>, <name2>, ...
      set dstaddr6 <name1>, <name2>, ...
      set dstintf <name1>, <name2>, ...
      set packet-de-duplication [enable|disable]
      set packet-duplication [disable|force|...]
      set service <name1>, <name2>, ...
      set service-id <id1>, <id2>, ...
      set sla-match-service [enable|disable]
      set srcaddr <name1>, <name2>, ...
      set srcaddr6 <name1>, <name2>, ...
      set srcintf <name1>, <name2>, ...
    next
  end
  set duplication-max-num {integer}
  set fail-alert-interfaces <name1>, <name2>, ...
  set fail-detect [enable|disable]
  config health-check
    Description: SD-WAN status checking or health checking. Identify a server on the Internet
```

and determine how SD-WAN verifies that the FortiGate can communicate with it.

```
edit <name>
    set addr-mode [ipv4|ipv6]
    set detect-mode [active|passive|...]
    set diffservcode {user}
    set dns-match-ip {ipv4-address}
    set dns-request-domain {string}
    set embed-measured-health [enable|disable]
    set failtime {integer}
    set ftp-file {string}
    set ftp-mode [passive|port]
    set ha-priority {integer}
    set http-agent {string}
    set http-get {string}
    set http-match {string}
    set interval {integer}
    set members <seq-num1>, <seq-num2>, ...
    set mos-codec [g711|g722|...]
    set packet-size {integer}
    set password {password}
    set port {integer}
    set probe-count {integer}
    set probe-packets [disable|enable]
    set probe-timeout {integer}
    set protocol [ping|tcp-echo|...]
    set quality-measured-method [half-open|half-close]
    set recoverytime {integer}
    set security-mode [none|authentication]
    set server {string}
config sla
    Description: Service level agreement (SLA).
    edit <id>
        set jitter-threshold {integer}
        set latency-threshold {integer}
        set link-cost-factor {option1}, {option2}, ...
        set mos-threshold {string}
        set packetloss-threshold {integer}
        set priority-in-sla {integer}
        set priority-out-sla {integer}
    next
end
set sla-fail-log-period {integer}
set sla-id-redistribute {integer}
set sla-pass-log-period {integer}
set source {ipv4-address}
set system-dns [disable|enable]
set threshold-alert-jitter {integer}
set threshold-alert-latency {integer}
set threshold-alert-packetloss {integer}
set threshold-warning-jitter {integer}
set threshold-warning-latency {integer}
set threshold-warning-packetloss {integer}
```

```

        set update-cascade-interface [enable|disable]
        set update-static-route [enable|disable]
        set user {string}
        set vrf {integer}
    next
end
set load-balance-mode [source-ip-based|weight-based|...]
config members
    Description: FortiGate interfaces added to the SD-WAN.
    edit <seq-num>
        set comment {var-string}
        set cost {integer}
        set gateway {ipv4-address}
        set gateway6 {ipv6-address}
        set ingress-spillover-threshold {integer}
        set interface {string}
        set priority {integer}
        set priority6 {integer}
        set source {ipv4-address}
        set source6 {ipv6-address}
        set spillover-threshold {integer}
        set status [disable|enable]
        set volume-ratio {integer}
        set weight {integer}
        set zone {string}
    next
end
config neighbor
    Description: Create SD-WAN neighbor from BGP neighbor table to control route
    advertisements according to SLA status.
    edit <ip>
        set health-check {string}
        set member <seq-num1>, <seq-num2>, ...
        set minimum-sla-meet-members {integer}
        set mode [sla|speedtest]
        set role [standalone|primary|...]
        set sla-id {integer}
    next
end
set neighbor-hold-boot-time {integer}
set neighbor-hold-down [enable|disable]
set neighbor-hold-down-time {integer}
config service
    Description: Create SD-WAN rules (also called services) to control how sessions are
    distributed to interfaces in the SD-WAN.
    edit <id>
        set addr-mode [ipv4|ipv6]
        set agent-exclusive [enable|disable]
        set bandwidth-weight {integer}
        set default [enable|disable]
        set dscp-forward [enable|disable]
        set dscp-forward-tag {user}

```

```

set dscp-reverse [enable|disable]
set dscp-reverse-tag {user}
set dst <name1>, <name2>, ...
set dst-negate [enable|disable]
set dst6 <name1>, <name2>, ...
set end-port {integer}
set gateway [enable|disable]
set groups <name1>, <name2>, ...
set hash-mode [round-robin|source-ip-based|...]
set health-check <name1>, <name2>, ...
set hold-down-time {integer}
set input-device <name1>, <name2>, ...
set input-device-negate [enable|disable]
set input-zone <name1>, <name2>, ...
set internet-service [enable|disable]
set internet-service-app-ctrl <id1>, <id2>, ...
set internet-service-app-ctrl-category <id1>, <id2>, ...
set internet-service-app-ctrl-group <name1>, <name2>, ...
set internet-service-custom <name1>, <name2>, ...
set internet-service-custom-group <name1>, <name2>, ...
set internet-service-group <name1>, <name2>, ...
set internet-service-name <name1>, <name2>, ...
set jitter-weight {integer}
set latency-weight {integer}
set link-cost-factor [latency|jitter|...]
set link-cost-threshold {integer}
set minimum-sla-meet-members {integer}
set mode [auto|manual|...]
set name {string}
set packet-loss-weight {integer}
set passive-measurement [enable|disable]
set priority-members <seq-num1>, <seq-num2>, ...
set priority-zone <name1>, <name2>, ...
set protocol {integer}
set quality-link {integer}
set role [standalone|primary|...]
set route-tag {integer}
config sla
    Description: Service level agreement (SLA).
    edit <health-check>
        set id {integer}
    next
end
set sla-compare-method [order|number]
set src <name1>, <name2>, ...
set src-negate [enable|disable]
set src6 <name1>, <name2>, ...
set standalone-action [enable|disable]
set start-port {integer}
set status [enable|disable]
set tie-break [zone|cfg-order|...]
set tos {user}

```

```

        set tos-mask {user}
        set use-shortcut-sla [enable|disable]
        set users <name1>, <name2>, ...
    next
end
set speedtest-bypass-routing [disable|enable]
set status [disable|enable]
config zone
    Description: Configure SD-WAN zones.
    edit <name>
        set service-sla-tie-break [cfg-order|fib-best-match|...]
    next
end
end

```

config system sdwan

Parameter	Description	Type	Size	Default								
duplication-max-num	Maximum number of interface members a packet is duplicated in the SD-WAN zone (2 - 4, default = 2; if set to 3, the original packet plus 2 more copies are created).	integer	Minimum value: 2 Maximum value: 4	2								
fail-alert-interfaces <name>	Physical interfaces that will be alerted. Physical interface name.	string	Maximum length: 79									
fail-detect	Enable/disable SD-WAN Internet connection status checking (failure detection).	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable status checking.</td></tr><tr><td>disable</td><td>Disable status checking.</td></tr></table>	Option	Description	enable	Enable status checking.	disable	Disable status checking.					
Option	Description											
enable	Enable status checking.											
disable	Disable status checking.											
load-balance-mode	Algorithm or mode to use for load balancing Internet traffic to SD-WAN members.	option	-	source-ip-based								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>source-ip-based</td><td>Source IP load balancing. All traffic from a source IP is sent to the same interface.</td></tr><tr><td>weight-based</td><td>Weight-based load balancing. Interfaces with higher weights have higher priority and get more traffic.</td></tr><tr><td>usage-based</td><td>Usage-based load balancing. All traffic is sent to the first interface on the list. When the bandwidth on that interface exceeds the spill-over limit new traffic is sent to the next interface.</td></tr></table>	Option	Description	source-ip-based	Source IP load balancing. All traffic from a source IP is sent to the same interface.	weight-based	Weight-based load balancing. Interfaces with higher weights have higher priority and get more traffic.	usage-based	Usage-based load balancing. All traffic is sent to the first interface on the list. When the bandwidth on that interface exceeds the spill-over limit new traffic is sent to the next interface.			
Option	Description											
source-ip-based	Source IP load balancing. All traffic from a source IP is sent to the same interface.											
weight-based	Weight-based load balancing. Interfaces with higher weights have higher priority and get more traffic.											
usage-based	Usage-based load balancing. All traffic is sent to the first interface on the list. When the bandwidth on that interface exceeds the spill-over limit new traffic is sent to the next interface.											

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>source-dest-ip-based</i>	Source and destination IP load balancing. All traffic from a source IP to a destination IP is sent to the same interface.		
	<i>measured-volume-based</i>	Volume-based load balancing. Traffic is load balanced based on traffic volume (in bytes). More traffic is sent to interfaces with higher volume ratios.		
neighbor-hold-boot-time	Waiting period in seconds when switching from the primary neighbor to the secondary neighbor from the neighbor start. (0 - 10000000, default = 0).	integer	Minimum value: 0 Maximum value: 10000000	0
neighbor-hold-down	Enable/disable hold switching from the secondary neighbor to the primary neighbor.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable hold switching from the secondary neighbor to the primary neighbor.		
	<i>disable</i>	Disable hold switching from the secondary neighbor to the primary neighbor.		
neighbor-hold-down-time	Waiting period in seconds when switching from the secondary neighbor to the primary neighbor when hold-down is disabled. (0 - 10000000, default = 0).	integer	Minimum value: 0 Maximum value: 10000000	0
speedtest-bypass-routing	Enable/disable bypass routing when speedtest on a SD-WAN member.	option	-	disable
	Option	Description		
	<i>disable</i>	Disable SD-WAN.		
	<i>enable</i>	Enable SD-WAN.		
status	Enable/disable SD-WAN.	option	-	disable
	Option	Description		
	<i>disable</i>	Disable SD-WAN.		
	<i>enable</i>	Enable SD-WAN.		

config duplication

Parameter	Description	Type	Size	Default								
dstaddr <name>	Destination address or address group names. Address or address group name.	string	Maximum length: 79									
dstaddr6 <name>	Destination address6 or address6 group names. Address6 or address6 group name.	string	Maximum length: 79									
dstintf <name>	Outgoing (egress) interfaces or zones. Interface, zone or SDWAN zone name.	string	Maximum length: 79									
id	Duplication rule ID (1 - 255).	integer	Minimum value: 0 1 Maximum value: 255									
packet-de- duplication	Enable/disable discarding of packets that have been duplicated.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable discarding of packets that have been duplicated.</td></tr><tr><td><i>disable</i></td><td>Disable discarding of packets that have been duplicated.</td></tr></table>				Option	Description	<i>enable</i>	Enable discarding of packets that have been duplicated.	<i>disable</i>	Disable discarding of packets that have been duplicated.		
Option	Description											
<i>enable</i>	Enable discarding of packets that have been duplicated.											
<i>disable</i>	Disable discarding of packets that have been duplicated.											
packet- duplication	Configure packet duplication method.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>disable</i></td><td>Disable packet duplication.</td></tr><tr><td><i>force</i></td><td>Duplicate packets across all interface members of the SD-WAN zone.</td></tr><tr><td><i>on-demand</i></td><td>Duplicate packets across all interface members of the SD-WAN zone based on the link quality.</td></tr></table>				Option	Description	<i>disable</i>	Disable packet duplication.	<i>force</i>	Duplicate packets across all interface members of the SD-WAN zone.	<i>on-demand</i>	Duplicate packets across all interface members of the SD-WAN zone based on the link quality.
Option	Description											
<i>disable</i>	Disable packet duplication.											
<i>force</i>	Duplicate packets across all interface members of the SD-WAN zone.											
<i>on-demand</i>	Duplicate packets across all interface members of the SD-WAN zone based on the link quality.											
service <name>	Service and service group name. Service and service group name.	string	Maximum length: 79									
service-id <id>	SD-WAN service rule ID list. SD-WAN service rule ID.	integer	Minimum value: 0 Maximum value: 4294967295									
sla-match- service	Enable/disable packet duplication matching health-check SLAs in service rule.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable packet duplication matching health-check SLAs in service rule (matching all SLAs of current defined service).</td></tr></table>				Option	Description	<i>enable</i>	Enable packet duplication matching health-check SLAs in service rule (matching all SLAs of current defined service).				
Option	Description											
<i>enable</i>	Enable packet duplication matching health-check SLAs in service rule (matching all SLAs of current defined service).											

Parameter	Description	Type	Size	Default				
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>disable</i></td><td>Disable packet duplication matching health-check SLAs in service rule (matching all SLAs of all defined health-check).</td></tr></table>	Option	Description	<i>disable</i>	Disable packet duplication matching health-check SLAs in service rule (matching all SLAs of all defined health-check).			
Option	Description							
<i>disable</i>	Disable packet duplication matching health-check SLAs in service rule (matching all SLAs of all defined health-check).							
srcaddr <name>	Source address or address group names. Address or address group name.	string	Maximum length: 79					
srcaddr6 <name>	Source address6 or address6 group names. Address6 or address6 group name.	string	Maximum length: 79					
srcintf <name>	Incoming (ingress) interfaces or zones. Interface, zone or SDWAN zone name.	string	Maximum length: 79					

config health-check

Parameter	Description	Type	Size	Default												
addr-mode	Address mode (IPv4 or IPv6).	option	-	ipv4												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>ipv4</td><td>IPv4 mode.</td></tr><tr><td>ipv6</td><td>IPv6 mode.</td></tr></table>				Option	Description	ipv4	IPv4 mode.	ipv6	IPv6 mode.						
	Option	Description														
	ipv4	IPv4 mode.														
	ipv6	IPv6 mode.														
detect-mode	The mode determining how to detect the server.	option	-	active												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>active</td><td>The probes are sent actively.</td></tr><tr><td>passive</td><td>The traffic measures health without probes.</td></tr><tr><td>prefer-passive</td><td>The probes are sent in case of no new traffic.</td></tr><tr><td>remote</td><td>Link health obtained from remote peers.</td></tr><tr><td>agent-based</td><td>Traffic health is measured from the fabric connectors.</td></tr></table>				Option	Description	active	The probes are sent actively.	passive	The traffic measures health without probes.	prefer-passive	The probes are sent in case of no new traffic.	remote	Link health obtained from remote peers.	agent-based	Traffic health is measured from the fabric connectors.
	Option	Description														
	active	The probes are sent actively.														
	passive	The traffic measures health without probes.														
	prefer-passive	The probes are sent in case of no new traffic.														
	remote	Link health obtained from remote peers.														
	agent-based	Traffic health is measured from the fabric connectors.														
diffservcode	Differentiated services code point (DSCP) in the IP header of the probe packet.	user	Not Specified													
dns-match-ip	Response IP expected from DNS server if the protocol is DNS.	ipv4-address	Not Specified	0.0.0.0												
dns-request-domain	Fully qualified domain name to resolve for the DNS probe.	string	Maximum length: 255	www.example.com												

Parameter	Description	Type	Size	Default						
embed-measured-health	Enable/disable embedding measured health information.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable embed measured health.</td></tr><tr><td><i>disable</i></td><td>Disable embed measured health.</td></tr></table>	Option	Description	<i>enable</i>	Enable embed measured health.	<i>disable</i>	Disable embed measured health.			
Option	Description									
<i>enable</i>	Enable embed measured health.									
<i>disable</i>	Disable embed measured health.									
failtime	Number of failures before server is considered lost (1 - 3600, default = 5).	integer	Minimum value: 1 Maximum value: 3600	5						
ftp-file	Full path and file name on the FTP server to download for FTP health-check to probe.	string	Maximum length: 254							
ftp-mode	FTP mode.	option	-	passive						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>passive</i></td><td>The FTP health-check initiates and establishes the data connection.</td></tr><tr><td><i>port</i></td><td>The FTP server initiates and establishes the data connection.</td></tr></table>	Option	Description	<i>passive</i>	The FTP health-check initiates and establishes the data connection.	<i>port</i>	The FTP server initiates and establishes the data connection.			
Option	Description									
<i>passive</i>	The FTP health-check initiates and establishes the data connection.									
<i>port</i>	The FTP server initiates and establishes the data connection.									
ha-priority	HA election priority (1 - 50).	integer	Minimum value: 1 Maximum value: 50							
http-agent	String in the http-agent field in the HTTP header.	string	Maximum length: 1024	Chrome/ Safari/						
http-get	URL used to communicate with the server if the protocol if the protocol is HTTP.	string	Maximum length: 1024	/						
http-match	Response string expected from the server if the protocol is HTTP.	string	Maximum length: 1024							
interval	Status check interval in milliseconds, or the time between attempting to connect to the server (20 - 3600*1000 msec, default = 500).	integer	Minimum value: 20 Maximum value: 3600000	500						
members <seq-num>	Member sequence number list. Member sequence number.	integer	Minimum value: 0 Maximum value: 4294967295							

Parameter	Description	Type	Size	Default
mos-codec	Codec to use for MOS calculation (default = g711).	option	-	g711
	Option	Description		
	g711	Calculate MOS based on the G.711 codec.		
	g722	Calculate MOS based on the G.722 codec.		
	g729	Calculate MOS based on the G.729 codec.		
name	Status check or health check name.	string	Maximum length: 35	
packet-size	Packet size of a TWAMP test session.	integer	Minimum value: 64 Maximum value: 1024	64
password	TWAMP controller password in authentication mode.	password	Not Specified	
port	Port number used to communicate with the server over the selected protocol (0 - 65535, default = 0, auto select. http, tcp-connect: 80, udp-echo, tcp-echo: 7, dns: 53, ftp: 21, twamp: 862).	integer	Minimum value: 0 Maximum value: 65535	0
probe-count	Number of most recent probes that should be used to calculate latency and jitter (5 - 30, default = 30).	integer	Minimum value: 5 Maximum value: 30	30
probe-packets	Enable/disable transmission of probe packets.	option	-	enable
	Option	Description		
	disable	Disable transmission of probe packets.		
	enable	Enable transmission of probe packets.		
probe-timeout	Time to wait before a probe packet is considered lost (20 - 3600*1000 msec, default = 500).	integer	Minimum value: 20 Maximum value: 3600000	500
protocol	Protocol used to determine if the FortiGate can communicate with the server.	option	-	ping

Parameter	Description	Type	Size	Default																		
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>ping</i></td><td>Use PING to test the link with the server.</td></tr><tr><td><i>tcp-echo</i></td><td>Use TCP echo to test the link with the server.</td></tr><tr><td><i>udp-echo</i></td><td>Use UDP echo to test the link with the server.</td></tr><tr><td><i>http</i></td><td>Use HTTP-GET to test the link with the server.</td></tr><tr><td><i>twamp</i></td><td>Use TWAMP to test the link with the server.</td></tr><tr><td><i>dns</i></td><td>Use DNS query to test the link with the server.</td></tr><tr><td><i>tcp-connect</i></td><td>Use a full TCP connection to test the link with the server.</td></tr><tr><td><i>ftp</i></td><td>Use FTP to test the link with the server.</td></tr></table>	Option	Description	<i>ping</i>	Use PING to test the link with the server.	<i>tcp-echo</i>	Use TCP echo to test the link with the server.	<i>udp-echo</i>	Use UDP echo to test the link with the server.	<i>http</i>	Use HTTP-GET to test the link with the server.	<i>twamp</i>	Use TWAMP to test the link with the server.	<i>dns</i>	Use DNS query to test the link with the server.	<i>tcp-connect</i>	Use a full TCP connection to test the link with the server.	<i>ftp</i>	Use FTP to test the link with the server.			
	Option	Description																				
	<i>ping</i>	Use PING to test the link with the server.																				
	<i>tcp-echo</i>	Use TCP echo to test the link with the server.																				
	<i>udp-echo</i>	Use UDP echo to test the link with the server.																				
	<i>http</i>	Use HTTP-GET to test the link with the server.																				
	<i>twamp</i>	Use TWAMP to test the link with the server.																				
	<i>dns</i>	Use DNS query to test the link with the server.																				
	<i>tcp-connect</i>	Use a full TCP connection to test the link with the server.																				
<i>ftp</i>	Use FTP to test the link with the server.																					
quality-measured-method	Method to measure the quality of tcp-connect.	option	-	half-open																		
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>half-open</i></td><td>Measure the round trip between syn and ack.</td></tr><tr><td><i>half-close</i></td><td>Measure the round trip between fin and ack.</td></tr></table>	Option	Description	<i>half-open</i>	Measure the round trip between syn and ack.	<i>half-close</i>	Measure the round trip between fin and ack.															
	Option	Description																				
	<i>half-open</i>	Measure the round trip between syn and ack.																				
<i>half-close</i>	Measure the round trip between fin and ack.																					
recoverytime	Number of successful responses received before server is considered recovered (1 - 3600, default = 5).	integer	Minimum value: 5 1 Maximum value: 3600																			
security-mode	Twamp controller security mode.	option	-	none																		
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>none</i></td><td>Unauthenticated mode.</td></tr><tr><td><i>authentication</i></td><td>Authenticated mode.</td></tr></table>	Option	Description	<i>none</i>	Unauthenticated mode.	<i>authentication</i>	Authenticated mode.															
	Option	Description																				
	<i>none</i>	Unauthenticated mode.																				
<i>authentication</i>	Authenticated mode.																					
server	IP address or FQDN name of the server.	string	Maximum length: 79																			
sla-fail-log-period	Time interval in seconds that SLA fail log messages will be generated (0 - 3600, default = 0).	integer	Minimum value: 0 0 Maximum value: 3600																			
sla-id-redistribute	Select the ID from the SLA sub-table. The selected SLA's priority value will be distributed into the routing table (0 - 32, default = 0).	integer	Minimum value: 0 0 Maximum value: 32																			

Parameter	Description	Type	Size	Default
sla-pass-log-period	Time interval in seconds that SLA pass log messages will be generated (0 - 3600, default = 0).	integer	Minimum value: 0 Maximum value: 3600	0
source	Source IP address used in the health-check packet to the server.	ipv4-address	Not Specified	0.0.0.0
system-dns	Enable/disable system DNS as the probe server.	option	-	disable
	Option		Description	
	disable		Disable system DNS as the probe server.	
	enable		Enable system DNS as the probe server.	
threshold-alert-jitter	Alert threshold for jitter (ms, default = 0).	integer	Minimum value: 0 Maximum value: 4294967295	0
threshold-alert-latency	Alert threshold for latency (ms, default = 0).	integer	Minimum value: 0 Maximum value: 4294967295	0
threshold-alert-packetloss	Alert threshold for packet loss (percentage, default = 0).	integer	Minimum value: 0 Maximum value: 100	0
threshold-warning-jitter	Warning threshold for jitter (ms, default = 0).	integer	Minimum value: 0 Maximum value: 4294967295	0
threshold-warning-latency	Warning threshold for latency (ms, default = 0).	integer	Minimum value: 0 Maximum value: 4294967295	0
threshold-warning-packetloss	Warning threshold for packet loss (percentage, default = 0).	integer	Minimum value: 0 Maximum value: 100	0
update-cascade-interface	Enable/disable update cascade interface.	option	-	enable
	Option		Description	
	enable		Enable update cascade interface.	

Parameter	Description	Type	Size	Default						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>disable</i></td><td>Disable update cascade interface.</td></tr></table>				Option	Description	<i>disable</i>	Disable update cascade interface.		
	Option	Description								
<i>disable</i>	Disable update cascade interface.									
update-static-route	Enable/disable updating the static route.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable updating the static route.</td></tr><tr><td><i>disable</i></td><td>Disable updating the static route.</td></tr></table>				Option	Description	<i>enable</i>	Enable updating the static route.	<i>disable</i>	Disable updating the static route.
	Option	Description								
	<i>enable</i>	Enable updating the static route.								
<i>disable</i>	Disable updating the static route.									
user	The user name to access probe server.	string	Maximum length: 64							
vrf	Virtual Routing Forwarding ID.	integer	Minimum value: 0 Maximum value: 251							

config sla

Parameter	Description	Type	Size	Default				
id	SLA ID.	integer	Minimum value: 1 Maximum value: 32	0				
jitter-threshold	Jitter for SLA to make decision in milliseconds. (0 - 10000000, default = 5).	integer	Minimum value: 0 Maximum value: 10000000	5				
latency-threshold	Latency for SLA to make decision in milliseconds. (0 - 10000000, default = 5).	integer	Minimum value: 0 Maximum value: 10000000	5				
link-cost-factor	Criteria on which to base link selection.	option	-	latency jitter packet-loss				
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>latency</td><td>Select link based on latency.</td></tr></table>				Option	Description	latency	Select link based on latency.
Option	Description							
latency	Select link based on latency.							

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>jitter</i>	Select link based on jitter.		
	<i>packet-loss</i>	Select link based on packet loss.		
	<i>mos</i>	Select link based on Mean Opinion Score (MOS).		
mos-threshold	Minimum Mean Opinion Score for SLA to be marked as pass. (1.0 - 5.0, default = 3.6).	string	Maximum length: 35	3.6
packetloss-threshold	Packet loss for SLA to make decision in percentage. (0 - 100, default = 0).	integer	Minimum value: 0 Maximum value: 100	0
priority-in-sla	Value to be distributed into routing table when in-sla (0 - 65535, default = 0).	integer	Minimum value: 0 Maximum value: 65535	0
priority-out-sla	Value to be distributed into routing table when out-sla (0 - 65535, default = 0).	integer	Minimum value: 0 Maximum value: 65535	0

config members

Parameter	Description	Type	Size	Default
comment	Comments.	var-string	Maximum length: 255	
cost	Cost of this interface for services in SLA mode (0 - 4294967295, default = 0).	integer	Minimum value: 0 Maximum value: 4294967295	0
gateway	The default gateway for this interface. Usually the default gateway of the Internet service provider that this interface is connected to.	ipv4-address	Not Specified	0.0.0.0
gateway6	IPv6 gateway.	ipv6-address	Not Specified	::
ingress-spillover-threshold	Ingress spillover threshold for this interface (0 - 16776000 kbit/s). When this traffic volume threshold is reached, new sessions spill over to other interfaces in the SD-WAN.	integer	Minimum value: 0 Maximum value: 16776000	0

Parameter	Description	Type	Size	Default						
interface	Interface name.	string	Maximum length: 15							
priority	Priority of the interface for IPv4 (1 - 65535, default = 1). Used for SD-WAN rules or priority rules.	integer	Minimum value: 1 Maximum value: 65535	1						
priority6	Priority of the interface for IPv6 (1 - 65535, default = 1024). Used for SD-WAN rules or priority rules.	integer	Minimum value: 1 Maximum value: 65535	1024						
seq-num	Sequence number(1-512).	integer	Minimum value: 0 Maximum value: 512	0						
source	Source IP address used in the health-check packet to the server.	ipv4-address	Not Specified	0.0.0.0						
source6	Source IPv6 address used in the health-check packet to the server.	ipv6-address	Not Specified	::						
spillover-threshold	Egress spillover threshold for this interface (0 - 16776000 kbit/s). When this traffic volume threshold is reached, new sessions spill over to other interfaces in the SD-WAN.	integer	Minimum value: 0 Maximum value: 16776000	0						
status	Enable/disable this interface in the SD-WAN.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Disable this interface in the SD-WAN.</td></tr><tr><td>enable</td><td>Enable this interface in the SD-WAN.</td></tr></table>				Option	Description	disable	Disable this interface in the SD-WAN.	enable	Enable this interface in the SD-WAN.
Option	Description									
disable	Disable this interface in the SD-WAN.									
enable	Enable this interface in the SD-WAN.									
volume-ratio	Measured volume ratio (this value / sum of all values = percentage of link volume, 1 - 255).	integer	Minimum value: 1 Maximum value: 255	1						
weight	Weight of this interface for weighted load balancing. (1 - 255) More traffic is directed to interfaces with higher weights.	integer	Minimum value: 1 Maximum value: 255	1						
zone	Zone name.	string	Maximum length: 35	virtual-wan-link						

config neighbor

Parameter	Description	Type	Size	Default
health-check	SD-WAN health-check name.	string	Maximum length: 35	

Parameter	Description	Type	Size	Default								
ip	IP/IPv6 address of neighbor.	string	Maximum length: 45									
member <seq-num>	Member sequence number list. Member sequence number.	integer	Minimum value: 0 Maximum value: 4294967295									
minimum-sla-meet-members	Minimum number of members which meet SLA when the neighbor is preferred.	integer	Minimum value: 1 Maximum value: 255									
mode	What metric to select the neighbor.	option	-	sla								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>sla</td><td>Select neighbor based on SLA link quality.</td></tr><tr><td>speedtest</td><td>Select neighbor based on the speedtest status.</td></tr></table>				Option	Description	sla	Select neighbor based on SLA link quality.	speedtest	Select neighbor based on the speedtest status.		
Option	Description											
sla	Select neighbor based on SLA link quality.											
speedtest	Select neighbor based on the speedtest status.											
role	Role of neighbor.	option	-	standalone								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>standalone</td><td>Standalone neighbor.</td></tr><tr><td>primary</td><td>Primary neighbor.</td></tr><tr><td>secondary</td><td>Secondary neighbor.</td></tr></table>				Option	Description	standalone	Standalone neighbor.	primary	Primary neighbor.	secondary	Secondary neighbor.
Option	Description											
standalone	Standalone neighbor.											
primary	Primary neighbor.											
secondary	Secondary neighbor.											
sla-id	SLA ID.	integer	Minimum value: 0 Maximum value: 4294967295									

config service

Parameter	Description	Type	Size	Default
addr-mode	Address mode (IPv4 or IPv6).	option	-	ipv4
	Option	Description		
	ipv4	IPv4 mode.		
	ipv6	IPv6 mode.		
agent-exclusive	Set/unset the service as agent use exclusively.	option	-	disable

Parameter	Description	Type	Size	Default
	Option Description			
	<i>enable</i>	Set the service as agent use exclusively.		
	<i>disable</i>	Unset the service as agent use exclusively.		
bandwidth-weight	Coefficient of reciprocal of available bidirectional bandwidth in the formula of custom-profile-1.	integer	Minimum value: 0 0 Maximum value: 10000000	
default	Enable/disable use of SD-WAN as default service.	option	-	disable
	Option Description			
	<i>enable</i>	Enable use of SD-WAN as default service.		
	<i>disable</i>	Disable use of SD-WAN as default service.		
dscp-forward	Enable/disable forward traffic DSCP tag.	option	-	disable
	Option Description			
	<i>enable</i>	Enable use of forward DSCP tag.		
	<i>disable</i>	Disable use of forward DSCP tag.		
dscp-forward-tag	Forward traffic DSCP tag.	user	Not Specified	
dscp-reverse	Enable/disable reverse traffic DSCP tag.	option	-	disable
	Option Description			
	<i>enable</i>	Enable use of reverse DSCP tag.		
	<i>disable</i>	Disable use of reverse DSCP tag.		
dscp-reverse-tag	Reverse traffic DSCP tag.	user	Not Specified	
dst <name>	Destination address name. Address or address group name.	string	Maximum length: 79	
dst-negate	Enable/disable negation of destination address match.	option	-	disable
	Option Description			
	<i>enable</i>	Enable destination address negation.		
	<i>disable</i>	Disable destination address negation.		

Parameter	Description	Type	Size	Default														
dst6 <name>	Destination address6 name. Address6 or address6 group name.	string	Maximum length: 79															
end-port	End destination port number.	integer	Minimum value: 0 Maximum value: 65535	65535														
gateway	Enable/disable SD-WAN service gateway.	option	-	disable														
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable SD-WAN service gateway.</td></tr><tr><td>disable</td><td>Disable SD-WAN service gateway.</td></tr></table>	Option	Description	enable	Enable SD-WAN service gateway.	disable	Disable SD-WAN service gateway.											
Option	Description																	
enable	Enable SD-WAN service gateway.																	
disable	Disable SD-WAN service gateway.																	
groups <name>	User groups. Group name.	string	Maximum length: 79															
hash-mode	Hash algorithm for selected priority members for load balance mode.	option	-	round-robin														
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>round-robin</td><td>All traffic are distributed to selected interfaces in equal portions and circular order.</td></tr><tr><td>source-ip-based</td><td>All traffic from a source IP is sent to the same interface.</td></tr><tr><td>source-dest-ip-based</td><td>All traffic from a source IP to a destination IP is sent to the same interface.</td></tr><tr><td>inbandwidth</td><td>All traffic are distributed to a selected interface with most available bandwidth for incoming traffic.</td></tr><tr><td>outbandwidth</td><td>All traffic are distributed to a selected interface with most available bandwidth for outgoing traffic.</td></tr><tr><td>bibandwidth</td><td>All traffic are distributed to a selected interface with most available bandwidth for both incoming and outgoing traffic.</td></tr></table>	Option	Description	round-robin	All traffic are distributed to selected interfaces in equal portions and circular order.	source-ip-based	All traffic from a source IP is sent to the same interface.	source-dest-ip-based	All traffic from a source IP to a destination IP is sent to the same interface.	inbandwidth	All traffic are distributed to a selected interface with most available bandwidth for incoming traffic.	outbandwidth	All traffic are distributed to a selected interface with most available bandwidth for outgoing traffic.	bibandwidth	All traffic are distributed to a selected interface with most available bandwidth for both incoming and outgoing traffic.			
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outbandwidth	All traffic are distributed to a selected interface with most available bandwidth for outgoing traffic.																	
bibandwidth	All traffic are distributed to a selected interface with most available bandwidth for both incoming and outgoing traffic.																	
health-check <name>	Health check list. Health check name.	string	Maximum length: 79															
hold-down-time	Waiting period in seconds when switching from the back-up member to the primary member (0 - 10000000, default = 0).	integer	Minimum value: 0 Maximum value: 10000000	0														
id	SD-WAN rule ID (1 - 4000).	integer	Minimum value: 1 Maximum value: 4000	0														

Parameter	Description	Type	Size	Default						
input-device <name>	Source interface name. Interface name.	string	Maximum length: 79							
input-device- negate	Enable/disable negation of input device match.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable negation of input device match.</td></tr><tr><td><i>disable</i></td><td>Disable negation of input device match.</td></tr></table>	Option	Description	<i>enable</i>	Enable negation of input device match.	<i>disable</i>	Disable negation of input device match.			
Option	Description									
<i>enable</i>	Enable negation of input device match.									
<i>disable</i>	Disable negation of input device match.									
input-zone <name>	Source input-zone name. Zone.	string	Maximum length: 79							
internet-service	Enable/disable use of Internet service for application-based load balancing.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable cloud service to support application-based load balancing.</td></tr><tr><td><i>disable</i></td><td>Disable cloud service to support application-based load balancing.</td></tr></table>	Option	Description	<i>enable</i>	Enable cloud service to support application-based load balancing.	<i>disable</i>	Disable cloud service to support application-based load balancing.			
Option	Description									
<i>enable</i>	Enable cloud service to support application-based load balancing.									
<i>disable</i>	Disable cloud service to support application-based load balancing.									
internet- service-app- ctrl <id>	Application control based Internet Service ID list. Application control based Internet Service ID.	integer	Minimum value: 0 Maximum value: 4294967295							
internet- service-app- ctrl-category <id>	IDs of one or more application control categories. Application control category ID.	integer	Minimum value: 0 Maximum value: 4294967295							
internet- service-app- ctrl-group <name>	Application control based Internet Service group list. Application control based Internet Service group name.	string	Maximum length: 79							
internet- service-custom <name>	Custom Internet service name list. Custom Internet service name.	string	Maximum length: 79							
internet- service- custom-group <name>	Custom Internet Service group list. Custom Internet Service group name.	string	Maximum length: 79							
internet- service-group <name>	Internet Service group list. Internet Service group name.	string	Maximum length: 79							

Parameter	Description	Type	Size	Default
internet-service-name <name>	Internet service name list. Internet service name.	string	Maximum length: 79	
jitter-weight	Coefficient of jitter in the formula of custom-profile-1.	integer	Minimum value: 0 Maximum value: 10000000	
latency-weight	Coefficient of latency in the formula of custom-profile-1.	integer	Minimum value: 0 Maximum value: 10000000	
link-cost-factor	Link cost factor.	option	-	latency
	Option		Description	
	latency		Select link based on latency.	
	jitter		Select link based on jitter.	
	packet-loss		Select link based on packet loss.	
	inbandwidth		Select link based on available bandwidth of incoming traffic.	
	outbandwidth		Select link based on available bandwidth of outgoing traffic.	
	bibandwidth		Select link based on available bandwidth of bidirectional traffic.	
	custom-profile-1		Select link based on customized profile.	
link-cost-threshold	Percentage threshold change of link cost values that will result in policy route regeneration (0 - 10000000, default = 10).	integer	Minimum value: 10 Maximum value: 10000000	
minimum-sla-meet-members	Minimum number of members which meet SLA.	integer	Minimum value: 0 Maximum value: 255	
mode	Control how the SD-WAN rule sets the priority of interfaces in the SD-WAN.	option	-	manual
	Option		Description	
	auto		Assign interfaces a priority based on quality.	
	manual		Assign interfaces a priority manually.	
	priority		Assign interfaces a priority based on the link-cost-factor quality of the interface.	

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>sla</i>	Assign interfaces a priority based on selected SLA settings.		
	<i>load-balance</i>	Distribute traffic among all available links based on round robin. ADVPN feature is not supported in the mode.		
name	SD-WAN rule name.	string	Maximum length: 35	
packet-loss-weight	Coefficient of packet-loss in the formula of custom-profile-1.	integer	Minimum value: 0 Maximum value: 10000000	
passive-measurement	Enable/disable passive measurement based on the service criteria.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable passive measurement of user traffic.		
	<i>disable</i>	Disable passive measurement of user traffic.		
priority-members <seq-num>	Member sequence number list. Member sequence number.	integer	Minimum value: 0 Maximum value: 4294967295	
priority-zone <name>	Priority zone name list. Priority zone name.	string	Maximum length: 79	
protocol	Protocol number.	integer	Minimum value: 0 Maximum value: 255	
quality-link	Quality grade.	integer	Minimum value: 0 Maximum value: 255	
role	Service role to work with neighbor.	option	-	standalone
	Option	Description		
	<i>standalone</i>	Standalone service.		
	<i>primary</i>	Primary service for primary neighbor.		
	<i>secondary</i>	Secondary service for secondary neighbor.		

Parameter	Description	Type	Size	Default						
route-tag	IPv4 route map route-tag.	integer	Minimum value: 0 0 Maximum value: 4294967295							
sla-compare-method	Method to compare SLA value for SLA mode.	option	-	order						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>order</td><td>Compare SLA value based on the order of health-check.</td></tr><tr><td>number</td><td>Compare SLA value based on the number of satisfied health-check. Limits health-checks to only configured member interfaces.</td></tr></table>	Option	Description	order	Compare SLA value based on the order of health-check.	number	Compare SLA value based on the number of satisfied health-check. Limits health-checks to only configured member interfaces.			
Option	Description									
order	Compare SLA value based on the order of health-check.									
number	Compare SLA value based on the number of satisfied health-check. Limits health-checks to only configured member interfaces.									
src <name>	Source address name. Address or address group name.	string	Maximum length: 79							
src-negate	Enable/disable negation of source address match.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable source address negation.</td></tr><tr><td>disable</td><td>Disable source address negation.</td></tr></table>	Option	Description	enable	Enable source address negation.	disable	Disable source address negation.			
Option	Description									
enable	Enable source address negation.									
disable	Disable source address negation.									
src6 <name>	Source address6 name. Address6 or address6 group name.	string	Maximum length: 79							
standalone-action	Enable/disable service when selected neighbor role is standalone while service role is not standalone.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable service when selected neighbor role is standalone.</td></tr><tr><td>disable</td><td>Disable service when selected neighbor role is standalone.</td></tr></table>	Option	Description	enable	Enable service when selected neighbor role is standalone.	disable	Disable service when selected neighbor role is standalone.			
Option	Description									
enable	Enable service when selected neighbor role is standalone.									
disable	Disable service when selected neighbor role is standalone.									
start-port	Start destination port number.	integer	Minimum value: 1 0 Maximum value: 65535							
status	Enable/disable SD-WAN service.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable SD-WAN service.</td></tr><tr><td>disable</td><td>Disable SD-WAN service.</td></tr></table>	Option	Description	enable	Enable SD-WAN service.	disable	Disable SD-WAN service.			
Option	Description									
enable	Enable SD-WAN service.									
disable	Disable SD-WAN service.									

Parameter	Description	Type	Size	Default
tie-break	Method of selecting member if more than one meets the SLA.	option	-	zone
	Option	Description		
	<i>zone</i>	Use the setting that is configured for the members' zone.		
	<i>cfg-order</i>	Members that meet the SLA are selected in the order they are configured.		
	<i>fib-best-match</i>	Members that meet the SLA are selected that match the longest prefix in the routing table.		
	<i>input-device</i>	Members that meet the SLA are selected by matching the input device.		
tos	Type of service bit pattern.	user	Not Specified	
tos-mask	Type of service evaluated bits.	user	Not Specified	
use-shortcut-sla	Enable/disable use of ADVPN shortcut for quality comparison.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable use of ADVPN shortcut for quality comparison.		
	<i>disable</i>	Disable use of ADVPN shortcut for quality comparison.		
users <name>	User name. User name.	string	Maximum length: 79	

config sla

Parameter	Description	Type	Size	Default
health-check	SD-WAN health-check.	string	Maximum length: 35	
id	SLA ID.	integer	Minimum value: 0 0 Maximum value: 4294967295	

config zone

Parameter	Description	Type	Size	Default
name	Zone name.	string	Maximum length: 35	

Parameter	Description	Type	Size	Default
service-sla-tie-break	Method of selecting member if more than one meets the SLA.	option	-	cfg-order
	Option	Description		
	<i>cfg-order</i>	Members that meet the SLA are selected in the order they are configured.		
	<i>fib-best-match</i>	Members that meet the SLA are selected that match the longest prefix in the routing table.		
	<i>input-device</i>	Members that meet the SLA are selected by matching the input device.		

config system session-helper

Configure session helper.

```
config system session-helper
  Description: Configure session helper.
  edit <id>
    set name [ftp|tftp|...]
    set port {integer}
    set protocol {integer}
  next
end
```

config system session-helper

Parameter	Description	Type	Size	Default
id	Session helper ID.	integer	Minimum value: 0 0 Maximum value: 4294967295	
name	Helper name.	option	-	
	Option	Description		
	<i>ftp</i>	FTP.		
	<i>tftp</i>	TFTP.		
	<i>ras</i>	RAS.		
	<i>h323</i>	H323.		

Parameter	Description	Type	Size	Default																								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>tns</i></td><td>TNS.</td></tr><tr><td><i>mms</i></td><td>MMS.</td></tr><tr><td><i>sip</i></td><td>SIP.</td></tr><tr><td><i>pptp</i></td><td>PPTP.</td></tr><tr><td><i>rtsp</i></td><td>RTSP.</td></tr><tr><td><i>dns-udp</i></td><td>DNS UDP.</td></tr><tr><td><i>dns-tcp</i></td><td>DNS TCP.</td></tr><tr><td><i>pmap</i></td><td>PMAP.</td></tr><tr><td><i>rsh</i></td><td>RSH.</td></tr><tr><td><i>dcerpc</i></td><td>DCERPC.</td></tr><tr><td><i>mgcp</i></td><td>MGCP.</td></tr></table>	Option	Description	<i>tns</i>	TNS.	<i>mms</i>	MMS.	<i>sip</i>	SIP.	<i>pptp</i>	PPTP.	<i>rtsp</i>	RTSP.	<i>dns-udp</i>	DNS UDP.	<i>dns-tcp</i>	DNS TCP.	<i>pmap</i>	PMAP.	<i>rsh</i>	RSH.	<i>dcerpc</i>	DCERPC.	<i>mgcp</i>	MGCP.			
	Option	Description																										
	<i>tns</i>	TNS.																										
	<i>mms</i>	MMS.																										
	<i>sip</i>	SIP.																										
	<i>pptp</i>	PPTP.																										
	<i>rtsp</i>	RTSP.																										
	<i>dns-udp</i>	DNS UDP.																										
	<i>dns-tcp</i>	DNS TCP.																										
	<i>pmap</i>	PMAP.																										
	<i>rsh</i>	RSH.																										
	<i>dcerpc</i>	DCERPC.																										
<i>mgcp</i>	MGCP.																											
port	Protocol port.	integer	Minimum value: 0 1 Maximum value: 65535	0																								
protocol	Protocol number.	integer	Minimum value: 0 0 Maximum value: 255	0																								

config system session-ttl

Configure global session TTL timers for this FortiGate.

```

config system session-ttl
  Description: Configure global session TTL timers for this FortiGate.
  set default {user}
  config port
    Description: Session TTL port.
    edit <id>
      set end-port {integer}
      set protocol {integer}
      set start-port {integer}
      set timeout {user}
    next
  end
end
end

```

config system session-ttl

Parameter	Description	Type	Size	Default
default	Default timeout.	user	Not Specified	

config port

Parameter	Description	Type	Size	Default
end-port	End port number.	integer	Minimum value: 0 Maximum value: 65535	0
id	Table entry ID.	integer	Minimum value: 0 Maximum value: 65535	0
protocol	Protocol (0 - 255).	integer	Minimum value: 0 Maximum value: 255	0
start-port	Start port number.	integer	Minimum value: 0 Maximum value: 65535	0
timeout	Session timeout (TTL).	user	Not Specified	

config system settings

Configure VDOM settings.

```
config system settings
  Description: Configure VDOM settings.
  set allow-linkdown-path [enable|disable]
  set allow-subnet-overlap [enable|disable]
  set application-bandwidth-tracking [disable|enable]
  set asymroute [enable|disable]
  set asymroute-icmp [enable|disable]
  set asymroute6 [enable|disable]
  set asymroute6-icmp [enable|disable]
```

```
set auxiliary-session [enable|disable]
set bfd [enable|disable]
set bfd-desired-min-tx {integer}
set bfd-detect-mult {integer}
set bfd-dont-enforce-src-port [enable|disable]
set bfd-required-min-rx {integer}
set block-land-attack [disable|enable]
set central-nat [enable|disable]
set comments {var-string}
set default-app-port-as-service [enable|disable]
set default-policy-expiry-days {integer}
set default-voip-alg-mode [proxy-based|kernel-helper-based]
set deny-tcp-with-icmp [enable|disable]
set detect-unknown-esp [enable|disable]
set device {string}
set dhcp-proxy [enable|disable]
set dhcp-proxy-interface {string}
set dhcp-proxy-interface-select-method [auto|sdwan|...]
set dhcp-server-ip {user}
set dhcp6-server-ip {user}
set discovered-device-timeout {integer}
set dyn-addr-session-check [enable|disable]
set ecmp-max-paths {integer}
set email-portal-check-dns [disable|enable]
set ext-resource-session-check [enable|disable]
set firewall-session-dirty [check-all|check-new|...]
set fqdn-session-check [enable|disable]
set fw-session-hairpin [enable|disable]
set gateway {ipv4-address}
set gateway6 {ipv6-address}
set gui-advanced-policy [enable|disable]
set gui-advanced-wireless-features [enable|disable]
set gui-allow-unnamed-policy [enable|disable]
set gui-antivirus [enable|disable]
set gui-ap-profile [enable|disable]
set gui-application-control [enable|disable]
set gui-default-policy-columns <name1>, <name2>, ...
set gui-dhcp-advanced [enable|disable]
set gui-dlp-profile [enable|disable]
set gui-dns-database [enable|disable]
set gui-dnsfilter [enable|disable]
set gui-dos-policy [enable|disable]
set gui-dynamic-routing [enable|disable]
set gui-email-collection [enable|disable]
set gui-enforce-change-summary [disable|require|...]
set gui-explicit-proxy [enable|disable]
set gui-file-filter [enable|disable]
set gui-fortiap-split-tunneling [enable|disable]
set gui-fortiextender-controller [enable|disable]
set gui-icap [enable|disable]
set gui-implicit-policy [enable|disable]
set gui-ips [enable|disable]
```

```
set gui-load-balance [enable|disable]
set gui-local-in-policy [enable|disable]
set gui-multicast-policy [enable|disable]
set gui-multiple-interface-policy [enable|disable]
set gui-object-colors [enable|disable]
set gui-ot [enable|disable]
set gui-policy-based-ipsec [enable|disable]
set gui-policy-disclaimer [enable|disable]
set gui-proxy-inspection [enable|disable]
set gui-security-profile-group [enable|disable]
set gui-spamfilter [enable|disable]
set gui-sslvpn-personal-bookmarks [enable|disable]
set gui-sslvpn-realms [enable|disable]
set gui-switch-controller [enable|disable]
set gui-threat-weight [enable|disable]
set gui-traffic-shaping [enable|disable]
set gui-videofilter [enable|disable]
set gui-voip-profile [enable|disable]
set gui-vpn [enable|disable]
set gui-waf-profile [enable|disable]
set gui-wan-load-balancing [enable|disable]
set gui-wanopt-cache [enable|disable]
set gui-webfilter [enable|disable]
set gui-webfilter-advanced [enable|disable]
set gui-wireless-controller [enable|disable]
set gui-ztna [enable|disable]
set h323-direct-model [disable|enable]
set http-external-dest [fortiweb|forticache]
set ike-dn-format [with-space|no-space]
set ike-policy-route [enable|disable]
set ike-port {integer}
set ike-quick-crash-detect [enable|disable]
set ike-session-resume [enable|disable]
set internet-service-database-cache [disable|enable]
set ip {ipv4-classnet-host}
set ip6 {ipv6-prefix}
set lan-extension-controller-addr {string}
set link-down-access [enable|disable]
set lldp-reception [enable|disable|...]
set lldp-transmission [enable|disable|...]
set location-id {ipv4-address}
set mac-ttl {integer}
set manageip {user}
set manageip6 {ipv6-prefix}
set multicast-forward [enable|disable]
set multicast-skip-policy [enable|disable]
set multicast-ttl-notchange [enable|disable]
set nat46-force-ipv4-packet-forwarding [enable|disable]
set nat46-generate-ipv6-fragment-header [enable|disable]
set nat64-force-ipv6-packet-forwarding [enable|disable]
set ngfw-mode [profile-based|policy-based]
set opmode [nat|transparent]
```

```

set policy-offload-level [disable|dos-offload]
set prp-trailer-action [enable|disable]
set sccp-port {integer}
set sctp-session-without-init [enable|disable]
set ses-denied-traffic [enable|disable]
set sip-expectation [enable|disable]
set sip-nat-trace [enable|disable]
set sip-ssl-port {integer}
set sip-tcp-port {integer}
set sip-udp-port {integer}
set snat-hairpin-traffic [enable|disable]
set status [enable|disable]
set strict-src-check [enable|disable]
set tcp-session-without-syn [enable|disable]
set utf8-spam-tagging [enable|disable]
set v4-ecmp-mode [source-ip-based|weight-based|...]
set vdom-type [traffic|lan-extension|...]
set vpn-stats-log {option1}, {option2}, ...
set vpn-stats-period {integer}
set wccp-cache-engine [enable|disable]
end

```

config system settings

Parameter	Description	Type	Size	Default						
allow-linkdown-path	Enable/disable link down path.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Allow link down path.</td></tr><tr><td><i>disable</i></td><td>Do not allow link down path.</td></tr></table>	Option	Description	<i>enable</i>	Allow link down path.	<i>disable</i>	Do not allow link down path.			
Option	Description									
<i>enable</i>	Allow link down path.									
<i>disable</i>	Do not allow link down path.									
allow-subnet-overlap	Enable/disable allowing interface subnets to use overlapping IP addresses.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable overlapping subnets.</td></tr><tr><td><i>disable</i></td><td>Disable overlapping subnets.</td></tr></table>	Option	Description	<i>enable</i>	Enable overlapping subnets.	<i>disable</i>	Disable overlapping subnets.			
Option	Description									
<i>enable</i>	Enable overlapping subnets.									
<i>disable</i>	Disable overlapping subnets.									
application-bandwidth-tracking	Enable/disable application bandwidth tracking.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>disable</i></td><td>Disable application bandwidth tracking.</td></tr></table>	Option	Description	<i>disable</i>	Disable application bandwidth tracking.					
Option	Description									
<i>disable</i>	Disable application bandwidth tracking.									

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>enable</i>	Enable application bandwidth tracking.		
	<i>disable</i>	Disable application bandwidth tracking.		
asymroute	Enable/disable IPv4 asymmetric routing.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable IPv4 asymmetric routing.		
	<i>disable</i>	Disable IPv4 asymmetric routing.		
asymroute-icmp	Enable/disable ICMP asymmetric routing.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable ICMP asymmetric routing.		
	<i>disable</i>	Disable ICMP asymmetric routing.		
asymroute6	Enable/disable asymmetric IPv6 routing.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable asymmetric IPv6 routing.		
	<i>disable</i>	Disable asymmetric IPv6 routing.		
asymroute6-icmp	Enable/disable asymmetric ICMPv6 routing.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable asymmetric ICMPv6 routing.		
	<i>disable</i>	Disable asymmetric ICMPv6 routing.		
auxiliary-session *	Enable/disable auxiliary session.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable auxiliary session for this VDOM.		
	<i>disable</i>	Disable auxiliary session for this VDOM.		
bfd	Enable/disable Bi-directional Forwarding Detection (BFD) on all interfaces.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable Bi-directional Forwarding Detection (BFD) on all interfaces.		
	<i>disable</i>	Disable Bi-directional Forwarding Detection (BFD) on all interfaces.		

Parameter	Description	Type	Size	Default						
bfd-desired-min-tx	BFD desired minimal transmit interval (1 - 100000 ms, default = 250).	integer	Minimum value: 1 Maximum value: 100000	250						
bfd-detect-mult	BFD detection multiplier (1 - 50, default = 3).	integer	Minimum value: 1 Maximum value: 50	3						
bfd-dont-enforce-src-port	Enable to not enforce verifying the source port of BFD Packets.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable verifying the source port of BFD Packets.</td></tr><tr><td>disable</td><td>Disable verifying the source port of BFD Packets.</td></tr></table>	Option	Description	enable	Enable verifying the source port of BFD Packets.	disable	Disable verifying the source port of BFD Packets.			
Option	Description									
enable	Enable verifying the source port of BFD Packets.									
disable	Disable verifying the source port of BFD Packets.									
bfd-required-min-rx	BFD required minimal receive interval (1 - 100000 ms, default = 250).	integer	Minimum value: 1 Maximum value: 100000	250						
block-land-attack	Enable/disable blocking of land attacks.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Do not block land attack.</td></tr><tr><td>enable</td><td>Block land attack.</td></tr></table>	Option	Description	disable	Do not block land attack.	enable	Block land attack.			
Option	Description									
disable	Do not block land attack.									
enable	Block land attack.									
central-nat	Enable/disable central NAT.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable central NAT.</td></tr><tr><td>disable</td><td>Disable central NAT.</td></tr></table>	Option	Description	enable	Enable central NAT.	disable	Disable central NAT.			
Option	Description									
enable	Enable central NAT.									
disable	Disable central NAT.									
comments	VDOM comments.	var-string	Maximum length: 255							
default-app-port-as-service	Enable/disable policy service enforcement based on application default ports.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable setting.</td></tr><tr><td>disable</td><td>Disable setting.</td></tr></table>	Option	Description	enable	Enable setting.	disable	Disable setting.			
Option	Description									
enable	Enable setting.									
disable	Disable setting.									

Parameter	Description	Type	Size	Default
default-policy-expiry-days	Default policy expiry in days (0 - 365 days, default = 30).	integer	Minimum value: 0 Maximum value: 365	30
default-voip-alg-mode	Configure how the FortiGate handles VoIP traffic when a policy that accepts the traffic doesn't include a VoIP profile.	option	-	proxy-based
	Option	Description		
	proxy-based	Use a default proxy-based VoIP ALG.		
	kernel-helper-based	Use the SIP session helper.		
deny-tcp-with-icmp	Enable/disable denying TCP by sending an ICMP communication prohibited packet.	option	-	disable
	Option	Description		
	enable	Deny TCP with ICMP.		
	disable	Disable denying TCP with ICMP.		
detect-unknown-esp	Enable/disable detection of unknown ESP packets (default = enable).	option	-	enable
	Option	Description		
	enable	Enable detection of unknown ESP packets and drop the ESP packet if it's unknown.		
	disable	Disable detection of unknown ESP packets.		
device	Interface to use for management access for NAT mode.	string	Maximum length: 35	
dhcp-proxy	Enable/disable the DHCP Proxy.	option	-	disable
	Option	Description		
	enable	Enable the DHCP proxy.		
	disable	Disable the DHCP proxy.		
dhcp-proxy-interface	Specify outgoing interface to reach server.	string	Maximum length: 15	
dhcp-proxy-interface-select-method	Specify how to select outgoing interface to reach server.	option	-	auto

Parameter	Description	Type	Size	Default
	Option Description			
	<i>auto</i>	Set outgoing interface automatically.		
	<i>sdwan</i>	Set outgoing interface by SD-WAN or policy routing rules.		
	<i>specify</i>	Set outgoing interface manually.		
dhcp-server-ip	DHCP Server IPv4 address.	user	Not Specified	
dhcp6-server-ip	DHCPv6 server IPv6 address.	user	Not Specified	
discovered-device-timeout	Timeout for discovered devices (1 - 365 days, default = 28).	integer	Minimum value: 1 Maximum value: 365	28
dyn-addr-session-check	Enable/disable dirty session check caused by dynamic address updates.	option	-	disable
	Option Description			
	<i>enable</i>	Enable dirty session check caused by dynamic address updates.		
	<i>disable</i>	Disable dirty session check caused by dynamic address updates.		
ecmp-max-paths	Maximum number of Equal Cost Multi-Path (ECMP) next-hops. Set to 1 to disable ECMP routing (1 - 255, default = 255).	integer	Minimum value: 1 Maximum value: 255	255
email-portal-check-dns	Enable/disable using DNS to validate email addresses collected by a captive portal.	option	-	enable
	Option Description			
	<i>disable</i>	Disable email address checking with DNS.		
	<i>enable</i>	Enable email address checking with DNS.		
ext-resource-session-check	Enable/disable dirty session check caused by external resource updates.	option	-	disable
	Option Description			
	<i>enable</i>	Enable dirty session check caused by external resource updates.		
	<i>disable</i>	Disable dirty session check caused by external resource updates.		
firewall-session-dirty	Select how to manage sessions affected by firewall policy configuration changes.	option	-	check-all

Parameter	Description	Type	Size	Default								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>check-all</i></td><td>All sessions affected by a firewall policy change are flushed from the session table. When new packets are recived they are re-evaluated by stateful inspection and re-added to the session table.</td></tr><tr><td><i>check-new</i></td><td>Established sessions for changed firewall policies continue without being affected by the policy configuration change. New sessions are evaluated according to the new firewall policy configuration.</td></tr><tr><td><i>check-policy-option</i></td><td>Sessions are managed individually depending on the firewall policy. Some sessions may restart. Some may continue.</td></tr></table>	Option	Description	<i>check-all</i>	All sessions affected by a firewall policy change are flushed from the session table. When new packets are recived they are re-evaluated by stateful inspection and re-added to the session table.	<i>check-new</i>	Established sessions for changed firewall policies continue without being affected by the policy configuration change. New sessions are evaluated according to the new firewall policy configuration.	<i>check-policy-option</i>	Sessions are managed individually depending on the firewall policy. Some sessions may restart. Some may continue.			
	Option	Description										
	<i>check-all</i>	All sessions affected by a firewall policy change are flushed from the session table. When new packets are recived they are re-evaluated by stateful inspection and re-added to the session table.										
	<i>check-new</i>	Established sessions for changed firewall policies continue without being affected by the policy configuration change. New sessions are evaluated according to the new firewall policy configuration.										
<i>check-policy-option</i>	Sessions are managed individually depending on the firewall policy. Some sessions may restart. Some may continue.											
fqdn-session-check	Enable/disable dirty session check caused by FQDN updates.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable dirty session check caused by FQDN updates.</td></tr><tr><td><i>disable</i></td><td>Disable dirty session check caused by FQDN updates.</td></tr></table>	Option	Description	<i>enable</i>	Enable dirty session check caused by FQDN updates.	<i>disable</i>	Disable dirty session check caused by FQDN updates.					
	Option	Description										
	<i>enable</i>	Enable dirty session check caused by FQDN updates.										
<i>disable</i>	Disable dirty session check caused by FQDN updates.											
fw-session-hairpin	Enable/disable checking for a matching policy each time hairpin traffic goes through the FortiGate.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Perform a policy check every time.</td></tr><tr><td><i>disable</i></td><td>Perform a policy check only the first time the session is received.</td></tr></table>	Option	Description	<i>enable</i>	Perform a policy check every time.	<i>disable</i>	Perform a policy check only the first time the session is received.					
	Option	Description										
	<i>enable</i>	Perform a policy check every time.										
<i>disable</i>	Perform a policy check only the first time the session is received.											
gateway	Transparent mode IPv4 default gateway IP address.	ipv4-address	Not Specified	0.0.0.0								
gateway6	Transparent mode IPv4 default gateway IP address.	ipv6-address	Not Specified	::								
gui-advanced-policy	Enable/disable advanced policy configuration on the GUI.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable advanced policy configuration on the GUI.</td></tr><tr><td><i>disable</i></td><td>Disable advanced policy configuration on the GUI.</td></tr></table>	Option	Description	<i>enable</i>	Enable advanced policy configuration on the GUI.	<i>disable</i>	Disable advanced policy configuration on the GUI.					
	Option	Description										
	<i>enable</i>	Enable advanced policy configuration on the GUI.										
<i>disable</i>	Disable advanced policy configuration on the GUI.											
gui-advanced-wireless-features	Enable/disable advanced wireless features in GUI.	option	-	disable								

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>enable</i>	Enable advanced wireless features in GUI.		
	<i>disable</i>	Disable advanced wireless features in GUI.		
gui-allow-unnamed-policy	Enable/disable the requirement for policy naming on the GUI.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable the requirement for policy naming on the GUI.		
	<i>disable</i>	Disable the requirement for policy naming on the GUI.		
gui-antivirus	Enable/disable AntiVirus on the GUI.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable AntiVirus on the GUI.		
	<i>disable</i>	Disable AntiVirus on the GUI.		
gui-ap-profile	Enable/disable FortiAP profiles on the GUI.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable FortiAP profiles on the GUI.		
	<i>disable</i>	Disable FortiAP profiles on the GUI.		
gui-application-control	Enable/disable application control on the GUI.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable application control on the GUI.		
	<i>disable</i>	Disable application control on the GUI.		
gui-default-policy-columns <name>	Default columns to display for policy lists on GUI. Select column name.	string	Maximum length: 79	
gui-dhcp-advanced	Enable/disable advanced DHCP options on the GUI.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable advanced DHCP options on the GUI.		
	<i>disable</i>	Disable advanced DHCP options on the GUI.		

Parameter	Description	Type	Size	Default						
gui-dlp-profile	Enable/disable Data Leak Prevention on the GUI.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable Data Leak Prevention on the GUI.</td></tr><tr><td><i>disable</i></td><td>Disable Data Leak Prevention on the GUI.</td></tr></table>	Option	Description	<i>enable</i>	Enable Data Leak Prevention on the GUI.	<i>disable</i>	Disable Data Leak Prevention on the GUI.			
Option	Description									
<i>enable</i>	Enable Data Leak Prevention on the GUI.									
<i>disable</i>	Disable Data Leak Prevention on the GUI.									
gui-dns-database	Enable/disable DNS database settings on the GUI.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable DNS database settings on the GUI.</td></tr><tr><td><i>disable</i></td><td>Disable DNS database settings on the GUI.</td></tr></table>	Option	Description	<i>enable</i>	Enable DNS database settings on the GUI.	<i>disable</i>	Disable DNS database settings on the GUI.			
Option	Description									
<i>enable</i>	Enable DNS database settings on the GUI.									
<i>disable</i>	Disable DNS database settings on the GUI.									
gui-dnsfilter	Enable/disable DNS Filtering on the GUI.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable DNS Filtering on the GUI.</td></tr><tr><td><i>disable</i></td><td>Disable DNS Filtering on the GUI.</td></tr></table>	Option	Description	<i>enable</i>	Enable DNS Filtering on the GUI.	<i>disable</i>	Disable DNS Filtering on the GUI.			
Option	Description									
<i>enable</i>	Enable DNS Filtering on the GUI.									
<i>disable</i>	Disable DNS Filtering on the GUI.									
gui-dos-policy	Enable/disable DoS policies on the GUI.	option	-	enable **						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable DoS policies on the GUI.</td></tr><tr><td><i>disable</i></td><td>Disable DoS policies on the GUI.</td></tr></table>	Option	Description	<i>enable</i>	Enable DoS policies on the GUI.	<i>disable</i>	Disable DoS policies on the GUI.			
Option	Description									
<i>enable</i>	Enable DoS policies on the GUI.									
<i>disable</i>	Disable DoS policies on the GUI.									
gui-dynamic-routing	Enable/disable dynamic routing on the GUI.	option	-	enable **						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable dynamic routing on the GUI.</td></tr><tr><td><i>disable</i></td><td>Disable dynamic routing on the GUI.</td></tr></table>	Option	Description	<i>enable</i>	Enable dynamic routing on the GUI.	<i>disable</i>	Disable dynamic routing on the GUI.			
Option	Description									
<i>enable</i>	Enable dynamic routing on the GUI.									
<i>disable</i>	Disable dynamic routing on the GUI.									
gui-email-collection	Enable/disable email collection on the GUI.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable email collection on the GUI.</td></tr><tr><td><i>disable</i></td><td>Disable email collection on the GUI.</td></tr></table>	Option	Description	<i>enable</i>	Enable email collection on the GUI.	<i>disable</i>	Disable email collection on the GUI.			
Option	Description									
<i>enable</i>	Enable email collection on the GUI.									
<i>disable</i>	Disable email collection on the GUI.									

Parameter	Description	Type	Size	Default
gui-enforce-change-summary	Enforce change summaries for select tables in the GUI.	option	-	require
	Option	Description		
	<i>disable</i>	No change summary requirement.		
	<i>require</i>	Change summary required.		
gui-explicit-proxy	Enable/disable the explicit proxy on the GUI.	option	-	disable
gui-file-filter	Enable/disable File-filter on the GUI.	option	-	enable **
gui-fortiap-split-tunneling	Enable/disable FortiAP split tunneling on the GUI.	option	-	disable
gui-fortitender-controller	Enable/disable FortiExtender on the GUI.	option	-	disable **
gui-icap	Enable/disable ICAP on the GUI.	option	-	disable

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>enable</i>	Enable ICAP on the GUI.		
	<i>disable</i>	Disable ICAP on the GUI.		
gui-implicit-policy	Enable/disable implicit firewall policies on the GUI.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable implicit firewall policies on the GUI.		
	<i>disable</i>	Disable implicit firewall policies on the GUI.		
gui-ips	Enable/disable IPS on the GUI.	option	-	enable **
	Option	Description		
	<i>enable</i>	Enable IPS on the GUI.		
	<i>disable</i>	Disable IPS on the GUI.		
gui-load-balance	Enable/disable server load balancing on the GUI.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable server load balancing on the GUI.		
	<i>disable</i>	Disable server load balancing on the GUI.		
gui-local-in-policy	Enable/disable Local-In policies on the GUI.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable Local-In policies on the GUI.		
	<i>disable</i>	Disable Local-In policies on the GUI.		
gui-multicast-policy	Enable/disable multicast firewall policies on the GUI.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable multicast firewall policies on the GUI.		
	<i>disable</i>	Disable multicast firewall policies on the GUI.		
gui-multiple-interface-policy	Enable/disable adding multiple interfaces to a policy on the GUI.	option	-	disable

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>enable</i>	Enable adding multiple interfaces to a policy on the GUI.		
	<i>disable</i>	Disable adding multiple interfaces to a policy on the GUI.		
gui-object-colors	Enable/disable object colors on the GUI.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable object colors on the GUI.		
	<i>disable</i>	Disable object colors on the GUI.		
gui-ot	Enable/disable Operational technology features on the GUI.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable Operational technology features on the GUI.		
	<i>disable</i>	Disable Operational technology features on the GUI.		
gui-policy-based-ipsec	Enable/disable policy-based IPsec VPN on the GUI.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable policy-based IPsec VPN on the GUI.		
	<i>disable</i>	Disable policy-based IPsec VPN on the GUI.		
gui-policy-disclaimer	Enable/disable policy disclaimer on the GUI.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable policy disclaimer on the GUI.		
	<i>disable</i>	Disable policy disclaimer on the GUI.		
gui-proxy-inspection	Enable/disable the proxy features on the GUI.	option	-	enable **
	Option	Description		
	<i>enable</i>	Enable the proxy features on the GUI.		
	<i>disable</i>	Disable the proxy features on the GUI.		
gui-security-profile-group	Enable/disable Security Profile Groups on the GUI.	option	-	disable

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>enable</i>	Enable Security Profile Groups on the GUI.		
	<i>disable</i>	Disable Security Profile Groups on the GUI.		
gui-spamfilter	Enable/disable Antispam on the GUI.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable Antispam on the GUI.		
	<i>disable</i>	Disable Antispam on the GUI.		
gui-sslvpn-personal-bookmarks	Enable/disable SSL-VPN personal bookmark management on the GUI.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable SSL-VPN personal bookmark management on the GUI.		
	<i>disable</i>	Disable SSL-VPN personal bookmark management on the GUI.		
gui-sslvpn-realms	Enable/disable SSL-VPN realms on the GUI.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable SSL-VPN realms on the GUI.		
	<i>disable</i>	Disable SSL-VPN realms on the GUI.		
gui-switch-controller *	Enable/disable the switch controller on the GUI.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable the switch controller on the GUI.		
	<i>disable</i>	Disable the switch controller on the GUI.		
gui-threat-weight	Enable/disable threat weight on the GUI.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable threat weight on the GUI.		
	<i>disable</i>	Disable threat weight on the GUI.		
gui-traffic-shaping	Enable/disable traffic shaping on the GUI.	option	-	enable

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>enable</i>	Enable traffic shaping on the GUI.		
	<i>disable</i>	Disable traffic shaping on the GUI.		
gui-videofilter	Enable/disable Video filtering on the GUI.	option	-	enable **
	Option	Description		
	<i>enable</i>	Enable Video filtering on the GUI.		
	<i>disable</i>	Disable Video filtering on the GUI.		
gui-voip-profile	Enable/disable VoIP profiles on the GUI.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable VoIP profiles on the GUI.		
	<i>disable</i>	Disable VoIP profiles on the GUI.		
gui-vpn	Enable/disable VPN tunnels on the GUI.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable VPN tunnels on the GUI.		
	<i>disable</i>	Disable VPN tunnels on the GUI.		
gui-waf-profile	Enable/disable Web Application Firewall on the GUI.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable Web Application Firewall on the GUI.		
	<i>disable</i>	Disable Web Application Firewall on the GUI.		
gui-wan-load-balancing	Enable/disable SD-WAN on the GUI.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable SD-WAN on the GUI.		
	<i>disable</i>	Disable SD-WAN on the GUI.		
gui-wanopt-cache *	Enable/disable WAN Optimization and Web Caching on the GUI.	option	-	disable

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>enable</i>	Enable WAN Optimization and Web Caching on the GUI.		
	<i>disable</i>	Disable WAN Optimization and Web Caching on the GUI.		
gui-webfilter	Enable/disable Web filtering on the GUI.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable Web filtering on the GUI.		
	<i>disable</i>	Disable Web filtering on the GUI.		
gui-webfilter-advanced	Enable/disable advanced web filtering on the GUI.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable advanced web filtering on the GUI.		
	<i>disable</i>	Disable advanced web filtering on the GUI.		
gui-wireless-controller	Enable/disable the wireless controller on the GUI.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable the wireless controller on the GUI.		
	<i>disable</i>	Disable the wireless controller on the GUI.		
gui-ztna	Enable/disable Zero Trust Network Access features on the GUI.	option	-	enable **
	Option	Description		
	<i>enable</i>	Enable Zero Trust Network Access features on the GUI.		
	<i>disable</i>	Disable Zero Trust Network Access features on the GUI.		
h323-direct-model	Enable/disable H323 direct model.	option	-	disable
	Option	Description		
	<i>disable</i>	Disable H323 direct model.		
	<i>enable</i>	Enable H323 direct model.		
http-external-dest	Offload HTTP traffic to FortiWeb or FortiCache.	option	-	fortiweb

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>fortiweb</i>	Offload HTTP traffic to FortiWeb for Web Application Firewall inspection.		
	<i>forticache</i>	Offload HTTP traffic to FortiCache for external web caching and WAN optimization.		
ike-dn-format	Configure IKE ASN.1 Distinguished Name format conventions.	option	-	with-space
	Option	Description		
	<i>with-space</i>	Format IKE ASN.1 Distinguished Names with spaces between attribute names and values.		
	<i>no-space</i>	Format IKE ASN.1 Distinguished Names without spaces between attribute names and values.		
ike-policy-route	Enable/disable IKE Policy Based Routing (PBR).	option	-	disable
	Option	Description		
	<i>enable</i>	Enable IKE Policy Based Routing (PBR).		
	<i>disable</i>	Disable IKE Policy Based Routing (PBR).		
ike-port	UDP port for IKE/IPsec traffic (default 500).	integer	Minimum value: 500 1024 Maximum value: 65535	
ike-quick-crash-detect	Enable/disable IKE quick crash detection (RFC 6290).	option	-	disable
	Option	Description		
	<i>enable</i>	Enable IKE quick crash detection (RFC 6290).		
	<i>disable</i>	Disable IKE quick crash detection (RFC 6290).		
ike-session-resume	Enable/disable IKEv2 session resumption (RFC 5723).	option	-	disable
	Option	Description		
	<i>enable</i>	Enable IKEv2 session resumption (RFC 5723).		
	<i>disable</i>	Disable IKEv2 session resumption (RFC 5723).		

Parameter	Description	Type	Size	Default								
internet-service-database-cache	Enable/disable Internet Service database caching.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Disable Internet Service database caching.</td></tr><tr><td>enable</td><td>Enable Internet Service database caching.</td></tr></table>	Option	Description	disable	Disable Internet Service database caching.	enable	Enable Internet Service database caching.					
Option	Description											
disable	Disable Internet Service database caching.											
enable	Enable Internet Service database caching.											
ip	IP address and netmask.	ipv4-classnet-host	Not Specified	0.0.0.0 0.0.0.0								
ip6	IPv6 address prefix for NAT mode.	ipv6-prefix	Not Specified	::/0								
lan-extension-controller-addr	Controller IP address or FQDN to connect.	string	Maximum length: 255									
link-down-access	Enable/disable link down access traffic.	option	-	enable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Allow link down access traffic.</td></tr><tr><td>disable</td><td>Block link down access traffic.</td></tr></table>	Option	Description	enable	Allow link down access traffic.	disable	Block link down access traffic.					
Option	Description											
enable	Allow link down access traffic.											
disable	Block link down access traffic.											
lldp-reception	Enable/disable Link Layer Discovery Protocol (LLDP) reception for this VDOM or apply global settings to this VDOM.	option	-	global								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable LLDP reception for this VDOM.</td></tr><tr><td>disable</td><td>Disable LLDP reception for this VDOM.</td></tr><tr><td>global</td><td>Use the global LLDP reception configuration for this VDOM.</td></tr></table>	Option	Description	enable	Enable LLDP reception for this VDOM.	disable	Disable LLDP reception for this VDOM.	global	Use the global LLDP reception configuration for this VDOM.			
Option	Description											
enable	Enable LLDP reception for this VDOM.											
disable	Disable LLDP reception for this VDOM.											
global	Use the global LLDP reception configuration for this VDOM.											
lldp-transmission	Enable/disable Link Layer Discovery Protocol (LLDP) transmission for this VDOM or apply global settings to this VDOM.	option	-	global								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable LLDP transmission for this VDOM.</td></tr><tr><td>disable</td><td>Disable LLDP transmission for this VDOM.</td></tr><tr><td>global</td><td>Use the global LLDP transmission configuration for this VDOM.</td></tr></table>	Option	Description	enable	Enable LLDP transmission for this VDOM.	disable	Disable LLDP transmission for this VDOM.	global	Use the global LLDP transmission configuration for this VDOM.			
Option	Description											
enable	Enable LLDP transmission for this VDOM.											
disable	Disable LLDP transmission for this VDOM.											
global	Use the global LLDP transmission configuration for this VDOM.											

Parameter	Description	Type	Size	Default
location-id	Local location ID in the form of an IPv4 address.	ipv4-address	Not Specified	0.0.0.0
mac-ttl	Duration of MAC addresses in Transparent mode (300 - 8640000 sec, default = 300).	integer	Minimum value: 300 Maximum value: 8640000	300
manageip	Transparent mode IPv4 management IP address and netmask.	user	Not Specified	
manageip6	Transparent mode IPv6 management IP address and netmask.	ipv6-prefix	Not Specified	::/0
multicast-forward	Enable/disable multicast forwarding.	option	-	enable
	Option		Description	
	<i>enable</i>		Enable multicast forwarding.	
	<i>disable</i>		Disable multicast forwarding.	
multicast-skip-policy	Enable/disable allowing multicast traffic through the FortiGate without a policy check.	option	-	disable
	Option		Description	
	<i>enable</i>		Allowing multicast traffic through the FortiGate without creating a multicast firewall policy.	
	<i>disable</i>		Require a multicast policy to allow multicast traffic to pass through the FortiGate.	
multicast-ttl-notchange	Enable/disable preventing the FortiGate from changing the TTL for forwarded multicast packets.	option	-	disable
	Option		Description	
	<i>enable</i>		The multicast TTL is not changed.	
	<i>disable</i>		The multicast TTL may be changed.	
nat46-force-ipv4-packet-forwarding	Enable/disable mandatory IPv4 packet forwarding in NAT46.	option	-	disable

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>enable</i>	Enable mandatory IPv4 packet forwarding when IPv4 DF is set to 1.		
	<i>disable</i>	Disable mandatory IPv4 packet forwarding when IPv4 DF is set to 1.		
nat46-generate-ipv6-fragment-header	Enable/disable NAT46 IPv6 fragment header generation.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable NAT46 IPv6 fragment header generation.		
	<i>disable</i>	Disable NAT46 IPv6 fragment header generation.		
nat64-force-ipv6-packet-forwarding	Enable/disable mandatory IPv6 packet forwarding in NAT64.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable mandatory IPv6 packet forwarding		
	<i>disable</i>	Disable mandatory IPv6 packet forwarding		
ngfw-mode	Next Generation Firewall (NGFW) mode.	option	-	profile-based
	Option	Description		
	<i>profile-based</i>	Application and web-filtering are configured using profiles applied to policy entries.		
	<i>policy-based</i>	Application and web-filtering are configured as policy match conditions.		
opmode	Firewall operation mode (NAT or Transparent).	option	-	nat
	Option	Description		
	<i>nat</i>	Change to NAT mode.		
	<i>transparent</i>	Change to transparent mode.		
policy-offload-level *	Configure firewall policy offload level.	option	-	disable

Parameter	Description	Type	Size	Default
	Option Description			
	<i>disable</i>	Disable policy offloading.		
	<i>dos-offload</i>	Only enable DoS policy offloading.		
prp-trailer-action	Enable/disable action to take on PRP trailer.	option	-	disable
	Option Description			
	<i>enable</i>	Try to keep PRP trailer.		
	<i>disable</i>	Trim PRP trailer.		
sccp-port	TCP port the SCCP proxy monitors for SCCP traffic (0 - 65535, default = 2000).	integer	Minimum value: 0 Maximum value: 65535	2000
sctp-session-without-init	Enable/disable Sctp session creation without Sctp INIT.	option	-	disable
	Option Description			
	<i>enable</i>	Enable Sctp session creation without Sctp INIT.		
	<i>disable</i>	Disable Sctp session creation without Sctp INIT.		
ses-denied-traffic	Enable/disable including denied session in the session table.	option	-	disable
	Option Description			
	<i>enable</i>	Include denied sessions in the session table.		
	<i>disable</i>	Do not add denied sessions to the session table.		
sip-expectation	Enable/disable the SIP kernel session helper to create an expectation for port 5060.	option	-	disable
	Option Description			
	<i>enable</i>	Allow SIP session helper to create an expectation for port 5060.		
	<i>disable</i>	Prevent SIP session helper from creating an expectation for port 5060.		
sip-nat-trace	Enable/disable recording the original SIP source IP address when NAT is used.	option	-	enable

Parameter	Description	Type	Size	Default
	Option Description			
	<i>enable</i>	Record the original SIP source IP address when NAT is used.		
	<i>disable</i>	Do not record the original SIP source IP address when NAT is used.		
sip-ssl-port *	TCP port the SIP proxy monitors for SIP SSL/TLS traffic (0 - 65535, default = 5061).	integer	Minimum value: 5061 0 Maximum value: 65535	
sip-tcp-port	TCP port the SIP proxy monitors for SIP traffic (0 - 65535, default = 5060).	integer	Minimum value: 5060 1 Maximum value: 65535	
sip-udp-port	UDP port the SIP proxy monitors for SIP traffic (0 - 65535, default = 5060).	integer	Minimum value: 5060 1 Maximum value: 65535	
snat-hairpin-traffic	Enable/disable source NAT (SNAT) for hairpin traffic.	option	-	enable
	Option Description			
	<i>enable</i>	Enable SNAT for hairpin traffic.		
	<i>disable</i>	Disable SNAT for hairpin traffic.		
status	Enable/disable this VDOM.	option	-	enable
	Option Description			
	<i>enable</i>	Enable this VDOM.		
	<i>disable</i>	Disable this VDOM.		
strict-src-check	Enable/disable strict source verification.	option	-	disable
	Option Description			
	<i>enable</i>	Enable strict source verification.		
	<i>disable</i>	Disable strict source verification.		
tcp-session-without-syn	Enable/disable allowing TCP session without SYN flags.	option	-	disable
	Option Description			
	<i>enable</i>	Allow TCP session without SYN flags.		
	<i>disable</i>	Do not allow TCP session without SYN flags.		

Parameter	Description	Type	Size	Default
utf8-spam-tagging	Enable/disable converting antispam tags to UTF-8 for better non-ASCII character support.	option	-	enable
	Option	Description		
	<i>enable</i>	Convert antispam tags to UTF-8.		
	<i>disable</i>	Do not convert antispam tags.		
v4-ecmp-mode	IPv4 Equal-cost multi-path (ECMP) routing and load balancing mode.	option	-	source-ip-based
	Option	Description		
	<i>source-ip-based</i>	Select next hop based on source IP.		
	<i>weight-based</i>	Select next hop based on weight.		
	<i>usage-based</i>	Select next hop based on usage.		
	<i>source-dest-ip-based</i>	Select next hop based on both source and destination IPs.		
vdom-type	Vdom type (traffic, lan-extension or admin).	option	-	traffic
	Option	Description		
	<i>traffic</i>	Change to traffic VDOM		
	<i>lan-extension</i>	Change to lan-extension VDOM		
	<i>admin</i>	Change to admin VDOM		
vpn-stats-log	Enable/disable periodic VPN log statistics for one or more types of VPN. Separate names with a space.	option	-	ipsec pptp l2tp ssl
	Option	Description		
	<i>ipsec</i>	IPsec.		
	<i>pptp</i>	PPTP.		
	<i>l2tp</i>	L2TP.		
	<i>ssl</i>	SSL.		
vpn-stats-period	Period to send VPN log statistics (0 or 60 - 86400 sec).	integer	Minimum value: 600 0 Maximum value: 4294967295	

Parameter	Description	Type	Size	Default						
wccp-cache-engine	Enable/disable WCCP cache engine.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable WCCP cache engine.</td></tr><tr><td><i>disable</i></td><td>Disable WCCP cache engine.</td></tr></table>				Option	Description	<i>enable</i>	Enable WCCP cache engine.	<i>disable</i>	Disable WCCP cache engine.
Option	Description									
<i>enable</i>	Enable WCCP cache engine.									
<i>disable</i>	Disable WCCP cache engine.									

* This parameter may not exist in some models.

** Values may differ between models.

config system sflow

Configure sFlow.

```
config system sflow
  Description: Configure sFlow.
  set collector-ip {ipv4-address}
  set collector-port {integer}
  set interface {string}
  set interface-select-method [auto|sdwan|...]
  set source-ip {ipv4-address}
end
```

config system sflow

Parameter	Description	Type	Size	Default
collector-ip	IP address of the sFlow collector that sFlow agents added to interfaces in this VDOM send sFlow datagrams to (default = 0.0.0.0).	ipv4-address	Not Specified	0.0.0.0
collector-port	UDP port number used for sending sFlow datagrams (configure only if required by your sFlow collector or your network configuration) (0 - 65535, default = 6343).	integer	Minimum value: 0 Maximum value: 65535	6343
interface	Specify outgoing interface to reach server.	string	Maximum length: 15	
interface-select-method	Specify how to select outgoing interface to reach server.	option	-	auto

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>auto</i>	Set outgoing interface automatically.		
	<i>sdwan</i>	Set outgoing interface by SD-WAN or policy routing rules.		
	<i>specify</i>	Set outgoing interface manually.		
source-ip	Source IP address for sFlow agent.	ipv4-address	Not Specified	0.0.0.0

config system sit-tunnel

Configure IPv6 tunnel over IPv4.

```

config system sit-tunnel
  Description: Configure IPv6 tunnel over IPv4.
  edit <name>
    set auto-asic-offload [enable|disable]
    set destination {ipv4-address}
    set interface {string}
    set ip6 {ipv6-prefix}
    set source {ipv4-address}
    set use-sdwan [disable|enable]
  next
end

```

config system sit-tunnel

Parameter	Description	Type	Size	Default
auto-asic-offload *	Enable/disable tunnel ASIC offloading.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable auto ASIC offloading.		
	<i>disable</i>	Disable ASIC offloading.		
destination	Destination IP address of the tunnel.	ipv4-address	Not Specified	0.0.0.0
interface	Interface name.	string	Maximum length: 15	
ip6	IPv6 address of the tunnel.	ipv6-prefix	Not Specified	::/0

Parameter	Description	Type	Size	Default
name	Tunnel name.	string	Maximum length: 15	
source	Source IP address of the tunnel.	ipv4-address	Not Specified	0.0.0.0
use-sdwan	Enable/disable use of SD-WAN to reach remote gateway.	option	-	disable
	Option	Description		
	disable	Disable use of SD-WAN to reach remote gateway.		
	enable	Enable use of SD-WAN to reach remote gateway.		

* This parameter may not exist in some models.

config system smc-ntp



This command is available for model(s): FortiGate 1100E, FortiGate 1101E, FortiGate 1800F, FortiGate 1801F, FortiGate 2600F, FortiGate 2601F, FortiGate 3000F, FortiGate 3001F, FortiGate 300E, FortiGate 301E, FortiGate 3200F, FortiGate 3201F, FortiGate 3300E, FortiGate 3301E, FortiGate 3400E, FortiGate 3401E, FortiGate 3501F, FortiGate 3600E, FortiGate 3601E, FortiGate 3700F, FortiGate 3701F, FortiGate 3980E, FortiGate 400E Bypass, FortiGate 400E, FortiGate 400F, FortiGate 401E, FortiGate 401F, FortiGate 4200F, FortiGate 4201F, FortiGate 4400F, FortiGate 4401F, FortiGate 500E, FortiGate 501E, FortiGate 600E, FortiGate 601E.

It is not available for: FortiGate 1000D, FortiGate 1000F, FortiGate 1001F, FortiGate 100EF, FortiGate 100E, FortiGate 100F, FortiGate 101F, FortiGate 140E-POE, FortiGate 140E, FortiGate 1500DT, FortiGate 1500D, FortiGate 2000E, FortiGate 200E, FortiGate 200F, FortiGate 201E, FortiGate 201F, FortiGate 2201E, FortiGate 2500E, FortiGate 3000D, FortiGate 3100D, FortiGate 3200D, FortiGate 3700D, FortiGate 3960E, FortiGate 40F 3G4G, FortiGate 5001E1, FortiGate 5001E, FortiGate 60E-POE, FortiGate 60E, FortiGate 60F, FortiGate 61E, FortiGate 70F, FortiGate 71F, FortiGate 800D, FortiGate 80E-POE, FortiGate 80E, FortiGate 80F Bypass, FortiGate 80F DSL, FortiGate 80F-POE, FortiGate 80F, FortiGate 81E-POE, FortiGate 81E, FortiGate 81F-POE, FortiGate 81F, FortiGate 900D, FortiGate 90E, FortiGate 91E, FortiGate-VM64 Aliyun, FortiGate-VM64 AWS, FortiGate-VM64 Azure, FortiGate-VM64 GCP, FortiGate-VM64 OPC, FortiGate-VM64, FortiGateRugged 60F 3G4G, FortiGateRugged 60F, FortiGateRugged 70F 3G4G, FortiGateRugged 70F, FortiWiFi 40F 3G4G, FortiWiFi 40F, FortiWiFi 60E, FortiWiFi 60F, FortiWiFi 61E, FortiWiFi 61F, FortiWiFi 80F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G-POE, FortiWiFi 81F 2R-POE, FortiWiFi 81F 2R.

Configure SMC NTP information.

```

config system smc-ntp
  Description: Configure SMC NTP information.
  set channel {integer}
  config ntpserver
    Description: Configure the FortiGate SMC to connect to an NTP server.
    edit <id>
      set server {ipv4-address}
    next
  end
  set ntpsync [enable|disable]
  set syncinterval {integer}
end

```

config system smc-ntp

Parameter	Description	Type	Size	Default
channel	SMC NTP client will send NTP packets through this channel.	integer	Minimum value: 1 Maximum value: 65535	5
ntpsync	Enable/disable setting the FortiGate SMC system time by synchronizing with an NTP server.	option	-	disable
	Option	Description		
	enable	Enable synchronization with NTP server in SMC.		
	disable	Disable synchronization with NTP server in SMC.		
syncinterval	SMC NTP synchronization interval (1 - 65535 secs).	integer	Minimum value: 1 Maximum value: 65535	60

config ntpserver

Parameter	Description	Type	Size	Default
id	NTP server ID.	integer	Minimum value: 0 Maximum value: 4294967295	0
server	IP address of the NTP server.	ipv4-address	Not Specified	0.0.0.0

config system sms-server

Configure SMS server for sending SMS messages to support user authentication.

```
config system sms-server
  Description: Configure SMS server for sending SMS messages to support user authentication.
  edit <name>
    set mail-server {string}
  next
end
```

config system sms-server

Parameter	Description	Type	Size	Default
mail-server	Email-to-SMS server domain name.	string	Maximum length: 63	
name	Name of SMS server.	string	Maximum length: 35	

config system snmp community

SNMP community configuration.

```
config system snmp community
  Description: SNMP community configuration.
  edit <id>
    set events {option1}, {option2}, ...
    config hosts
      Description: Configure IPv4 SNMP managers (hosts).
      edit <id>
        set ha-direct [enable|disable]
        set host-type [any|query|...]
        set ip {user}
        set source-ip {ipv4-address}
      next
    end
  config hosts6
    Description: Configure IPv6 SNMP managers.
    edit <id>
      set ha-direct [enable|disable]
      set host-type [any|query|...]
      set ipv6 {ipv6-prefix}
      set source-ipv6 {ipv6-address}
    next
  end
  set mib-view {string}
```

```
set name {string}
set query-v1-port {integer}
set query-v1-status [enable|disable]
set query-v2c-port {integer}
set query-v2c-status [enable|disable]
set status [enable|disable]
set trap-v1-lport {integer}
set trap-v1-rport {integer}
set trap-v1-status [enable|disable]
set trap-v2c-lport {integer}
set trap-v2c-rport {integer}
set trap-v2c-status [enable|disable]
set vdoms <name1>, <name2>, ...
next
end
```

config system snmp community

Parameter	Description	Type	Size	Default
events	SNMP trap events.	option	-	cpu-high mem- low log-full intf-ip vpn-tun- up vpn-tun- down ha- switch ha-hb- failure ips- signature ips- anomaly av- virus av- oversize av- pattern av- fragmented fm- if-change bgp- established bgp-backward- transition ha- member-up ha- member-down ent-conf- change av- conserve av- bypass av- oversize- passed av- oversize- blocked ips- pkg-update ips-fail-open temperature- high voltage- alert power- supply-failure faz-disconnect fan-failure wc- ap-up wc-ap- down fswctl- session-up fswctl-session- down load- balance-real- server-down per-cpu-high dhcp pool- usage ospf- nbr-state- change ospf- virtnbr-state- change **

Parameter	Description	Type	Size	Default

Option	Description
<i>cpu-high</i>	Send a trap when CPU usage is high.
<i>mem-low</i>	Send a trap when available memory is low.
<i>log-full</i>	Send a trap when log disk space becomes low.
<i>intf-ip</i>	Send a trap when an interface IP address is changed.
<i>vpn-tun-up</i>	Send a trap when a VPN tunnel comes up.
<i>vpn-tun-down</i>	Send a trap when a VPN tunnel goes down.
<i>ha-switch</i>	Send a trap after an HA failover when the backup unit has taken over.
<i>ha-hb-failure</i>	Send a trap when HA heartbeats are not received.
<i>ips-signature</i>	Send a trap when IPS detects an attack.
<i>ips-anomaly</i>	Send a trap when IPS finds an anomaly.
<i>av-virus</i>	Send a trap when AntiVirus finds a virus.
<i>av-oversize</i>	Send a trap when AntiVirus finds an oversized file.
<i>av-pattern</i>	Send a trap when AntiVirus finds file matching pattern.
<i>av-fragmented</i>	Send a trap when AntiVirus finds a fragmented file.
<i>fm-if-change</i>	Send a trap when FortiManager interface changes. Send a FortiManager trap.
<i>fm-conf-change</i>	Send a trap when a configuration change is made by a FortiGate administrator and the FortiGate is managed by FortiManager.
<i>bgp-established</i>	Send a trap when a BGP FSM transitions to the established state.
<i>bgp-backward-transition</i>	Send a trap when a BGP FSM goes from a high numbered state to a lower numbered state.
<i>ha-member-up</i>	Send a trap when an HA cluster member goes up.
<i>ha-member-down</i>	Send a trap when an HA cluster member goes down.
<i>ent-conf-change</i>	Send a trap when an entity MIB change occurs (RFC4133).
<i>av-conserve</i>	Send a trap when the FortiGate enters conserve mode.
<i>av-bypass</i>	Send a trap when the FortiGate enters bypass mode.
<i>av-oversize-passed</i>	Send a trap when AntiVirus passes an oversized file.

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>av-oversize-blocked</i>	Send a trap when AntiVirus blocks an oversized file.		
	<i>ips-pkg-update</i>	Send a trap when the IPS signature database or engine is updated.		
	<i>ips-fail-open</i>	Send a trap when the IPS network buffer is full.		
	<i>temperature-high</i>	Send a trap when a temperature sensor registers a temperature that is too high.		
	<i>voltage-alert</i>	Send a trap when a voltage sensor registers a voltage that is outside of the normal range.		
	<i>power-supply-failure</i>	Send a trap when a power supply fails.		
	<i>faz-disconnect</i>	Send a trap when a FortiAnalyzer disconnects from the FortiGate.		
	<i>fan-failure</i>	Send a trap when a fan fails.		
	<i>wc-ap-up</i>	Send a trap when a managed FortiAP comes up.		
	<i>wc-ap-down</i>	Send a trap when a managed FortiAP goes down.		
	<i>fswctl-session-up</i>	Send a trap when a FortiSwitch controller session comes up.		
	<i>fswctl-session-down</i>	Send a trap when a FortiSwitch controller session goes down.		
	<i>load-balance-real-server-down</i>	Send a trap when a server load balance real server goes down.		
	<i>device-new</i>	Send a trap when a new device is found.		
	<i>per-cpu-high</i>	Send a trap when per-CPU usage is high.		
	<i>dhcp</i>	Send a trap when the DHCP server exhausts the IP pool, an IP address already is in use, or a DHCP client interface received a DHCP-NAK.		
<i>pool-usage</i>	Send a trap about ippool usage.			
<i>ospf-nbr-state-change</i>	Send a trap when there has been a change in the state of a non-virtual OSPF neighbor.			
<i>ospf-virtnbr-state-change</i>	Send a trap when there has been a change in the state of an OSPF virtual neighbor.			
id	Community ID.	integer	Minimum value: 0 0 Maximum value: 4294967295	

Parameter	Description	Type	Size	Default						
mib-view	SNMP access control MIB view.	string	Maximum length: 32							
name	Community name.	string	Maximum length: 35							
query-v1-port	SNMP v1 query port (default = 161).	integer	Minimum value: 1 Maximum value: 65535	161						
query-v1-status	Enable/disable SNMP v1 queries.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable setting.</td></tr><tr><td>disable</td><td>Disable setting.</td></tr></table>	Option	Description	enable	Enable setting.	disable	Disable setting.			
Option	Description									
enable	Enable setting.									
disable	Disable setting.									
query-v2c-port	SNMP v2c query port (default = 161).	integer	Minimum value: 0 Maximum value: 65535	161						
query-v2c-status	Enable/disable SNMP v2c queries.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable setting.</td></tr><tr><td>disable</td><td>Disable setting.</td></tr></table>	Option	Description	enable	Enable setting.	disable	Disable setting.			
Option	Description									
enable	Enable setting.									
disable	Disable setting.									
status	Enable/disable this SNMP community.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable setting.</td></tr><tr><td>disable</td><td>Disable setting.</td></tr></table>	Option	Description	enable	Enable setting.	disable	Disable setting.			
Option	Description									
enable	Enable setting.									
disable	Disable setting.									
trap-v1-lport	SNMP v1 trap local port (default = 162).	integer	Minimum value: 1 Maximum value: 65535	162						
trap-v1-rport	SNMP v1 trap remote port (default = 162).	integer	Minimum value: 1 Maximum value: 65535	162						
trap-v1-status	Enable/disable SNMP v1 traps.	option	-	enable						

Parameter	Description	Type	Size	Default
	Option Description			
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		
trap-v2c-lport	SNMP v2c trap local port (default = 162).	integer	Minimum value: 162 Maximum value: 65535	
trap-v2c-rport	SNMP v2c trap remote port (default = 162).	integer	Minimum value: 162 Maximum value: 65535	
trap-v2c-status	Enable/disable SNMP v2c traps.	option	-	enable
	Option Description			
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		
vdoms <name>	SNMP access control VDOMs. VDOM name.	string	Maximum length: 79	

** Values may differ between models.

config hosts

Parameter	Description	Type	Size	Default
ha-direct	Enable/disable direct management of HA cluster members.	option	-	disable
	Option Description			
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		
host-type	Control whether the SNMP manager sends SNMP queries, receives SNMP traps, or both. No traps will be sent when IP type is subnet.	option	-	any
	Option Description			
	<i>any</i>	Accept queries from and send traps to this SNMP manager.		
	<i>query</i>	Accept queries from this SNMP manager but do not send traps.		

Parameter	Description	Type	Size	Default
	Option	Description		
	trap	Send traps to this SNMP manager but do not accept SNMP queries from this SNMP manager.		
id	Host entry ID.	integer	Minimum value: 0 Maximum value: 4294967295	
ip	IPv4 address of the SNMP manager (host).	user	Not Specified	
source-ip	Source IPv4 address for SNMP traps.	ipv4-address	Not Specified	0.0.0.0

config hosts6

Parameter	Description	Type	Size	Default								
ha-direct	Enable/disable direct management of HA cluster members.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable setting.</td></tr><tr><td><i>disable</i></td><td>Disable setting.</td></tr></table>	Option	Description	<i>enable</i>	Enable setting.	<i>disable</i>	Disable setting.					
Option	Description											
<i>enable</i>	Enable setting.											
<i>disable</i>	Disable setting.											
host-type	Control whether the SNMP manager sends SNMP queries, receives SNMP traps, or both.	option	-	any								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>any</i></td><td>Accept queries from and send traps to this SNMP manager.</td></tr><tr><td><i>query</i></td><td>Accept queries from this SNMP manager but do not send traps.</td></tr><tr><td><i>trap</i></td><td>Send traps to this SNMP manager but do not accept SNMP queries from this SNMP manager.</td></tr></table>	Option	Description	<i>any</i>	Accept queries from and send traps to this SNMP manager.	<i>query</i>	Accept queries from this SNMP manager but do not send traps.	<i>trap</i>	Send traps to this SNMP manager but do not accept SNMP queries from this SNMP manager.			
Option	Description											
<i>any</i>	Accept queries from and send traps to this SNMP manager.											
<i>query</i>	Accept queries from this SNMP manager but do not send traps.											
<i>trap</i>	Send traps to this SNMP manager but do not accept SNMP queries from this SNMP manager.											
id	Host6 entry ID.	integer	Minimum value: 0 0 Maximum value: 4294967295									
ipv6	SNMP manager IPv6 address prefix.	ipv6-prefix	Not Specified	::/0								
source-ipv6	Source IPv6 address for SNMP traps.	ipv6-address	Not Specified	::								

config system snmp mib-view

SNMP Access Control MIB View configuration.

```
config system snmp mib-view
  Description: SNMP Access Control MIB View configuration.
  edit <name>
    set exclude {string}
    set include {string}
  next
end
```

config system snmp mib-view

Parameter	Description	Type	Size	Default
exclude	OID subtrees to be excluded in the view. Maximum 64 allowed.	string	Maximum length: 79	
include	OID subtrees to be included in the view. Maximum 16 allowed.	string	Maximum length: 79	
name	MIB view name.	string	Maximum length: 32	

config system snmp sysinfo

SNMP system info configuration.

```
config system snmp sysinfo
  Description: SNMP system info configuration.
  set append-index [enable|disable]
  set contact-info {var-string}
  set description {var-string}
  set engine-id {string}
  set engine-id-type [text|hex|...]
  set location {var-string}
  set status [enable|disable]
  set trap-high-cpu-threshold {integer}
  set trap-log-full-threshold {integer}
  set trap-low-memory-threshold {integer}
end
```

config system snmp sysinfo

Parameter	Description	Type	Size	Default								
append-index	Enable/disable allowance of appending VDOM or interface index in some RFC tables.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable setting.</td></tr><tr><td><i>disable</i></td><td>Disable setting.</td></tr></table>	Option	Description	<i>enable</i>	Enable setting.	<i>disable</i>	Disable setting.					
Option	Description											
<i>enable</i>	Enable setting.											
<i>disable</i>	Disable setting.											
contact-info	Contact information.	var-string	Maximum length: 255									
description	System description.	var-string	Maximum length: 255									
engine-id	Local SNMP engineID string (maximum 27 characters).	string	Maximum length: 54									
engine-id-type	Local SNMP engineID type (text/hex/mac).	option	-	text								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>text</i></td><td>Text format.</td></tr><tr><td><i>hex</i></td><td>Octets format.</td></tr><tr><td><i>mac</i></td><td>MAC address format.</td></tr></table>	Option	Description	<i>text</i>	Text format.	<i>hex</i>	Octets format.	<i>mac</i>	MAC address format.			
Option	Description											
<i>text</i>	Text format.											
<i>hex</i>	Octets format.											
<i>mac</i>	MAC address format.											
location	System location.	var-string	Maximum length: 255									
status	Enable/disable SNMP.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable setting.</td></tr><tr><td><i>disable</i></td><td>Disable setting.</td></tr></table>	Option	Description	<i>enable</i>	Enable setting.	<i>disable</i>	Disable setting.					
Option	Description											
<i>enable</i>	Enable setting.											
<i>disable</i>	Disable setting.											
trap-high-cpu-threshold	CPU usage when trap is sent.	integer	Minimum value: 1 Maximum value: 100	80								
trap-log-full-threshold	Log disk usage when trap is sent.	integer	Minimum value: 1 Maximum value: 100	90								

Parameter	Description	Type	Size	Default
trap-low-memory-threshold	Memory usage when trap is sent.	integer	Minimum value: 1 Maximum value: 100	80

config system snmp user

SNMP user configuration.

```

config system snmp user
  Description: SNMP user configuration.
  edit <name>
    set auth-proto [md5|sha|...]
    set auth-pwd {password}
    set events {option1}, {option2}, ...
    set ha-direct [enable|disable]
    set mib-view {string}
    set notify-hosts {ipv4-address}
    set notify-hosts6 {ipv6-address}
    set priv-proto [aes|des|...]
    set priv-pwd {password}
    set queries [enable|disable]
    set query-port {integer}
    set security-level [no-auth-no-priv|auth-no-priv|...]
    set source-ip {ipv4-address}
    set source-ipv6 {ipv6-address}
    set status [enable|disable]
    set trap-lport {integer}
    set trap-rport {integer}
    set trap-status [enable|disable]
    set vdoms <name1>, <name2>, ...
  next
end

```

config system snmp user

Parameter	Description	Type	Size	Default						
auth-proto	Authentication protocol.	option	-	sha						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>md5</td><td>HMAC-MD5-96 authentication protocol.</td></tr><tr><td>sha</td><td>HMAC-SHA-96 authentication protocol.</td></tr></table>	Option	Description	md5	HMAC-MD5-96 authentication protocol.	sha	HMAC-SHA-96 authentication protocol.			
Option	Description									
md5	HMAC-MD5-96 authentication protocol.									
sha	HMAC-SHA-96 authentication protocol.									

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>sha224</i>	HMAC-SHA224 authentication protocol.		
	<i>sha256</i>	HMAC-SHA256 authentication protocol.		
	<i>sha384</i>	HMAC-SHA384 authentication protocol.		
	<i>sha512</i>	HMAC-SHA512 authentication protocol.		
auth-pwd	Password for authentication protocol.	password	Not Specified	

Parameter	Description	Type	Size	Default
events	SNMP notifications (traps) to send.	option	-	cpu-high mem- low log-full intf-ip vpn-tun- up vpn-tun- down ha- switch ha-hb- failure ips- signature ips- anomaly av- virus av- oversize av- pattern av- fragmented fm- if-change bgp- established bgp-backward- transition ha- member-up ha- member-down ent-conf- change av- conserve av- bypass av- oversize- passed av- oversize- blocked ips- pkg-update ips-fail-open temperature- high voltage- alert power- supply-failure faz-disconnect fan-failure wc- ap-up wc-ap- down fswctl- session-up fswctl-session- down load- balance-real- server-down per-cpu-high dhcp pool- usage ospf- nbr-state- change ospf- virtnbr-state- change **

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>cpu-high</i>	Send a trap when CPU usage is high.		
	<i>mem-low</i>	Send a trap when available memory is low.		
	<i>log-full</i>	Send a trap when log disk space becomes low.		
	<i>intf-ip</i>	Send a trap when an interface IP address is changed.		
	<i>vpn-tun-up</i>	Send a trap when a VPN tunnel comes up.		
	<i>vpn-tun-down</i>	Send a trap when a VPN tunnel goes down.		
	<i>ha-switch</i>	Send a trap after an HA failover when the backup unit has taken over.		
	<i>ha-hb-failure</i>	Send a trap when HA heartbeats are not received.		
	<i>ips-signature</i>	Send a trap when IPS detects an attack.		
	<i>ips-anomaly</i>	Send a trap when IPS finds an anomaly.		
	<i>av-virus</i>	Send a trap when AntiVirus finds a virus.		
	<i>av-oversize</i>	Send a trap when AntiVirus finds an oversized file.		
	<i>av-pattern</i>	Send a trap when AntiVirus finds file matching pattern.		
	<i>av-fragmented</i>	Send a trap when AntiVirus finds a fragmented file.		
	<i>fm-if-change</i>	Send a trap when FortiManager interface changes. Send a FortiManager trap.		
	<i>fm-conf-change</i>	Send a trap when a configuration change is made by a FortiGate administrator and the FortiGate is managed by FortiManager.		
	<i>bgp-established</i>	Send a trap when a BGP FSM transitions to the established state.		
	<i>bgp-backward-transition</i>	Send a trap when a BGP FSM goes from a high numbered state to a lower numbered state.		
	<i>ha-member-up</i>	Send a trap when an HA cluster member goes up.		
	<i>ha-member-down</i>	Send a trap when an HA cluster member goes down.		
	<i>ent-conf-change</i>	Send a trap when an entity MIB change occurs (RFC4133).		
	<i>av-conserve</i>	Send a trap when the FortiGate enters conserve mode.		
	<i>av-bypass</i>	Send a trap when the FortiGate enters bypass mode.		
	<i>av-oversize-passed</i>	Send a trap when AntiVirus passes an oversized file.		

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>av-oversize-blocked</i>	Send a trap when AntiVirus blocks an oversized file.		
	<i>ips-pkg-update</i>	Send a trap when the IPS signature database or engine is updated.		
	<i>ips-fail-open</i>	Send a trap when the IPS network buffer is full.		
	<i>temperature-high</i>	Send a trap when a temperature sensor registers a temperature that is too high.		
	<i>voltage-alert</i>	Send a trap when a voltage sensor registers a voltage that is outside of the normal range.		
	<i>power-supply-failure</i>	Send a trap when a power supply fails.		
	<i>faz-disconnect</i>	Send a trap when a FortiAnalyzer disconnects from the FortiGate.		
	<i>fan-failure</i>	Send a trap when a fan fails.		
	<i>wc-ap-up</i>	Send a trap when a managed FortiAP comes up.		
	<i>wc-ap-down</i>	Send a trap when a managed FortiAP goes down.		
	<i>fswctl-session-up</i>	Send a trap when a FortiSwitch controller session comes up.		
	<i>fswctl-session-down</i>	Send a trap when a FortiSwitch controller session goes down.		
	<i>load-balance-real-server-down</i>	Send a trap when a server load balance real server goes down.		
	<i>device-new</i>	Send a trap when a new device is found.		
	<i>per-cpu-high</i>	Send a trap when per-CPU usage is high.		
	<i>dhcp</i>	Send a trap when the DHCP server exhausts the IP pool, an IP address already is in use, or a DHCP client interface received a DHCP-NAK.		
	<i>pool-usage</i>	Send a trap about ippool usage.		
<i>ospf-nbr-state-change</i>	Send a trap when there has been a change in the state of a non-virtual OSPF neighbor.			
<i>ospf-virtnbr-state-change</i>	Send a trap when there has been a change in the state of an OSPF virtual neighbor.			
ha-direct	Enable/disable direct management of HA cluster members.	option	-	disable

Parameter	Description	Type	Size	Default										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable setting.</td></tr><tr><td><i>disable</i></td><td>Disable setting.</td></tr></table>				Option	Description	<i>enable</i>	Enable setting.	<i>disable</i>	Disable setting.				
	Option	Description												
	<i>enable</i>	Enable setting.												
<i>disable</i>	Disable setting.													
mib-view	SNMP access control MIB view.	string	Maximum length: 32											
name	SNMP user name.	string	Maximum length: 32											
notify-hosts	SNMP managers to send notifications (traps) to.	ipv4-address	Not Specified											
notify-hosts6	IPv6 SNMP managers to send notifications (traps) to.	ipv6-address	Not Specified											
priv-proto	Privacy (encryption) protocol.	option	-	aes										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>aes</i></td><td>CFB128-AES-128 symmetric encryption protocol.</td></tr><tr><td><i>des</i></td><td>CBC-DES symmetric encryption protocol.</td></tr><tr><td><i>aes256</i></td><td>CFB128-AES-256 symmetric encryption protocol.</td></tr><tr><td><i>aes256cisco</i></td><td>CFB128-AES-256 symmetric encryption protocol compatible with CISCO.</td></tr></table>				Option	Description	<i>aes</i>	CFB128-AES-128 symmetric encryption protocol.	<i>des</i>	CBC-DES symmetric encryption protocol.	<i>aes256</i>	CFB128-AES-256 symmetric encryption protocol.	<i>aes256cisco</i>	CFB128-AES-256 symmetric encryption protocol compatible with CISCO.
	Option	Description												
	<i>aes</i>	CFB128-AES-128 symmetric encryption protocol.												
	<i>des</i>	CBC-DES symmetric encryption protocol.												
	<i>aes256</i>	CFB128-AES-256 symmetric encryption protocol.												
<i>aes256cisco</i>	CFB128-AES-256 symmetric encryption protocol compatible with CISCO.													
priv-pwd	Password for privacy (encryption) protocol.	password	Not Specified											
queries	Enable/disable SNMP queries for this user.	option	-	enable										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable setting.</td></tr><tr><td><i>disable</i></td><td>Disable setting.</td></tr></table>				Option	Description	<i>enable</i>	Enable setting.	<i>disable</i>	Disable setting.				
	Option	Description												
	<i>enable</i>	Enable setting.												
<i>disable</i>	Disable setting.													
query-port	SNMPv3 query port (default = 161).	integer	Minimum value: 1 Maximum value: 65535	161										
security-level	Security level for message authentication and encryption.	option	-	no-auth-no-priv										

Parameter	Description	Type	Size	Default								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>no-auth-no-priv</i></td><td>Message with no authentication and no privacy (encryption).</td></tr><tr><td><i>auth-no-priv</i></td><td>Message with authentication but no privacy (encryption).</td></tr><tr><td><i>auth-priv</i></td><td>Message with authentication and privacy (encryption).</td></tr></table>		Option	Description	<i>no-auth-no-priv</i>	Message with no authentication and no privacy (encryption).	<i>auth-no-priv</i>	Message with authentication but no privacy (encryption).	<i>auth-priv</i>	Message with authentication and privacy (encryption).		
	Option	Description										
	<i>no-auth-no-priv</i>	Message with no authentication and no privacy (encryption).										
	<i>auth-no-priv</i>	Message with authentication but no privacy (encryption).										
<i>auth-priv</i>	Message with authentication and privacy (encryption).											
source-ip	Source IP for SNMP trap.	ipv4-address	Not Specified	0.0.0.0								
source-ipv6	Source IPv6 for SNMP trap.	ipv6-address	Not Specified	::								
status	Enable/disable this SNMP user.	option	-	enable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable setting.</td></tr><tr><td><i>disable</i></td><td>Disable setting.</td></tr></table>		Option	Description	<i>enable</i>	Enable setting.	<i>disable</i>	Disable setting.				
	Option	Description										
	<i>enable</i>	Enable setting.										
<i>disable</i>	Disable setting.											
trap-lport	SNMPv3 local trap port (default = 162).	integer	Minimum value: 1 Maximum value: 65535	162								
trap-rport	SNMPv3 trap remote port (default = 162).	integer	Minimum value: 1 Maximum value: 65535	162								
trap-status	Enable/disable traps for this SNMP user.	option	-	enable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable setting.</td></tr><tr><td><i>disable</i></td><td>Disable setting.</td></tr></table>		Option	Description	<i>enable</i>	Enable setting.	<i>disable</i>	Disable setting.				
	Option	Description										
	<i>enable</i>	Enable setting.										
<i>disable</i>	Disable setting.											
vdoms <name>	SNMP access control VDOMs. VDOM name.	string	Maximum length: 79									

** Values may differ between models.

config system speed-test-schedule

Speed test schedule for each interface.

```

config system speed-test-schedule
  Description: Speed test schedule for each interface.
  edit <interface>
    set diffserv {user}
    set dynamic-server [disable|enable]
    set mode [UDP|TCP|...]
    set schedules <name1>, <name2>, ...
    set server-name {string}
    set status [disable|enable]
    set update-inbandwidth [disable|enable]
    set update-inbandwidth-maximum {integer}
    set update-inbandwidth-minimum {integer}
    set update-outbandwidth [disable|enable]
    set update-outbandwidth-maximum {integer}
    set update-outbandwidth-minimum {integer}
  next
end

```

config system speed-test-schedule

Parameter	Description	Type	Size	Default
diffserv	DSCP used for speed test.	user	Not Specified	
dynamic-server	Enable/disable dynamic server option.	option	-	disable
	Option	Description		
	<i>disable</i>	Disable dynamic server.		
	<i>enable</i>	Enable dynamic server.The speed test server will be found automatically.		
interface	Interface name.	string	Maximum length: 35	
mode	Protocol Auto(default), TCP or UDP used for speed test.	option	-	Auto
	Option	Description		
	<i>UDP</i>	Protocol UDP for speed test.		
	<i>TCP</i>	Protocol TCP for speed test.		
	<i>Auto</i>	Dynamically selects TCP or UDP based on the speed test setting		
schedules <name>	Schedules for the interface. Name of a firewall recurring schedule.	string	Maximum length: 31	

Parameter	Description	Type	Size	Default						
server-name	Speed test server name.	string	Maximum length: 35							
status	Enable/disable scheduled speed test.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Disable scheduled speed test.</td></tr><tr><td>enable</td><td>Enable scheduled speed test.</td></tr></table>				Option	Description	disable	Disable scheduled speed test.	enable	Enable scheduled speed test.
	Option	Description								
	disable	Disable scheduled speed test.								
	enable	Enable scheduled speed test.								
update-inbandwidth	Enable/disable bypassing interface's inbound bandwidth setting.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Honor interface's inbandwidth shaping.</td></tr><tr><td>enable</td><td>Ignore interface's inbandwidth shaping.</td></tr></table>				Option	Description	disable	Honor interface's inbandwidth shaping.	enable	Ignore interface's inbandwidth shaping.
	Option	Description								
	disable	Honor interface's inbandwidth shaping.								
	enable	Ignore interface's inbandwidth shaping.								
update-inbandwidth-maximum	Maximum downloading bandwidth (kbps) to be used in a speed test.	integer	Minimum value: 0 Maximum value: 16776000	0						
update-inbandwidth-minimum	Minimum downloading bandwidth (kbps) to be considered effective.	integer	Minimum value: 0 Maximum value: 16776000	0						
update-outbandwidth	Enable/disable bypassing interface's outbound bandwidth setting.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Honor interface's outbandwidth shaping.</td></tr><tr><td>enable</td><td>Ignore updating interface's outbandwidth shaping.</td></tr></table>				Option	Description	disable	Honor interface's outbandwidth shaping.	enable	Ignore updating interface's outbandwidth shaping.
	Option	Description								
	disable	Honor interface's outbandwidth shaping.								
	enable	Ignore updating interface's outbandwidth shaping.								
update-outbandwidth-maximum	Maximum uploading bandwidth (kbps) to be used in a speed test.	integer	Minimum value: 0 Maximum value: 16776000	0						
update-outbandwidth-minimum	Minimum uploading bandwidth (kbps) to be considered effective.	integer	Minimum value: 0 Maximum value: 16776000	0						

config system speed-test-server



The `config system speed-test-server` command is read-only. Administrators cannot configure custom servers.

Configure speed test server list.

```
config system speed-test-server
  Description: Configure speed test server list.
  edit <name>
    config host
      Description: Hosts of the server.
      edit <id>
        set distance {integer}
        set ip {ipv4-address}
        set latitude {string}
        set longitude {string}
        set password {password}
        set port {integer}
        set user {string}
      next
    end
    set timestamp {integer}
  next
end
```

config system speed-test-server

Parameter	Description	Type	Size	Default
name	Speed test server name.	string	Maximum length: 35	
timestamp	Speed test server timestamp.	integer	Minimum value: 0 Maximum value: 4294967295	

config host

Parameter	Description	Type	Size	Default
distance	Speed test host distance.	integer	Minimum value: 0 Maximum value: 4294967295	

Parameter	Description	Type	Size	Default
id	Server host ID.	integer	Minimum value: 0 0 Maximum value: 4294967295	0
ip	Server host IPv4 address.	ipv4-address	Not Specified	0.0.0.0
latitude	Speed test host latitude.	string	Maximum length: 7	
longitude	Speed test host longitude.	string	Maximum length: 7	
password	Speed test host password.	password	Not Specified	
port	Server host port number to communicate with client.	integer	Minimum value: 5204 1 Maximum value: 65535	
user	Speed test host user name.	string	Maximum length: 64	

config system speed-test-setting

Configure speed test setting.

```

config system speed-test-setting
    Description: Configure speed test setting.
    set latency-threshold {integer}
    set multiple-tcp-stream {integer}
end

```

config system speed-test-setting

Parameter	Description	Type	Size	Default
latency-threshold	Speed test latency threshold in milliseconds (0 - 2000, default = 60) for the Auto mode. If the latency exceeds this threshold, the speed test will use the UDP protocol; otherwise, it will use the TCP protocol.	integer	Minimum value: 0 Maximum value: 2000	60
multiple-tcp-stream	Number of parallel client streams (1 - 64, default = 4) for the TCP protocol to run during the speed test.	integer	Minimum value: 1 Maximum value: 64	4

config system sso-admin

Configure SSO admin users.

```
config system sso-admin
  Description: Configure SSO admin users.
  edit <name>
    set accprofile {string}
    set vdom <name1>, <name2>, ...
  next
end
```

config system sso-admin

Parameter	Description	Type	Size	Default
accprofile	SSO admin user access profile.	string	Maximum length: 35	
name	SSO admin name.	string	Maximum length: 64	
vdom <name>	Virtual domain(s) that the administrator can access. Virtual domain name.	string	Maximum length: 79	

config system sso-forticloud-admin

Configure FortiCloud SSO admin users.

```
config system sso-forticloud-admin
  Description: Configure FortiCloud SSO admin users.
  edit <name>
    set accprofile {string}
    set vdom <name1>, <name2>, ...
  next
end
```

config system sso-forticloud-admin

Parameter	Description	Type	Size	Default
accprofile	FortiCloud SSO admin user access profile.	string	Maximum length: 35	
name	FortiCloud SSO admin name.	string	Maximum length: 64	

Parameter	Description	Type	Size	Default
vdom <name>	Virtual domain(s) that the administrator can access. Virtual domain name.	string	Maximum length: 79	

config system sso-fortigate-cloud-admin

Configure FortiCloud SSO admin users.

```
config system sso-fortigate-cloud-admin
  Description: Configure FortiCloud SSO admin users.
  edit <name>
    set accprofile {string}
    set vdom <name1>, <name2>, ...
  next
end
```

config system sso-fortigate-cloud-admin

Parameter	Description	Type	Size	Default
accprofile	FortiCloud SSO admin user access profile.	string	Maximum length: 35	
name	FortiCloud SSO admin name.	string	Maximum length: 64	
vdom <name>	Virtual domain(s) that the administrator can access. Virtual domain name.	string	Maximum length: 79	

config system standalone-cluster

Configure FortiGate Session Life Support Protocol (FGSP) cluster attributes.

```
config system standalone-cluster
  Description: Configure FortiGate Session Life Support Protocol (FGSP) cluster attributes.
  config cluster-peer
    Description: Configure FortiGate Session Life Support Protocol (FGSP) session
    synchronization.
    edit <sync-id>
      set down-intfs-before-sess-sync <name1>, <name2>, ...
      set hb-interval {integer}
      set hb-lost-threshold {integer}
      set ipsec-tunnel-sync [enable|disable]
      set peerip {ipv4-address}
      set peervd {string}
```

```

    set secondary-add-ipsec-routes [enable|disable]
    config session-sync-filter
        Description: Add one or more filters if you only want to synchronize some
sessions. Use the filter to configure the types of sessions to synchronize.
        config custom-service
            Description: Only sessions using these custom services are synchronized. Use
source and destination port ranges to define these custom services.
            edit <id>
                set dst-port-range {user}
                set src-port-range {user}
            next
        end
        set dstaddr {ipv4-classnet-any}
        set dstaddr6 {ipv6-network}
        set dstintf {string}
        set srcaddr {ipv4-classnet-any}
        set srcaddr6 {ipv6-network}
        set srcintf {string}
    end
    set syncvd <name1>, <name2>, ...
next
end
set encryption [enable|disable]
set group-member-id {integer}
set layer2-connection [available|unavailable]
set psksecret {password-3}
set session-sync-dev {user}
set standalone-group-id {integer}
end

```

config system standalone-cluster

Parameter	Description	Type	Size	Default						
encryption	Enable/disable encryption when synchronizing sessions.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable encryption when synchronizing sessions.</td></tr><tr><td><i>disable</i></td><td>Disable encryption when synchronizing sessions.</td></tr></table>				Option	Description	<i>enable</i>	Enable encryption when synchronizing sessions.	<i>disable</i>	Disable encryption when synchronizing sessions.
	Option	Description								
	<i>enable</i>	Enable encryption when synchronizing sessions.								
<i>disable</i>	Disable encryption when synchronizing sessions.									
group-member-id	Cluster member ID (0 - 15).	integer	Minimum value: 0 Maximum value: 15	0						
layer2-connection	Indicate whether layer 2 connections are present among FGSP members.	option	-	unavailable						

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>available</i>	There exist layer 2 connections among FGSP members.		
	<i>unavailable</i>	There does not exist layer 2 connection among FGSP members.		
psksecret	Pre-shared secret for session synchronization (ASCII string or hexadecimal encoded with a leading 0x).	password-3	Not Specified	
session-sync-dev	Offload session-sync process to kernel and sync sessions using connected interface(s) directly.	user	Not Specified	
standalone-group-id	Cluster group ID (0 - 255). Must be the same for all members.	integer	Minimum value: 0 Maximum value: 255	0

config cluster-peer

Parameter	Description	Type	Size	Default						
down-intfs-before-sess-sync <name>	List of interfaces to be turned down before session synchronization is complete. Interface name.	string	Maximum length: 79							
hb-interval	Heartbeat interval (1 - 20 (100*ms). Increase to reduce false positives.	integer	Minimum value: 1 Maximum value: 20	2						
hb-lost-threshold	Lost heartbeat threshold (1 - 60). Increase to reduce false positives.	integer	Minimum value: 1 Maximum value: 60	10						
ipsec-tunnel-sync	Enable/disable IPsec tunnel synchronization.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable IPsec tunnel synchronization.</td></tr><tr><td><i>disable</i></td><td>Disable IPsec tunnel synchronization.</td></tr></table>				Option	Description	<i>enable</i>	Enable IPsec tunnel synchronization.	<i>disable</i>	Disable IPsec tunnel synchronization.
Option	Description									
<i>enable</i>	Enable IPsec tunnel synchronization.									
<i>disable</i>	Disable IPsec tunnel synchronization.									
peerip	IP address of the interface on the peer unit that is used for the session synchronization link.	ipv4-address	Not Specified	0.0.0.0						
peervd	VDOM that contains the session synchronization link interface on the peer unit. Usually both peers would have the same peervd.	string	Maximum length: 31	root						

Parameter	Description	Type	Size	Default						
secondary-add-ipsec-routes	Enable/disable IKE route announcement on the backup unit.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Add IKE routes to the backup unit.</td></tr><tr><td><i>disable</i></td><td>Do not add IKE routes to the backup unit.</td></tr></table>	Option	Description	<i>enable</i>	Add IKE routes to the backup unit.	<i>disable</i>	Do not add IKE routes to the backup unit.			
Option	Description									
<i>enable</i>	Add IKE routes to the backup unit.									
<i>disable</i>	Do not add IKE routes to the backup unit.									
sync-id	Sync ID.	integer	Minimum value: 0 0 Maximum value: 4294967295							
syncvd <name>	Sessions from these VDOMs are synchronized using this session synchronization configuration. VDOM name.	string	Maximum length: 79							

config session-sync-filter

Parameter	Description	Type	Size	Default
dstaddr	Only sessions to this IPv4 address are synchronized.	ipv4-classnet-any	Not Specified	0.0.0.0 0.0.0.0
dstaddr6	Only sessions to this IPv6 address are synchronized.	ipv6-network	Not Specified	::/0
dstintf	Only sessions to this interface are synchronized.	string	Maximum length: 15	
srcaddr	Only sessions from this IPv4 address are synchronized.	ipv4-classnet-any	Not Specified	0.0.0.0 0.0.0.0
srcaddr6	Only sessions from this IPv6 address are synchronized.	ipv6-network	Not Specified	::/0
srcintf	Only sessions from this interface are synchronized.	string	Maximum length: 15	

config custom-service

Parameter	Description	Type	Size	Default
dst-port-range	Custom service destination port range.	user	Not Specified	0-0

Parameter	Description	Type	Size	Default
id	Custom service ID.	integer	Minimum value: 0 Maximum value: 4294967295	0
src-port-range	Custom service source port range.	user	Not Specified	0-0

config system storage

Configure logical storage.

```

config system storage
    Description: Configure logical storage.
    edit <name>
        set device {string}
        set media-status [enable|disable|...]
        set order {integer}
        set partition {string}
        set size {integer}
        set status [enable|disable]
        set usage [log|wanopt]
        set wanopt-mode [mix|wanopt|...]
    next
end

```

config system storage

Parameter	Description	Type	Size	Default
device	Partition device.	string	Maximum length: 19	?
media-status	The physical status of current media.	option	-	disable
	Option Description			
	enable	Storage is enabled.		
	disable	Storage is disabled.		
	fail	Storage have some fail sector.		
name	Storage name.	string	Maximum length: 35	default_n

Parameter	Description	Type	Size	Default
order	Set storage order.	integer	Minimum value: 0 0 Maximum value: 255	0
partition	Label of underlying partition.	string	Maximum length: 16	<unknown>
size	Partition size.	integer	Minimum value: 0 0 Maximum value: 4294967295	0
status	Enable/disable storage.	option	-	enable
	Option Description			
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		
usage	Use hard disk for logging or WAN Optimization (default = log).	option	-	log **
	Option Description			
	<i>log</i>	Use hard disk for logging.		
	<i>wanopt</i>	Use hard disk for WAN Optimization.		
wanopt-mode *	WAN Optimization mode (default = mix).	option	-	mix
	Option Description			
	<i>mix</i>	Use hard disk for WAN Optimization mix mode.		
	<i>wanopt</i>	Use hard disk for WAN Optimization wanopt mode.		
	<i>webcache</i>	Use hard disk for WAN Optimization webcache mode.		

* This parameter may not exist in some models.

** Values may differ between models.

config system stp



This command is available for model(s): FortiGate 1000F, FortiGate 1001F, FortiGate 100EF, FortiGate 100E, FortiGate 100F, FortiGate 101F, FortiGate 1100E, FortiGate 1101E, FortiGate 140E-POE, FortiGate 140E, FortiGate 1800F, FortiGate 1801F, FortiGate 200F, FortiGate 201F, FortiGate 2600F, FortiGate 2601F, FortiGate 3000F, FortiGate 3001F, FortiGate 300E, FortiGate 301E, FortiGate 3200F, FortiGate 3201F, FortiGate 3501F, FortiGate 3700F, FortiGate 3701F, FortiGate 400E Bypass, FortiGate 400E, FortiGate 400F, FortiGate 401E, FortiGate 401F, FortiGate 40F 3G4G, FortiGate 4200F, FortiGate 4201F, FortiGate 4400F, FortiGate 4401F, FortiGate 60E-POE, FortiGate 60E, FortiGate 60F, FortiGate 61E, FortiGate 70F, FortiGate 71F, FortiGate 80E-POE, FortiGate 80E, FortiGate 80F Bypass, FortiGate 80F DSL, FortiGate 80F-POE, FortiGate 80F, FortiGate 81E-POE, FortiGate 81E, FortiGate 81F-POE, FortiGate 81F, FortiGate 90E, FortiGate 91E, FortiGateRugged 60F 3G4G, FortiGateRugged 60F, FortiGateRugged 70F 3G4G, FortiGateRugged 70F, FortiWiFi 40F 3G4G, FortiWiFi 40F, FortiWiFi 60E, FortiWiFi 60F, FortiWiFi 61E, FortiWiFi 61F, FortiWiFi 80F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G-POE, FortiWiFi 81F 2R-POE, FortiWiFi 81F 2R.

It is not available for: FortiGate 1000D, FortiGate 1500DT, FortiGate 1500D, FortiGate 2000E, FortiGate 200E, FortiGate 201E, FortiGate 2201E, FortiGate 2500E, FortiGate 3000D, FortiGate 3100D, FortiGate 3200D, FortiGate 3300E, FortiGate 3301E, FortiGate 3400E, FortiGate 3401E, FortiGate 3600E, FortiGate 3601E, FortiGate 3700D, FortiGate 3960E, FortiGate 3980E, FortiGate 5001E1, FortiGate 5001E, FortiGate 500E, FortiGate 501E, FortiGate 600E, FortiGate 601E, FortiGate 800D, FortiGate 900D, FortiGate-VM64 Aliyun, FortiGate-VM64 AWS, FortiGate-VM64 Azure, FortiGate-VM64 GCP, FortiGate-VM64 OPC, FortiGate-VM64.

Configure Spanning Tree Protocol (STP).

```
config system stp
  Description: Configure Spanning Tree Protocol (STP).
  set forward-delay {integer}
  set hello-time {integer}
  set max-age {integer}
  set max-hops {integer}
  set switch-priority [0|4096|...]
end
```

config system stp

Parameter	Description	Type	Size	Default
forward-delay	Forward delay (4 - 30 sec, default = 15).	integer	Minimum value: 4 Maximum value: 30	15

Parameter	Description	Type	Size	Default																																
hello-time	Hello time (1 - 10 sec, default = 2).	integer	Minimum value: 1 Maximum value: 10	2																																
max-age	Maximum packet age (6 - 40 sec, default = 20).	integer	Minimum value: 6 Maximum value: 40	20																																
max-hops	Maximum number of hops (1 - 40, default = 20).	integer	Minimum value: 1 Maximum value: 40	20																																
switch-priority	STP switch priority; the lower the number the higher the priority (select from 0, 4096, 8192, 12288, 16384, 20480, 24576, 28672, 32768, 36864, 40960, 45056, 49152, 53248, and 57344).	option	-	32768																																
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>0</td><td>0</td></tr><tr><td>4096</td><td>4096</td></tr><tr><td>8192</td><td>8192</td></tr><tr><td>12288</td><td>12288</td></tr><tr><td>16384</td><td>16384</td></tr><tr><td>20480</td><td>20480</td></tr><tr><td>24576</td><td>24576</td></tr><tr><td>28672</td><td>28672</td></tr><tr><td>32768</td><td>32768</td></tr><tr><td>36864</td><td>36864</td></tr><tr><td>40960</td><td>40960</td></tr><tr><td>45056</td><td>45056</td></tr><tr><td>49152</td><td>49152</td></tr><tr><td>53248</td><td>53248</td></tr><tr><td>57344</td><td>57344</td></tr></table>				Option	Description	0	0	4096	4096	8192	8192	12288	12288	16384	16384	20480	20480	24576	24576	28672	28672	32768	32768	36864	36864	40960	40960	45056	45056	49152	49152	53248	53248	57344	57344
Option	Description																																			
0	0																																			
4096	4096																																			
8192	8192																																			
12288	12288																																			
16384	16384																																			
20480	20480																																			
24576	24576																																			
28672	28672																																			
32768	32768																																			
36864	36864																																			
40960	40960																																			
45056	45056																																			
49152	49152																																			
53248	53248																																			
57344	57344																																			

config system switch-interface

Configure software switch interfaces by grouping physical and WiFi interfaces.

```

config system switch-interface
    Description: Configure software switch interfaces by grouping physical and WiFi interfaces.
    edit <name>
        set intra-switch-policy [implicit|explicit]
        set mac-ttl {integer}
        set member <interface-name1>, <interface-name2>, ...
        set span [disable|enable]
        set span-dest-port {string}
        set span-direction [rx|tx|...]
        set span-source-port <interface-name1>, <interface-name2>, ...
        set type [switch|hub]
        set vdom {string}
    next
end

```

config system switch-interface

Parameter	Description	Type	Size	Default						
intra-switch-policy	Allow any traffic between switch interfaces or require firewall policies to allow traffic between switch interfaces.	option	-	implicit						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>implicit</i></td><td>Traffic between switch members is implicitly allowed.</td></tr><tr><td><i>explicit</i></td><td>Traffic between switch members must match firewall policies.</td></tr></table>	Option	Description	<i>implicit</i>	Traffic between switch members is implicitly allowed.	<i>explicit</i>	Traffic between switch members must match firewall policies.			
Option	Description									
<i>implicit</i>	Traffic between switch members is implicitly allowed.									
<i>explicit</i>	Traffic between switch members must match firewall policies.									
mac-ttl	Duration for which MAC addresses are held in the ARP table (300 - 8640000 sec, default = 300).	integer	Minimum value: 300 Maximum value: 8640000	300						
member <interface-name>	Names of the interfaces that belong to the virtual switch. Physical interface name.	string	Maximum length: 79							
name	Interface name (name cannot be in use by any other interfaces, VLANs, or inter-VDOM links).	string	Maximum length: 15							
span	Enable/disable port spanning. Port spanning echoes traffic received by the software switch to the span destination port.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>disable</i></td><td>Disable port spanning.</td></tr><tr><td><i>enable</i></td><td>Enable port spanning.</td></tr></table>	Option	Description	<i>disable</i>	Disable port spanning.	<i>enable</i>	Enable port spanning.			
Option	Description									
<i>disable</i>	Disable port spanning.									
<i>enable</i>	Enable port spanning.									

Parameter	Description	Type	Size	Default								
span-dest-port	SPAN destination port name. All traffic on the SPAN source ports is echoed to the SPAN destination port.	string	Maximum length: 15									
span-direction	The direction in which the SPAN port operates, either: rx, tx, or both.	option	-	both								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>rx</td><td>Copies only received packets from source SPAN ports to the destination SPAN port.</td></tr><tr><td>tx</td><td>Copies only transmitted packets from source SPAN ports to the destination SPAN port.</td></tr><tr><td>both</td><td>Copies both received and transmitted packets from source SPAN ports to the destination SPAN port.</td></tr></table>	Option	Description	rx	Copies only received packets from source SPAN ports to the destination SPAN port.	tx	Copies only transmitted packets from source SPAN ports to the destination SPAN port.	both	Copies both received and transmitted packets from source SPAN ports to the destination SPAN port.			
Option	Description											
rx	Copies only received packets from source SPAN ports to the destination SPAN port.											
tx	Copies only transmitted packets from source SPAN ports to the destination SPAN port.											
both	Copies both received and transmitted packets from source SPAN ports to the destination SPAN port.											
span-source-port <interface-name>	Physical interface name. Port spanning echoes all traffic on the SPAN source ports to the SPAN destination port. Physical interface name.	string	Maximum length: 79									
type	Type of switch based on functionality: switch for normal functionality, or hub to duplicate packets to all port members.	option	-	switch								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>switch</td><td>Switch for normal switch functionality (available in NAT mode only).</td></tr><tr><td>hub</td><td>Hub to duplicate packets to all member ports.</td></tr></table>	Option	Description	switch	Switch for normal switch functionality (available in NAT mode only).	hub	Hub to duplicate packets to all member ports.					
Option	Description											
switch	Switch for normal switch functionality (available in NAT mode only).											
hub	Hub to duplicate packets to all member ports.											
vdom	VDOM that the software switch belongs to.	string	Maximum length: 31									

config system tos-based-priority

Configure Type of Service (ToS) based priority table to set network traffic priorities.

```

config system tos-based-priority
    Description: Configure Type of Service (ToS) based priority table to set network traffic
    priorities.
    edit <id>
        set priority [low|medium|...]
        set tos {integer}
    next
end

```


config system tos-based-priority

Parameter	Description	Type	Size	Default
id	Item ID.	integer	Minimum value: 0 0 Maximum value: 4294967295	0
priority	ToS based priority level to low, medium or high (these priorities match firewall traffic shaping priorities) (default = medium).	option	-	high
	Option	Description		
	<i>low</i>	Low priority.		
	<i>medium</i>	Medium priority.		
	<i>high</i>	High priority.		
tos	Value of the ToS byte in the IP datagram header (0-15, 8: minimize delay, 4: maximize throughput, 2: maximize reliability, 1: minimize monetary cost, and 0: default service).	integer	Minimum value: 0 0 Maximum value: 15	0

config system vdom

Configure virtual domain.

```
config system vdom
  Description: Configure virtual domain.
  edit <name>
    set flag {integer}
    set short-name {string}
    set vcluster-id {integer}
  next
end
```

config system vdom

Parameter	Description	Type	Size	Default
flag	Flag.	integer	Minimum value: 0 Maximum value: 4294967295	0

Parameter	Description	Type	Size	Default
name	VDOM name.	string	Maximum length: 31	
short-name	VDOM short name.	string	Maximum length: 11	
vcluster-id	Virtual cluster ID (0 - 4294967295).	integer	Minimum value: 0 Maximum value: 4294967295	

config system vdom-dns

Configure DNS servers for a non-management VDOM.

```

config system vdom-dns
    Description: Configure DNS servers for a non-management VDOM.
    set alt-primary {ipv4-address}
    set alt-secondary {ipv4-address}
    set interface {string}
    set interface-select-method [auto|sdwan|...]
    set ip6-primary {ipv6-address}
    set ip6-secondary {ipv6-address}
    set primary {ipv4-address}
    set protocol {option1}, {option2}, ...
    set secondary {ipv4-address}
    set server-hostname <hostname1>, <hostname2>, ...
    set server-select-method [least-rtt|failover]
    set source-ip {ipv4-address}
    set ssl-certificate {string}
    set vdom-dns [enable|disable]
end

```

config system vdom-dns

Parameter	Description	Type	Size	Default
alt-primary	Alternate primary DNS server. This is not used as a failover DNS server.	ipv4-address	Not Specified	0.0.0.0
alt-secondary	Alternate secondary DNS server. This is not used as a failover DNS server.	ipv4-address	Not Specified	0.0.0.0
interface	Specify outgoing interface to reach server.	string	Maximum length: 15	

Parameter	Description	Type	Size	Default								
interface-select-method	Specify how to select outgoing interface to reach server.	option	-	auto								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>auto</td><td>Set outgoing interface automatically.</td></tr><tr><td>sdwan</td><td>Set outgoing interface by SD-WAN or policy routing rules.</td></tr><tr><td>specify</td><td>Set outgoing interface manually.</td></tr></table>	Option	Description	auto	Set outgoing interface automatically.	sdwan	Set outgoing interface by SD-WAN or policy routing rules.	specify	Set outgoing interface manually.			
	Option	Description										
	auto	Set outgoing interface automatically.										
	sdwan	Set outgoing interface by SD-WAN or policy routing rules.										
specify	Set outgoing interface manually.											
ip6-primary	Primary IPv6 DNS server IP address for the VDOM.	ipv6-address	Not Specified	::								
ip6-secondary	Secondary IPv6 DNS server IP address for the VDOM.	ipv6-address	Not Specified	::								
primary	Primary DNS server IP address for the VDOM.	ipv4-address	Not Specified	0.0.0.0								
protocol	DNS transport protocols.	option	-	cleartext								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>cleartext</td><td>DNS over UDP/53, DNS over TCP/53.</td></tr><tr><td>dot</td><td>DNS over TLS/853.</td></tr><tr><td>doh</td><td>DNS over HTTPS/443.</td></tr></table>	Option	Description	cleartext	DNS over UDP/53, DNS over TCP/53.	dot	DNS over TLS/853.	doh	DNS over HTTPS/443.			
	Option	Description										
	cleartext	DNS over UDP/53, DNS over TCP/53.										
	dot	DNS over TLS/853.										
doh	DNS over HTTPS/443.											
secondary	Secondary DNS server IP address for the VDOM.	ipv4-address	Not Specified	0.0.0.0								
server-hostname <hostname>	DNS server host name list. DNS server host name list separated by space (maximum 4 domains).	string	Maximum length: 127									
server-select-method	Specify how configured servers are prioritized.	option	-	least-rtt								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>least-rtt</td><td>Select servers based on least round trip time.</td></tr><tr><td>failover</td><td>Select servers based on the order they are configured.</td></tr></table>	Option	Description	least-rtt	Select servers based on least round trip time.	failover	Select servers based on the order they are configured.					
	Option	Description										
	least-rtt	Select servers based on least round trip time.										
failover	Select servers based on the order they are configured.											
source-ip	Source IP for communications with the DNS server.	ipv4-address	Not Specified	0.0.0.0								
ssl-certificate	Name of local certificate for SSL connections.	string	Maximum length: 35	Fortinet_Factory								

Parameter	Description	Type	Size	Default						
vdom-dns	Enable/disable configuring DNS servers for the current VDOM.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable configuring DNS servers for the current VDOM.</td></tr><tr><td><i>disable</i></td><td>Disable configuring DNS servers for the current VDOM.</td></tr></table>				Option	Description	<i>enable</i>	Enable configuring DNS servers for the current VDOM.	<i>disable</i>	Disable configuring DNS servers for the current VDOM.
Option	Description									
<i>enable</i>	Enable configuring DNS servers for the current VDOM.									
<i>disable</i>	Disable configuring DNS servers for the current VDOM.									

config system vdom-exception

Global configuration objects that can be configured independently across different ha peers for all VDOMs or for the defined VDOM scope.

```

config system vdom-exception
    Description: Global configuration objects that can be configured independently across
different ha peers for all VDOMs or for the defined VDOM scope.
    edit <id>
        set object [log.fortianalyzer.setting|log.fortianalyzer.override-setting|...]
        set scope [all|inclusive|...]
        set vdom <name1>, <name2>, ...
    next
end

```

config system vdom-exception

Parameter	Description	Type	Size	Default										
id	Index (1 - 4096).	integer	Minimum value: 1 Maximum value: 4096	0										
object	Name of the configuration object that can be configured independently for all VDOMs.	option	-											
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>log.fortianalyzer.setting</td><td>log.fortianalyzer.setting</td></tr><tr><td>log.fortianalyzer.override-setting</td><td>log.fortianalyzer.override-setting</td></tr><tr><td>log.fortianalyzer2.setting</td><td>log.fortianalyzer2.setting</td></tr><tr><td>log.fortianalyzer2.override-setting</td><td>log.fortianalyzer2.override-setting</td></tr></table>				Option	Description	log.fortianalyzer.setting	log.fortianalyzer.setting	log.fortianalyzer.override-setting	log.fortianalyzer.override-setting	log.fortianalyzer2.setting	log.fortianalyzer2.setting	log.fortianalyzer2.override-setting	log.fortianalyzer2.override-setting
	Option	Description												
	log.fortianalyzer.setting	log.fortianalyzer.setting												
	log.fortianalyzer.override-setting	log.fortianalyzer.override-setting												
	log.fortianalyzer2.setting	log.fortianalyzer2.setting												
	log.fortianalyzer2.override-setting	log.fortianalyzer2.override-setting												

Parameter	Description	Type	Size	Default																																							
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>log.fortianalyzer3.setting</i></td><td>log.fortianalyzer3.setting</td></tr><tr><td><i>log.fortianalyzer3.override-setting</i></td><td>log.fortianalyzer3.override-setting</td></tr><tr><td><i>log.fortianalyzer-cloud.setting</i></td><td>log.fortianalyzer-cloud.setting</td></tr><tr><td><i>log.fortianalyzer-cloud.override-setting</i></td><td>log.fortianalyzer-cloud.override-setting</td></tr><tr><td><i>log.syslogd.setting</i></td><td>log.syslogd.setting</td></tr><tr><td><i>log.syslogd.override-setting</i></td><td>log.syslogd.override-setting</td></tr><tr><td><i>log.syslogd2.setting</i></td><td>log.syslogd2.setting</td></tr><tr><td><i>log.syslogd2.override-setting</i></td><td>log.syslogd2.override-setting</td></tr><tr><td><i>log.syslogd3.setting</i></td><td>log.syslogd3.setting</td></tr><tr><td><i>log.syslogd3.override-setting</i></td><td>log.syslogd3.override-setting</td></tr><tr><td><i>log.syslogd4.setting</i></td><td>log.syslogd4.setting</td></tr><tr><td><i>log.syslogd4.override-setting</i></td><td>log.syslogd4.override-setting</td></tr><tr><td><i>system.gre-tunnel</i></td><td>system.gre-tunnel</td></tr><tr><td><i>system.central-management</i></td><td>system.central-management</td></tr><tr><td><i>system.csf</i></td><td>system.csf</td></tr><tr><td><i>user.radius</i></td><td>user.radius</td></tr><tr><td><i>log.syslogd.setting</i></td><td>log.syslogd.setting</td></tr><tr><td><i>log.syslogd.override-setting</i></td><td>log.syslogd.override-setting</td></tr></table>	Option	Description	<i>log.fortianalyzer3.setting</i>	log.fortianalyzer3.setting	<i>log.fortianalyzer3.override-setting</i>	log.fortianalyzer3.override-setting	<i>log.fortianalyzer-cloud.setting</i>	log.fortianalyzer-cloud.setting	<i>log.fortianalyzer-cloud.override-setting</i>	log.fortianalyzer-cloud.override-setting	<i>log.syslogd.setting</i>	log.syslogd.setting	<i>log.syslogd.override-setting</i>	log.syslogd.override-setting	<i>log.syslogd2.setting</i>	log.syslogd2.setting	<i>log.syslogd2.override-setting</i>	log.syslogd2.override-setting	<i>log.syslogd3.setting</i>	log.syslogd3.setting	<i>log.syslogd3.override-setting</i>	log.syslogd3.override-setting	<i>log.syslogd4.setting</i>	log.syslogd4.setting	<i>log.syslogd4.override-setting</i>	log.syslogd4.override-setting	<i>system.gre-tunnel</i>	system.gre-tunnel	<i>system.central-management</i>	system.central-management	<i>system.csf</i>	system.csf	<i>user.radius</i>	user.radius	<i>log.syslogd.setting</i>	log.syslogd.setting	<i>log.syslogd.override-setting</i>	log.syslogd.override-setting				
	Option	Description																																									
	<i>log.fortianalyzer3.setting</i>	log.fortianalyzer3.setting																																									
	<i>log.fortianalyzer3.override-setting</i>	log.fortianalyzer3.override-setting																																									
	<i>log.fortianalyzer-cloud.setting</i>	log.fortianalyzer-cloud.setting																																									
	<i>log.fortianalyzer-cloud.override-setting</i>	log.fortianalyzer-cloud.override-setting																																									
	<i>log.syslogd.setting</i>	log.syslogd.setting																																									
	<i>log.syslogd.override-setting</i>	log.syslogd.override-setting																																									
	<i>log.syslogd2.setting</i>	log.syslogd2.setting																																									
	<i>log.syslogd2.override-setting</i>	log.syslogd2.override-setting																																									
	<i>log.syslogd3.setting</i>	log.syslogd3.setting																																									
	<i>log.syslogd3.override-setting</i>	log.syslogd3.override-setting																																									
	<i>log.syslogd4.setting</i>	log.syslogd4.setting																																									
	<i>log.syslogd4.override-setting</i>	log.syslogd4.override-setting																																									
	<i>system.gre-tunnel</i>	system.gre-tunnel																																									
	<i>system.central-management</i>	system.central-management																																									
	<i>system.csf</i>	system.csf																																									
	<i>user.radius</i>	user.radius																																									
<i>log.syslogd.setting</i>	log.syslogd.setting																																										
<i>log.syslogd.override-setting</i>	log.syslogd.override-setting																																										
scope	Determine whether the configuration object can be configured separately for all VDOMs or if some VDOMs share the same configuration.	option	-	all																																							
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>all</i></td><td>Object configuration independent for all VDOMs.</td></tr><tr><td><i>inclusive</i></td><td>Object configuration independent for the listed VDOMs. Other VDOMs use the global configuration.</td></tr><tr><td><i>exclusive</i></td><td>Use the global object configuration for the listed VDOMs. Other VDOMs can be configured independently.</td></tr></table>	Option	Description	<i>all</i>	Object configuration independent for all VDOMs.	<i>inclusive</i>	Object configuration independent for the listed VDOMs. Other VDOMs use the global configuration.	<i>exclusive</i>	Use the global object configuration for the listed VDOMs. Other VDOMs can be configured independently.																																		
	Option	Description																																									
	<i>all</i>	Object configuration independent for all VDOMs.																																									
<i>inclusive</i>	Object configuration independent for the listed VDOMs. Other VDOMs use the global configuration.																																										
<i>exclusive</i>	Use the global object configuration for the listed VDOMs. Other VDOMs can be configured independently.																																										

Parameter	Description	Type	Size	Default
vdom <name>	Names of the VDOMs. VDOM name.	string	Maximum length: 79	

config system vdom-link

Configure VDOM links.

```
config system vdom-link
  Description: Configure VDOM links.
  edit <name>
    set type [ppp|ethernet|...]
    set vcluster [vcluster1|vcluster2]
  next
end
```

config system vdom-link

Parameter	Description	Type	Size	Default								
name	VDOM link name (maximum = 11 characters).	string	Maximum length: 11									
type	VDOM link type: PPP or Ethernet.	option	-	ppp								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>ppp</td><td>PPP VDOM link.</td></tr><tr><td>ethernet</td><td>Ethernet VDOM link.</td></tr><tr><td>npupair</td><td>NPU VDOM link.</td></tr></table>				Option	Description	ppp	PPP VDOM link.	ethernet	Ethernet VDOM link.	npupair	NPU VDOM link.
	Option	Description										
	ppp	PPP VDOM link.										
	ethernet	Ethernet VDOM link.										
npupair	NPU VDOM link.											
vcluster	Virtual cluster.	option	-	vcluster1								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>vcluster1</td><td>Virtual cluster 1.</td></tr><tr><td>vcluster2</td><td>Virtual cluster 2.</td></tr></table>				Option	Description	vcluster1	Virtual cluster 1.	vcluster2	Virtual cluster 2.		
	Option	Description										
	vcluster1	Virtual cluster 1.										
vcluster2	Virtual cluster 2.											

config system vdom-netflow

Configure NetFlow per VDOM.

```
config system vdom-netflow
  Description: Configure NetFlow per VDOM.
```

```

config collectors
    Description: Netflow collectors.
    edit <id>
        set collector-ip {string}
        set collector-port {integer}
        set interface {string}
        set interface-select-method [auto|sdwan|...]
        set source-ip {string}
    next
end
set vdom-netflow [enable|disable]
end

```

config system vdom-netflow

Parameter	Description	Type	Size	Default
vdom-netflow	Enable/disable NetFlow per VDOM.	option	-	disable
Option	Description			
<i>enable</i>	Enable NetFlow per VDOM.			
<i>disable</i>	Disable NetFlow per VDOM.			

config collectors

Parameter	Description	Type	Size	Default
collector-ip	Collector IP.	string	Maximum length: 63	
collector-port	NetFlow collector port number.	integer	Minimum value: 0 Maximum value: 65535	2055
id	ID.	integer	Minimum value: 1 Maximum value: 6	0
interface	Specify outgoing interface to reach server.	string	Maximum length: 15	
interface-select-method	Specify how to select outgoing interface to reach server.	option	-	auto

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>auto</i>	Set outgoing interface automatically.		
	<i>sdwan</i>	Set outgoing interface by SD-WAN or policy routing rules.		
	<i>specify</i>	Set outgoing interface manually.		
source-ip	Source IP address for communication with the NetFlow agent.	string	Maximum length: 63	

config system vdom-property

Configure VDOM property.

```

config system vdom-property
  Description: Configure VDOM property.
  edit <name>
    set custom-service {user}
    set description {string}
    set dialup-tunnel {user}
    set firewall-address {user}
    set firewall-addrgrp {user}
    set firewall-policy {user}
    set ipsec-phase1 {user}
    set ipsec-phase1-interface {user}
    set ipsec-phase2 {user}
    set ipsec-phase2-interface {user}
    set log-disk-quota {user}
    set onetime-schedule {user}
    set proxy {user}
    set recurring-schedule {user}
    set service-group {user}
    set session {user}
    set snmp-index {integer}
    set sslvpn {user}
    set user {user}
    set user-group {user}
  next
end

```


config system vdom-property

Parameter	Description	Type	Size	Default
custom-service	Maximum guaranteed number of firewall custom services.	user	Not Specified	
description	Description.	string	Maximum length: 127	
dialup-tunnel	Maximum guaranteed number of dial-up tunnels.	user	Not Specified	
firewall-address	Maximum guaranteed number of firewall addresses (IPv4, IPv6, multicast).	user	Not Specified	
firewall-addrgroup	Maximum guaranteed number of firewall address groups (IPv4, IPv6).	user	Not Specified	
firewall-policy	Maximum guaranteed number of firewall policies (policy, DoS-policy4, DoS-policy6, multicast).	user	Not Specified	
ipsec-phase1	Maximum guaranteed number of VPN IPsec phase 1 tunnels.	user	Not Specified	
ipsec-phase1-interface	Maximum guaranteed number of VPN IPsec phase1 interface tunnels.	user	Not Specified	
ipsec-phase2	Maximum guaranteed number of VPN IPsec phase 2 tunnels.	user	Not Specified	
ipsec-phase2-interface	Maximum guaranteed number of VPN IPsec phase2 interface tunnels.	user	Not Specified	
log-disk-quota	Log disk quota in megabytes (MB). Range depends on how much disk space is available.	user	Not Specified	
name	VDOM name.	string	Maximum length: 31	
onetime-schedule	Maximum guaranteed number of firewall one-time schedules.	user	Not Specified	
proxy	Maximum guaranteed number of concurrent proxy users.	user	Not Specified	
recurring-schedule	Maximum guaranteed number of firewall recurring schedules.	user	Not Specified	
service-group	Maximum guaranteed number of firewall service groups.	user	Not Specified	
session	Maximum guaranteed number of sessions.	user	Not Specified	

Parameter	Description	Type	Size	Default
snmp-index	Permanent SNMP Index of the virtual domain (1 - 2147483647).	integer	Minimum value: 1 Maximum value: 2147483647	0
sslvpn	Maximum guaranteed number of SSL-VPNs.	user	Not Specified	
user	Maximum guaranteed number of local users.	user	Not Specified	
user-group	Maximum guaranteed number of user groups.	user	Not Specified	

config system vdom-radius-server

Configure a RADIUS server to use as a RADIUS Single Sign On (RSSO) server for this VDOM.

```
config system vdom-radius-server
    Description: Configure a RADIUS server to use as a RADIUS Single Sign On (RSSO) server for
    this VDOM.
    edit <name>
        set radius-server-vdom {string}
        set status [enable|disable]
    next
end
```

config system vdom-radius-server

Parameter	Description	Type	Size	Default						
name	Name of the VDOM that you are adding the RADIUS server to.	string	Maximum length: 31							
radius-server-vdom	Use this option to select another VDOM containing a VDOM RSSO RADIUS server to use for the current VDOM.	string	Maximum length: 31							
status	Enable/disable the RSSO RADIUS server for this VDOM.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable the RSSO RADIUS server for this VDOM.</td></tr><tr><td><i>disable</i></td><td>Disable the RSSO RADIUS server for this VDOM.</td></tr></table>				Option	Description	<i>enable</i>	Enable the RSSO RADIUS server for this VDOM.	<i>disable</i>	Disable the RSSO RADIUS server for this VDOM.
Option	Description									
<i>enable</i>	Enable the RSSO RADIUS server for this VDOM.									
<i>disable</i>	Disable the RSSO RADIUS server for this VDOM.									

config system vdom-sflow

Configure sFlow per VDOM to add or change the IP address and UDP port that FortiGate sFlow agents in this VDOM use to send sFlow datagrams to an sFlow collector.

```
config system vdom-sflow
    Description: Configure sFlow per VDOM to add or change the IP address and UDP port that
    FortiGate sFlow agents in this VDOM use to send sFlow datagrams to an sFlow collector.
    set collector-ip {ipv4-address}
    set collector-port {integer}
    set interface {string}
    set interface-select-method [auto|sdwan|...]
    set source-ip {ipv4-address}
    set vdom-sflow [enable|disable]
end
```

config system vdom-sflow

Parameter	Description	Type	Size	Default
collector-ip	IP address of the sFlow collector that sFlow agents added to interfaces in this VDOM send sFlow datagrams to (default = 0.0.0.0).	ipv4-address	Not Specified	0.0.0.0
collector-port	UDP port number used for sending sFlow datagrams (configure only if required by your sFlow collector or your network configuration) (0 - 65535, default = 6343).	integer	Minimum value: 0 Maximum value: 65535	6343
interface	Specify outgoing interface to reach server.	string	Maximum length: 15	
interface-select-method	Specify how to select outgoing interface to reach server.	option	-	auto
		Option	Description	
		<i>auto</i>	Set outgoing interface automatically.	
		<i>sdwan</i>	Set outgoing interface by SD-WAN or policy routing rules.	
		<i>specify</i>	Set outgoing interface manually.	
source-ip	Source IP address for sFlow agent.	ipv4-address	Not Specified	0.0.0.0
vdom-sflow	Enable/disable the sFlow configuration for the current VDOM.	option	-	disable

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>enable</i>	Enable sFlow for this VDOM.		
	<i>disable</i>	Disable sFlow for this VDOM.		

config system vin-alarm



This command is available for model(s): FortiGateRugged 70F 3G4G, FortiGateRugged 70F.

It is not available for: FortiGate 1000D, FortiGate 1000F, FortiGate 1001F, FortiGate 100EF, FortiGate 100E, FortiGate 100F, FortiGate 101F, FortiGate 1100E, FortiGate 1101E, FortiGate 140E-POE, FortiGate 140E, FortiGate 1500DT, FortiGate 1500D, FortiGate 1800F, FortiGate 1801F, FortiGate 2000E, FortiGate 200E, FortiGate 200F, FortiGate 201E, FortiGate 201F, FortiGate 2201E, FortiGate 2500E, FortiGate 2600F, FortiGate 2601F, FortiGate 3000D, FortiGate 3000F, FortiGate 3001F, FortiGate 300E, FortiGate 301E, FortiGate 3100D, FortiGate 3200D, FortiGate 3200F, FortiGate 3201F, FortiGate 3300E, FortiGate 3301E, FortiGate 3400E, FortiGate 3401E, FortiGate 3501F, FortiGate 3600E, FortiGate 3601E, FortiGate 3700D, FortiGate 3700F, FortiGate 3701F, FortiGate 3960E, FortiGate 3980E, FortiGate 400E Bypass, FortiGate 400E, FortiGate 400F, FortiGate 401E, FortiGate 401F, FortiGate 40F 3G4G, FortiGate 4200F, FortiGate 4201F, FortiGate 4400F, FortiGate 4401F, FortiGate 5001E1, FortiGate 5001E, FortiGate 500E, FortiGate 501E, FortiGate 600E, FortiGate 601E, FortiGate 60E-POE, FortiGate 60E, FortiGate 60F, FortiGate 61E, FortiGate 70F, FortiGate 71F, FortiGate 800D, FortiGate 80E-POE, FortiGate 80E, FortiGate 80F Bypass, FortiGate 80F DSL, FortiGate 80F-POE, FortiGate 80F, FortiGate 81E-POE, FortiGate 81E, FortiGate 81F-POE, FortiGate 81F, FortiGate 900D, FortiGate 90E, FortiGate 91E, FortiGate-VM64 Aliyun, FortiGate-VM64 AWS, FortiGate-VM64 Azure, FortiGate-VM64 GCP, FortiGate-VM64 OPC, FortiGate-VM64, FortiGateRugged 60F 3G4G, FortiGateRugged 60F, FortiWiFi 40F 3G4G, FortiWiFi 40F, FortiWiFi 60E, FortiWiFi 60F, FortiWiFi 61E, FortiWiFi 61F, FortiWiFi 80F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G-POE, FortiWiFi 81F 2R-POE, FortiWiFi 81F 2R.

Configure vin alarm settings.

```
config system vin-alarm
    Description: Configure vin alarm settings.
    set psu-1-threshold-low {integer}
    set psu-2-threshold-low {integer}
    set status [enable|disable]
end
```

config system vin-alarm

Parameter	Description	Type	Size	Default						
psu-1-threshold-low	Threshold at which 1st PSU voltage drop to trigger low voltage alarm, in percent of voltage.(default = 60)	integer	Minimum value: 1 Maximum value: 99	60						
psu-2-threshold-low	Threshold at which 2nd PSU voltage drop to trigger low voltage alarm, in percent of voltage.(default = 60)	integer	Minimum value: 1 Maximum value: 99	60						
status	Enable/disable vin alarm.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable vin alarm.</td></tr><tr><td><i>disable</i></td><td>Disable vin alarm.</td></tr></table>				Option	Description	<i>enable</i>	Enable vin alarm.	<i>disable</i>	Disable vin alarm.
Option	Description									
<i>enable</i>	Enable vin alarm.									
<i>disable</i>	Disable vin alarm.									

config system virtual-switch



This command is available for model(s): FortiGate 1000F, FortiGate 1001F, FortiGate 100EF, FortiGate 100E, FortiGate 100F, FortiGate 101F, FortiGate 1100E, FortiGate 1101E, FortiGate 140E-POE, FortiGate 140E, FortiGate 1800F, FortiGate 1801F, FortiGate 200F, FortiGate 201F, FortiGate 2600F, FortiGate 2601F, FortiGate 3000F, FortiGate 3001F, FortiGate 300E, FortiGate 301E, FortiGate 3200F, FortiGate 3201F, FortiGate 3501F, FortiGate 3700F, FortiGate 3701F, FortiGate 400E Bypass, FortiGate 400E, FortiGate 400F, FortiGate 401E, FortiGate 401F, FortiGate 40F 3G4G, FortiGate 4200F, FortiGate 4201F, FortiGate 4400F, FortiGate 4401F, FortiGate 60E-POE, FortiGate 60E, FortiGate 60F, FortiGate 61E, FortiGate 70F, FortiGate 71F, FortiGate 80E-POE, FortiGate 80E, FortiGate 80F Bypass, FortiGate 80F DSL, FortiGate 80F-POE, FortiGate 80F, FortiGate 81E-POE, FortiGate 81E, FortiGate 81F-POE, FortiGate 81F, FortiGate 90E, FortiGate 91E, FortiGateRugged 60F 3G4G, FortiGateRugged 60F, FortiGateRugged 70F 3G4G, FortiGateRugged 70F, FortiWiFi 40F 3G4G, FortiWiFi 40F, FortiWiFi 60E, FortiWiFi 60F, FortiWiFi 61E, FortiWiFi 61F, FortiWiFi 80F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G-POE, FortiWiFi 81F 2R-POE, FortiWiFi 81F 2R.

It is not available for: FortiGate 1000D, FortiGate 1500DT, FortiGate 1500D, FortiGate 2000E, FortiGate 200E, FortiGate 201E, FortiGate 2201E, FortiGate 2500E, FortiGate 3000D, FortiGate 3100D, FortiGate 3200D, FortiGate 3300E, FortiGate 3301E, FortiGate 3400E, FortiGate 3401E, FortiGate 3600E, FortiGate 3601E, FortiGate 3700D, FortiGate 3960E, FortiGate 3980E, FortiGate 5001E1, FortiGate 5001E, FortiGate 500E, FortiGate 501E, FortiGate 600E, FortiGate 601E, FortiGate 800D, FortiGate 900D, FortiGate-VM64 Aliyun, FortiGate-VM64 AWS, FortiGate-VM64 Azure, FortiGate-VM64 GCP, FortiGate-VM64 OPC, FortiGate-VM64.

Configure virtual hardware switch interfaces.

```
config system virtual-switch
  Description: Configure virtual hardware switch interfaces.
  edit <name>
    set physical-switch {string}
    config port
      Description: Configure member ports.
      edit <name>
        set alias {string}
      next
    end
    set span [disable|enable]
    set span-dest-port {string}
    set span-direction [rx|tx|...]
    set span-source-port {string}
    set vlan {integer}
  next
end
```

config system virtual-switch

Parameter	Description	Type	Size	Default								
name	Name of the virtual switch.	string	Maximum length: 15									
physical-switch	Physical switch parent.	string	Maximum length: 15									
span *	Enable/disable SPAN.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Disable SPAN.</td></tr><tr><td>enable</td><td>Enable SPAN.</td></tr></table>				Option	Description	disable	Disable SPAN.	enable	Enable SPAN.		
Option	Description											
disable	Disable SPAN.											
enable	Enable SPAN.											
span-dest-port *	SPAN destination port.	string	Maximum length: 15									
span-direction *	SPAN direction.	option	-	both								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>rx</td><td>SPAN receive direction only.</td></tr><tr><td>tx</td><td>SPAN transmit direction only.</td></tr><tr><td>both</td><td>SPAN both directions.</td></tr></table>				Option	Description	rx	SPAN receive direction only.	tx	SPAN transmit direction only.	both	SPAN both directions.
Option	Description											
rx	SPAN receive direction only.											
tx	SPAN transmit direction only.											
both	SPAN both directions.											
span-source-port *	SPAN source port.	string	Maximum length: 15									

Parameter	Description	Type	Size	Default
vlan *	VLAN.	integer	Minimum value: 0 Maximum value: 4294967295	0

* This parameter may not exist in some models.

config port

Parameter	Description	Type	Size	Default
alias	Alias.	string	Maximum length: 25	
name	Physical interface name.	string	Maximum length: 15	

config system virtual-wire-pair

Configure virtual wire pairs.

```

config system virtual-wire-pair
  Description: Configure virtual wire pairs.
  edit <name>
    set member <interface-name1>, <interface-name2>, ...
    set outer-vlan-id <vlanid1>, <vlanid2>, ...
    set poweroff-bypass [enable|disable]
    set poweron-bypass [enable|disable]
    set vlan-filter {user}
    set wildcard-vlan [enable|disable]
  next
end

```

config system virtual-wire-pair

Parameter	Description	Type	Size	Default
member <interface-name>	Interfaces belong to the virtual-wire-pair. Interface name.	string	Maximum length: 79	
name	Virtual-wire-pair name. Must be a unique interface name.	string	Maximum length: 11	

Parameter	Description	Type	Size	Default						
outer-vlan-id <vlanid> *	Outer VLAN ID. VLAN ID (1 - 4094).	integer	Minimum value: 1 Maximum value: 4094							
poweroff-bypass *	Enable/disable interface bypass state when power off.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable bypass when power off.</td></tr><tr><td>disable</td><td>Disable bypass when power off.</td></tr></table>	Option	Description	enable	Enable bypass when power off.	disable	Disable bypass when power off.			
Option	Description									
enable	Enable bypass when power off.									
disable	Disable bypass when power off.									
poweron-bypass *	Enable/disable interface bypass state when power on.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable bypass when power on.</td></tr><tr><td>disable</td><td>Disable bypass when power on.</td></tr></table>	Option	Description	enable	Enable bypass when power on.	disable	Disable bypass when power on.			
Option	Description									
enable	Enable bypass when power on.									
disable	Disable bypass when power on.									
vlan-filter	VLAN ranges to allow	user	Not Specified							
wildcard-vlan	Enable/disable wildcard VLAN.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable wildcard VLAN.</td></tr><tr><td>disable</td><td>Disable wildcard VLAN.</td></tr></table>	Option	Description	enable	Enable wildcard VLAN.	disable	Disable wildcard VLAN.			
Option	Description									
enable	Enable wildcard VLAN.									
disable	Disable wildcard VLAN.									

* This parameter may not exist in some models.

config system vene-tunnel

Configure virtual network enabler tunnel.

```

config system vene-tunnel
  Description: Configure virtual network enabler tunnel.
  set auto-asic-offload [enable|disable]
  set bmr-hostname {password}
  set br {string}
  set http-password {password}
  set http-username {string}
  set interface {string}
  set ipv4-address {ipv4-classnet-host}
  set mode [map-e|fixed-ip|...]
  set ssl-certificate {string}

```



```

set status [enable|disable]
set update-url {string}
end

```

config system vne-tunnel

Parameter	Description	Type	Size	Default								
auto-asic-offload *	Enable/disable tunnel ASIC offloading.	option	-	enable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable auto ASIC offloading.</td></tr><tr><td><i>disable</i></td><td>Disable ASIC offloading.</td></tr></table>	Option	Description	<i>enable</i>	Enable auto ASIC offloading.	<i>disable</i>	Disable ASIC offloading.					
Option	Description											
<i>enable</i>	Enable auto ASIC offloading.											
<i>disable</i>	Disable ASIC offloading.											
bmr-hostname	BMR hostname.	password	Not Specified									
br	IPv6 address or FQDN of the border relay.	string	Maximum length: 255									
http-password	HTTP authentication password.	password	Not Specified									
http-username	HTTP authentication user name.	string	Maximum length: 64									
interface	Interface name.	string	Maximum length: 15									
ipv4-address	Tunnel IPv4 address and netmask.	ipv4-classnet-host	Not Specified	0.0.0.0 0.0.0.0								
mode	VNE tunnel mode.	option	-	map-e								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>map-e</i></td><td>Map-e mode.</td></tr><tr><td><i>fixed-ip</i></td><td>Fixed-ip mode.</td></tr><tr><td><i>ds-lite</i></td><td>DS-Lite mode.</td></tr></table>	Option	Description	<i>map-e</i>	Map-e mode.	<i>fixed-ip</i>	Fixed-ip mode.	<i>ds-lite</i>	DS-Lite mode.			
Option	Description											
<i>map-e</i>	Map-e mode.											
<i>fixed-ip</i>	Fixed-ip mode.											
<i>ds-lite</i>	DS-Lite mode.											
ssl-certificate	Name of local certificate for SSL connections.	string	Maximum length: 35	Fortinet_Factory								
status	Enable/disable VNE tunnel.	option	-	disable								

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>enable</i>	Enable VNE tunnel.		
	<i>disable</i>	Disable VNE tunnel.		
update-url	URL of provisioning server.	string	Maximum length: 511	

* This parameter may not exist in some models.

config system vxlan

Configure VXLAN devices.

```

config system vxlan
  Description: Configure VXLAN devices.
  edit <name>
    set dstport {integer}
    set interface {string}
    set ip-version [ipv4-unicast|ipv6-unicast|...]
    set multicast-ttl {integer}
    set remote-ip <ip1>, <ip2>, ...
    set remote-ip6 <ip61>, <ip62>, ...
    set vni {integer}
  next
end

```

config system vxlan

Parameter	Description	Type	Size	Default
dstport	VXLAN destination port (1 - 65535, default = 4789).	integer	Minimum value: 1 Maximum value: 65535	4789
interface	Outgoing interface for VXLAN encapsulated traffic.	string	Maximum length: 15	
ip-version	IP version to use for the VXLAN interface and so for communication over the VXLAN. IPv4 or IPv6 unicast or multicast.	option	-	ipv4-unicast

Parameter	Description	Type	Size	Default										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>ipv4-unicast</i></td><td>Use IPv4 unicast addressing over the VXLAN.</td></tr><tr><td><i>ipv6-unicast</i></td><td>Use IPv6 unicast addressing over the VXLAN.</td></tr><tr><td><i>ipv4-multicast</i></td><td>Use IPv4 multicast addressing over the VXLAN.</td></tr><tr><td><i>ipv6-multicast</i></td><td>Use IPv6 multicast addressing over the VXLAN.</td></tr></table>	Option	Description	<i>ipv4-unicast</i>	Use IPv4 unicast addressing over the VXLAN.	<i>ipv6-unicast</i>	Use IPv6 unicast addressing over the VXLAN.	<i>ipv4-multicast</i>	Use IPv4 multicast addressing over the VXLAN.	<i>ipv6-multicast</i>	Use IPv6 multicast addressing over the VXLAN.			
	Option	Description												
	<i>ipv4-unicast</i>	Use IPv4 unicast addressing over the VXLAN.												
	<i>ipv6-unicast</i>	Use IPv6 unicast addressing over the VXLAN.												
	<i>ipv4-multicast</i>	Use IPv4 multicast addressing over the VXLAN.												
<i>ipv6-multicast</i>	Use IPv6 multicast addressing over the VXLAN.													
multicast-ttl	VXLAN multicast TTL (1-255, default = 0).	integer	Minimum value: 1 Maximum value: 255	0										
name	VXLAN device or interface name. Must be a unique interface name.	string	Maximum length: 15											
remote-ip <ip>	IPv4 address of the VXLAN interface on the device at the remote end of the VXLAN. IPv4 address.	string	Maximum length: 15											
remote-ip6 <ip6>	IPv6 IP address of the VXLAN interface on the device at the remote end of the VXLAN. IPv6 address.	string	Maximum length: 45											
vni	VXLAN network ID.	integer	Minimum value: 1 Maximum value: 16777215	0										

config system wccp

Configure WCCP.

```

config system wccp
  Description: Configure WCCP.
  edit <service-id>
    set assignment-bucket-format [wccp-v2|cisco-implementation]
    set assignment-dstaddr-mask {ipv4-netmask-any}
    set assignment-method [HASH|MASK|...]
    set assignment-srcaddr-mask {ipv4-netmask-any}
    set assignment-weight {integer}
    set authentication [enable|disable]
    set cache-engine-method [GRE|L2]
    set cache-id {ipv4-address}
    set forward-method [GRE|L2|...]
    set group-address {ipv4-address-multicast}
    set password {password}
  
```

```

set ports {user}
set ports-defined [source|destination]
set primary-hash {option1}, {option2}, ...
set priority {integer}
set protocol {integer}
set return-method [GRE|L2|...]
set router-id {ipv4-address}
set router-list {user}
set server-list {user}
set server-type [forward|proxy]
set service-type [auto|standard|...]
next
end

```

config system wccp

Parameter	Description	Type	Size	Default								
assignment-bucket-format	Assignment bucket format for the WCCP cache engine.	option	-	cisco-implementation								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>wccp-v2</td><td>WCCP-v2 bucket format.</td></tr><tr><td>cisco-implementation</td><td>Cisco bucket format.</td></tr></table>				Option	Description	wccp-v2	WCCP-v2 bucket format.	cisco-implementation	Cisco bucket format.		
	Option	Description										
	wccp-v2	WCCP-v2 bucket format.										
cisco-implementation	Cisco bucket format.											
assignment-dstaddr-mask	Assignment destination address mask.	ipv4-netmask-any	Not Specified	0.0.0.0								
assignment-method	Hash key assignment preference.	option	-	HASH								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>HASH</td><td>HASH assignment method.</td></tr><tr><td>MASK</td><td>MASK assignment method.</td></tr><tr><td>any</td><td>HASH or MASK.</td></tr></table>				Option	Description	HASH	HASH assignment method.	MASK	MASK assignment method.	any	HASH or MASK.
	Option	Description										
	HASH	HASH assignment method.										
	MASK	MASK assignment method.										
any	HASH or MASK.											
assignment-srcaddr-mask	Assignment source address mask.	ipv4-netmask-any	Not Specified	0.0.23.65								
assignment-weight	Assignment of hash weight/ratio for the WCCP cache engine.	integer	Minimum value: 0 Maximum value: 255	0								
authentication	Enable/disable MD5 authentication.	option	-	disable								

Parameter	Description	Type	Size	Default
	Option Description			
	<i>enable</i>	Enable MD5 authentication.		
	<i>disable</i>	Disable MD5 authentication.		
cache-engine-method	Method used to forward traffic to the routers or to return to the cache engine.	option	-	GRE
	Option Description			
	<i>GRE</i>	GRE encapsulation.		
	<i>L2</i>	L2 rewrite.		
cache-id	IP address known to all routers. If the addresses are the same, use the default 0.0.0.0.	ipv4-address	Not Specified	0.0.0.0
forward-method	Method used to forward traffic to the cache servers.	option	-	GRE
	Option Description			
	<i>GRE</i>	GRE encapsulation.		
	<i>L2</i>	L2 rewrite.		
	<i>any</i>	GRE or L2.		
group-address	IP multicast address used by the cache routers. For the FortiGate to ignore multicast WCCP traffic, use the default 0.0.0.0.	ipv4-address-multicast	Not Specified	0.0.0.0
password	Password for MD5 authentication.	password	Not Specified	
ports	Service ports.	user	Not Specified	
ports-defined	Match method.	option	-	
	Option Description			
	<i>source</i>	Source port match.		
	<i>destination</i>	Destination port match.		
primary-hash	Hash method.	option	-	dst-ip

Parameter	Description	Type	Size	Default										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>src-ip</i></td><td>Source IP hash.</td></tr><tr><td><i>dst-ip</i></td><td>Destination IP hash.</td></tr><tr><td><i>src-port</i></td><td>Source port hash.</td></tr><tr><td><i>dst-port</i></td><td>Destination port hash.</td></tr></table>	Option	Description	<i>src-ip</i>	Source IP hash.	<i>dst-ip</i>	Destination IP hash.	<i>src-port</i>	Source port hash.	<i>dst-port</i>	Destination port hash.			
	Option	Description												
	<i>src-ip</i>	Source IP hash.												
	<i>dst-ip</i>	Destination IP hash.												
	<i>src-port</i>	Source port hash.												
<i>dst-port</i>	Destination port hash.													
priority	Service priority.	integer	Minimum value: 0 Maximum value: 255	0										
protocol	Service protocol.	integer	Minimum value: 0 Maximum value: 255	0										
return-method	Method used to decline a redirected packet and return it to the FortiGate unit.	option	-	GRE										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>GRE</i></td><td>GRE encapsulation.</td></tr><tr><td><i>L2</i></td><td>L2 rewrite.</td></tr><tr><td><i>any</i></td><td>GRE or L2.</td></tr></table>	Option	Description	<i>GRE</i>	GRE encapsulation.	<i>L2</i>	L2 rewrite.	<i>any</i>	GRE or L2.					
	Option	Description												
	<i>GRE</i>	GRE encapsulation.												
	<i>L2</i>	L2 rewrite.												
<i>any</i>	GRE or L2.													
router-id	IP address known to all cache engines. If all cache engines connect to the same FortiGate interface, use the default 0.0.0.0.	ipv4-address	Not Specified	0.0.0.0										
router-list	IP addresses of one or more WCCP routers.	user	Not Specified											
server-list	IP addresses and netmasks for up to four cache servers.	user	Not Specified											
server-type	Cache server type.	option	-	forward										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>forward</i></td><td>Forward server.</td></tr><tr><td><i>proxy</i></td><td>Proxy server.</td></tr></table>	Option	Description	<i>forward</i>	Forward server.	<i>proxy</i>	Proxy server.							
	Option	Description												
	<i>forward</i>	Forward server.												
<i>proxy</i>	Proxy server.													
service-id	Service ID.	string	Maximum length: 3											

Parameter	Description	Type	Size	Default
service-type	WCCP service type used by the cache server for logical interception and redirection of traffic.	option	-	auto
	Option	Description		
	auto	auto		
	standard	Standard service.		
	dynamic	Dynamic service.		

config system wireless ap-status



This command is available for model(s): FortiWiFi 40F 3G4G, FortiWiFi 40F, FortiWiFi 60E, FortiWiFi 60F, FortiWiFi 61E, FortiWiFi 61F.

It is not available for: FortiGate 1000D, FortiGate 1000F, FortiGate 1001F, FortiGate 100EF, FortiGate 100E, FortiGate 100F, FortiGate 101F, FortiGate 1100E, FortiGate 1101E, FortiGate 140E-POE, FortiGate 140E, FortiGate 1500DT, FortiGate 1500D, FortiGate 1800F, FortiGate 1801F, FortiGate 2000E, FortiGate 200E, FortiGate 200F, FortiGate 201E, FortiGate 201F, FortiGate 2201E, FortiGate 2500E, FortiGate 2600F, FortiGate 2601F, FortiGate 3000D, FortiGate 3000F, FortiGate 3001F, FortiGate 300E, FortiGate 301E, FortiGate 3100D, FortiGate 3200D, FortiGate 3200F, FortiGate 3201F, FortiGate 3300E, FortiGate 3301E, FortiGate 3400E, FortiGate 3401E, FortiGate 3501F, FortiGate 3600E, FortiGate 3601E, FortiGate 3700D, FortiGate 3700F, FortiGate 3701F, FortiGate 3960E, FortiGate 3980E, FortiGate 400E Bypass, FortiGate 400E, FortiGate 400F, FortiGate 401E, FortiGate 401F, FortiGate 40F 3G4G, FortiGate 4200F, FortiGate 4201F, FortiGate 4400F, FortiGate 4401F, FortiGate 5001E1, FortiGate 5001E, FortiGate 500E, FortiGate 501E, FortiGate 600E, FortiGate 601E, FortiGate 60E-POE, FortiGate 60E, FortiGate 60F, FortiGate 61E, FortiGate 70F, FortiGate 71F, FortiGate 800D, FortiGate 80E-POE, FortiGate 80E, FortiGate 80F Bypass, FortiGate 80F DSL, FortiGate 80F-POE, FortiGate 80F, FortiGate 81E-POE, FortiGate 81E, FortiGate 81F-POE, FortiGate 81F, FortiGate 900D, FortiGate 90E, FortiGate 91E, FortiGate-VM64 Aliyun, FortiGate-VM64 AWS, FortiGate-VM64 Azure, FortiGate-VM64 GCP, FortiGate-VM64 OPC, FortiGate-VM64, FortiGateRugged 60F 3G4G, FortiGateRugged 60F, FortiGateRugged 70F 3G4G, FortiGateRugged 70F, FortiWiFi 80F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G-POE, FortiWiFi 81F 2R-POE, FortiWiFi 81F 2R.

Configure accepted wireless AP.

```
config system wireless ap-status
  Description: Configure accepted wireless AP.
  edit <id>
    set bssid {mac-address}
    set ssid {string}
```

```

        set status [rogue|accepted|...]
    next
end

```

config system wireless ap-status

Parameter	Description	Type	Size	Default								
bssid	AP's BSSID.	mac-address	Not Specified	00:00:00:00:00:00								
id	AP ID.	integer	Minimum value: 0 Maximum value: 4294967295									
ssid	AP's ssid	string	Maximum length: 32									
status	AP status.	option	-	rogue								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>rogue</i></td><td>Rogue.</td></tr><tr><td><i>accepted</i></td><td>Accepted.</td></tr><tr><td><i>suppressed</i></td><td>Suppressed.</td></tr></table>				Option	Description	<i>rogue</i>	Rogue.	<i>accepted</i>	Accepted.	<i>suppressed</i>	Suppressed.
	Option	Description										
	<i>rogue</i>	Rogue.										
	<i>accepted</i>	Accepted.										
<i>suppressed</i>	Suppressed.											

config system wireless settings



This command is available for model(s): FortiWiFi 40F 3G4G, FortiWiFi 40F, FortiWiFi 60E, FortiWiFi 60F, FortiWiFi 61E, FortiWiFi 61F.

It is not available for: FortiGate 1000D, FortiGate 1000F, FortiGate 1001F, FortiGate 100EF, FortiGate 100E, FortiGate 100F, FortiGate 101F, FortiGate 1100E, FortiGate 1101E, FortiGate 140E-POE, FortiGate 140E, FortiGate 1500DT, FortiGate 1500D, FortiGate 1800F, FortiGate 1801F, FortiGate 2000E, FortiGate 200E, FortiGate 200F, FortiGate 201E, FortiGate 201F, FortiGate 2201E, FortiGate 2500E, FortiGate 2600F, FortiGate 2601F, FortiGate 3000D, FortiGate 3000F, FortiGate 3001F, FortiGate 300E, FortiGate 301E, FortiGate 3100D, FortiGate 3200D, FortiGate 3200F, FortiGate 3201F, FortiGate 3300E, FortiGate 3301E, FortiGate 3400E, FortiGate 3401E, FortiGate 3501F, FortiGate 3600E, FortiGate 3601E, FortiGate 3700D, FortiGate 3700F, FortiGate 3701F, FortiGate 3960E, FortiGate 3980E, FortiGate 400E Bypass, FortiGate 400E, FortiGate 400F, FortiGate 401E, FortiGate 401F, FortiGate 40F 3G4G, FortiGate 4200F, FortiGate 4201F, FortiGate 4400F, FortiGate 4401F, FortiGate 5001E1, FortiGate 5001E, FortiGate 500E, FortiGate 501E, FortiGate 600E, FortiGate 601E, FortiGate 60E-POE, FortiGate 60E, FortiGate 60F, FortiGate 61E, FortiGate 70F, FortiGate 71F, FortiGate 800D, FortiGate 80E-POE, FortiGate 80E, FortiGate 80F Bypass, FortiGate 80F DSL, FortiGate 80F-POE, FortiGate 80F, FortiGate 81E-POE, FortiGate 81E, FortiGate 81F-POE, FortiGate 81F, FortiGate 900D, FortiGate 90E, FortiGate 91E, FortiGate-VM64 Aliyun, FortiGate-VM64 AWS, FortiGate-VM64 Azure, FortiGate-VM64 GCP, FortiGate-VM64 OPC, FortiGate-VM64, FortiGateRugged 60F 3G4G, FortiGateRugged 60F, FortiGateRugged 70F 3G4G, FortiGateRugged 70F, FortiWiFi 80F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G-POE, FortiWiFi 81F 2R-POE, FortiWiFi 81F 2R.

Wireless radio configuration.

```
config system wireless settings
  Description: Wireless radio configuration.
  set band [802.11a|802.11b|...]
  set beacon-interval {integer}
  set bgscan [disable|enable]
  set bgscan-idle {integer}
  set bgscan-interval {integer}
  set channel {integer}
  set channel-bonding [enable|disable]
  set geography [World|Americas|...]
  set mode [CLIENT|AP|...]
  set power-level {integer}
  set rogue-scan [enable|disable]
  set rogue-scan-mac-adjacency {integer}
  set short-guard-interval [enable|disable]
end
```

config system wireless settings

Parameter	Description	Type	Size	Default																										
band	Band.	option	-	802.11g																										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>802.11a</td><td>802.11a.</td></tr><tr><td>802.11b</td><td>802.11b.</td></tr><tr><td>802.11g</td><td>802.11g.</td></tr><tr><td>802.11g-only</td><td>802.11g only.</td></tr><tr><td>802.11n</td><td>802.11n at 2.4G band.</td></tr><tr><td>802.11ng-only</td><td>802.11ng only at 2.4G band.</td></tr><tr><td>802.11n-only</td><td>802.11n only at 2.4G band.</td></tr><tr><td>802.11n-5G</td><td>802.11n at 5G band.</td></tr><tr><td>802.11n-5G-only</td><td>802.11n only at 5G band.</td></tr><tr><td>802.11ac</td><td>802.11ac at 5G band.</td></tr><tr><td>802.11acn-only</td><td>802.11acn only at 5G band.</td></tr><tr><td>802.11ac-only</td><td>802.11ac only at 5G band.</td></tr></table>	Option	Description	802.11a	802.11a.	802.11b	802.11b.	802.11g	802.11g.	802.11g-only	802.11g only.	802.11n	802.11n at 2.4G band.	802.11ng-only	802.11ng only at 2.4G band.	802.11n-only	802.11n only at 2.4G band.	802.11n-5G	802.11n at 5G band.	802.11n-5G-only	802.11n only at 5G band.	802.11ac	802.11ac at 5G band.	802.11acn-only	802.11acn only at 5G band.	802.11ac-only	802.11ac only at 5G band.			
	Option	Description																												
	802.11a	802.11a.																												
	802.11b	802.11b.																												
	802.11g	802.11g.																												
	802.11g-only	802.11g only.																												
	802.11n	802.11n at 2.4G band.																												
	802.11ng-only	802.11ng only at 2.4G band.																												
	802.11n-only	802.11n only at 2.4G band.																												
	802.11n-5G	802.11n at 5G band.																												
	802.11n-5G-only	802.11n only at 5G band.																												
	802.11ac	802.11ac at 5G band.																												
	802.11acn-only	802.11acn only at 5G band.																												
	802.11ac-only	802.11ac only at 5G band.																												
beacon-interval	Beacon level (25 - 1000).	integer	Minimum value: 25 Maximum value: 1000	100																										
bgscan	Enable/disable background rogue AP scan.	option	-	disable																										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Disable background rogue AP scan.</td></tr><tr><td>enable</td><td>Enable background rogue AP scan.</td></tr></table>	Option	Description	disable	Disable background rogue AP scan.	enable	Enable background rogue AP scan.																							
	Option	Description																												
	disable	Disable background rogue AP scan.																												
enable	Enable background rogue AP scan.																													
bgscan-idle	Interval between scanning channels (100 - 1000 ms).	integer	Minimum value: 100 Maximum value: 1000	250																										
bgscan-interval	Interval between two rounds of scanning (15 - 3600 sec).	integer	Minimum value: 15 Maximum value: 3600	120																										
channel	Channel.	integer	Minimum value: 0 Maximum value: 4294967295	0																										

Parameter	Description	Type	Size	Default												
channel-bonding	Supported channel width.	option	-	disable												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>20/40 MHz.</td></tr><tr><td><i>disable</i></td><td>20 MHz.</td></tr></table>	Option	Description	<i>enable</i>	20/40 MHz.	<i>disable</i>	20 MHz.									
Option	Description															
<i>enable</i>	20/40 MHz.															
<i>disable</i>	20 MHz.															
geography	Geography.	option	-	Americas												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>World</i></td><td>World.</td></tr><tr><td><i>Americas</i></td><td>Americas.</td></tr><tr><td><i>EMEA</i></td><td>EMEA.</td></tr><tr><td><i>Israel</i></td><td>Israel.</td></tr><tr><td><i>Japan</i></td><td>Japan.</td></tr></table>	Option	Description	<i>World</i>	World.	<i>Americas</i>	Americas.	<i>EMEA</i>	EMEA.	<i>Israel</i>	Israel.	<i>Japan</i>	Japan.			
Option	Description															
<i>World</i>	World.															
<i>Americas</i>	Americas.															
<i>EMEA</i>	EMEA.															
<i>Israel</i>	Israel.															
<i>Japan</i>	Japan.															
mode	Mode.	option	-	AP												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>CLIENT</i></td><td>Client.</td></tr><tr><td><i>AP</i></td><td>Access point.</td></tr><tr><td><i>SCAN</i></td><td>Scan.</td></tr></table>	Option	Description	<i>CLIENT</i>	Client.	<i>AP</i>	Access point.	<i>SCAN</i>	Scan.							
Option	Description															
<i>CLIENT</i>	Client.															
<i>AP</i>	Access point.															
<i>SCAN</i>	Scan.															
power-level	Power level (0 - 17).	integer	Minimum value: 0 Maximum value: 17	17												
rogue-scan	Enable/disable rogue scan.	option	-	disable												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable rogue scan.</td></tr><tr><td><i>disable</i></td><td>Disable rogue scan.</td></tr></table>	Option	Description	<i>enable</i>	Enable rogue scan.	<i>disable</i>	Disable rogue scan.									
Option	Description															
<i>enable</i>	Enable rogue scan.															
<i>disable</i>	Disable rogue scan.															
rogue-scan-mac-adjacency	MAC adjacency (0-31).	integer	Minimum value: 0 Maximum value: 31	7												
short-guard-interval	Enable/disable short guard interval.	option	-	disable												

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>enable</i>	400 ns long guard interval.		
	<i>disable</i>	800 ns short guard interval.		

config system zone

Configure zones to group two or more interfaces. When a zone is created you can configure policies for the zone instead of individual interfaces in the zone.

```

config system zone
    Description: Configure zones to group two or more interfaces. When a zone is created you can
    configure policies for the zone instead of individual interfaces in the zone.
    edit <name>
        set description {string}
        set interface <interface-name1>, <interface-name2>, ...
        set intrazone [allow|deny]
        config tagging
            Description: Config object tagging.
            edit <name>
                set category {string}
                set tags <name1>, <name2>, ...
            next
        end
    next
end
end

```

config system zone

Parameter	Description	Type	Size	Default
description	Description.	string	Maximum length: 127	
interface <interface-name>	Add interfaces to this zone. Interfaces must not be assigned to another zone or have firewall policies defined. Select interfaces to add to the zone.	string	Maximum length: 79	
intrazone	Allow or deny traffic routing between different interfaces in the same zone (default = deny).	option	-	deny

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>allow</i>	Allow traffic between interfaces in the zone.		
	<i>deny</i>	Deny traffic between interfaces in the zone.		
name	Zone name.	string	Maximum length: 35	

config tagging

Parameter	Description	Type	Size	Default
category	Tag category.	string	Maximum length: 63	
name	Tagging entry name.	string	Maximum length: 63	
tags <name>	Tags. Tag name.	string	Maximum length: 79	

user

This section includes syntax for the following commands:

- [config user adgrp on page 1751](#)
- [config user certificate on page 1752](#)
- [config user domain-controller on page 1753](#)
- [config user exchange on page 1757](#)
- [config user external-identity-provider on page 1759](#)
- [config user fortitoken on page 1761](#)
- [config user fsso-polling on page 1766](#)
- [config user fsso on page 1762](#)
- [config user group on page 1768](#)
- [config user krb-keytab on page 1773](#)
- [config user ldap on page 1774](#)
- [config user local on page 1781](#)
- [config user nac-policy on page 1785](#)
- [config user password-policy on page 1787](#)
- [config user peer on page 1788](#)
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- [config user saml on page 1807](#)
- [config user security-exempt-list on page 1810](#)
- [config user setting on page 1811](#)
- [config user tacacs+ on page 1816](#)

config user adgrp

Configure FSSO groups.

```
config user adgrp
  Description: Configure FSSO groups.
  edit <name>
    set connector-source {string}
    set id {integer}
    set server-name {string}
  next
end
```

config user adgrp

Parameter	Description	Type	Size	Default
connector-source	FSSO connector source.	string	Maximum length: 35	
id	Group ID. Read-only.	integer	Minimum value: 0 Maximum value: 4294967295	
name	Name.	string	Maximum length: 511	
server-name	FSSO agent name.	string	Maximum length: 35	

config user certificate

Configure certificate users.

```
config user certificate
  Description: Configure certificate users.
  edit <name>
    set common-name {string}
    set id {integer}
    set issuer {string}
    set status [enable|disable]
    set type [single-certificate|trusted-issuer]
  next
end
```

config user certificate

Parameter	Description	Type	Size	Default
common-name	Certificate common name.	string	Maximum length: 64	
id	User ID. Read-only.	integer	Minimum value: 0 Maximum value: 4294967295	
issuer	CA certificate used for client certificate verification.	string	Maximum length: 79	

Parameter	Description	Type	Size	Default						
name	User name.	string	Maximum length: 64							
status	Enable/disable allowing the certificate user to authenticate with the FortiGate unit.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable user.</td></tr><tr><td><i>disable</i></td><td>Disable user.</td></tr></table>	Option	Description	<i>enable</i>	Enable user.	<i>disable</i>	Disable user.			
Option	Description									
<i>enable</i>	Enable user.									
<i>disable</i>	Disable user.									
type	Type of certificate authentication method.	option	-	single-certificate						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>single-certificate</i></td><td>Single certificate.</td></tr><tr><td><i>trusted-issuer</i></td><td>Trusted CA issuer.</td></tr></table>	Option	Description	<i>single-certificate</i>	Single certificate.	<i>trusted-issuer</i>	Trusted CA issuer.			
Option	Description									
<i>single-certificate</i>	Single certificate.									
<i>trusted-issuer</i>	Trusted CA issuer.									

config user domain-controller

Configure domain controller entries.

```
config user domain-controller
  Description: Configure domain controller entries.
  edit <name>
    set ad-mode [none|ds|...]
    set adlds-dn {string}
    set adlds-ip-address {ipv4-address}
    set adlds-ip6 {ipv6-address}
    set adlds-port {integer}
    set change-detection [enable|disable]
    set change-detection-period {integer}
    set dns-srv-lookup [enable|disable]
    set domain-name {string}
    config extra-server
      Description: Extra servers.
      edit <id>
        set ip-address {ipv4-address}
        set port {integer}
        set source-ip-address {ipv4-address}
        set source-port {integer}
      next
    end
    set hostname {string}
    set interface {string}
```



```

set interface-select-method [auto|sdwan|...]
set ip-address {ipv4-address}
set ip6 {ipv6-address}
set ldap-server <name1>, <name2>, ...
set password {password}
set port {integer}
set replication-port {integer}
set source-ip-address {ipv4-address}
set source-ip6 {ipv6-address}
set source-port {integer}
set username {string}
next
end

```

config user domain-controller

Parameter	Description	Type	Size	Default								
ad-mode	Set Active Directory mode.	option	-	none								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>none</i></td><td>The server is not configured as an Active Directory Domain Server (AD DS).</td></tr><tr><td><i>ds</i></td><td>The server is configured as an Active Directory Domain Server (AD DS).</td></tr><tr><td><i>lds</i></td><td>The server is an Active Directory Lightweight Domain Server (AD LDS).</td></tr></table>	Option	Description	<i>none</i>	The server is not configured as an Active Directory Domain Server (AD DS).	<i>ds</i>	The server is configured as an Active Directory Domain Server (AD DS).	<i>lds</i>	The server is an Active Directory Lightweight Domain Server (AD LDS).			
	Option	Description										
	<i>none</i>	The server is not configured as an Active Directory Domain Server (AD DS).										
	<i>ds</i>	The server is configured as an Active Directory Domain Server (AD DS).										
<i>lds</i>	The server is an Active Directory Lightweight Domain Server (AD LDS).											
adlds-dn	AD LDS distinguished name.	string	Maximum length: 255									
adlds-ip-address	AD LDS IPv4 address.	ipv4-address	Not Specified	0.0.0.0								
adlds-ip6	AD LDS IPv6 address.	ipv6-address	Not Specified	::								
adlds-port	Port number of AD LDS service (default = 389).	integer	Minimum value: 0 Maximum value: 65535	389								
change-detection	Enable/disable detection of a configuration change in the Active Directory server.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable detection of a configuration change in the Active Directory server.</td></tr></table>	Option	Description	<i>enable</i>	Enable detection of a configuration change in the Active Directory server.							
	Option	Description										
<i>enable</i>	Enable detection of a configuration change in the Active Directory server.											

Parameter	Description	Type	Size	Default								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>disable</i></td><td>Disable detection of a configuration change in the Active Directory server.</td></tr></table>	Option	Description	<i>disable</i>	Disable detection of a configuration change in the Active Directory server.							
	Option	Description										
<i>disable</i>	Disable detection of a configuration change in the Active Directory server.											
change-detection-period	Minutes to detect a configuration change in the Active Directory server (5 - 10080 minutes (7 days), default = 60).	integer	Minimum value: 5 Maximum value: 10080	60								
dns-srv-lookup	Enable/disable DNS service lookup.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable DNS service lookup.</td></tr><tr><td><i>disable</i></td><td>Disable DNS service lookup.</td></tr></table>	Option	Description	<i>enable</i>	Enable DNS service lookup.	<i>disable</i>	Disable DNS service lookup.					
	Option	Description										
	<i>enable</i>	Enable DNS service lookup.										
<i>disable</i>	Disable DNS service lookup.											
domain-name	Domain DNS name.	string	Maximum length: 255									
hostname	Hostname of the server to connect to.	string	Maximum length: 255									
interface	Specify outgoing interface to reach server.	string	Maximum length: 15									
interface-select-method	Specify how to select outgoing interface to reach server.	option	-	auto								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>auto</i></td><td>Set outgoing interface automatically.</td></tr><tr><td><i>sdwan</i></td><td>Set outgoing interface by SD-WAN or policy routing rules.</td></tr><tr><td><i>specify</i></td><td>Set outgoing interface manually.</td></tr></table>	Option	Description	<i>auto</i>	Set outgoing interface automatically.	<i>sdwan</i>	Set outgoing interface by SD-WAN or policy routing rules.	<i>specify</i>	Set outgoing interface manually.			
	Option	Description										
	<i>auto</i>	Set outgoing interface automatically.										
	<i>sdwan</i>	Set outgoing interface by SD-WAN or policy routing rules.										
<i>specify</i>	Set outgoing interface manually.											
ip-address	Domain controller IPv4 address.	ipv4-address	Not Specified	0.0.0.0								
ip6	Domain controller IPv6 address.	ipv6-address	Not Specified	::								
ldap-server <name>	LDAP server name(s). LDAP server name.	string	Maximum length: 79									
name	Domain controller entry name.	string	Maximum length: 35									

Parameter	Description	Type	Size	Default
password	Password for specified username.	password	Not Specified	
port	Port to be used for communication with the domain controller (default = 445).	integer	Minimum value: 0 Maximum value: 65535	445
replication-port	Port to be used for communication with the domain controller for replication service. Port number 0 indicates automatic discovery.	integer	Minimum value: 0 Maximum value: 65535	0
source-ip-address	FortiGate IPv4 address to be used for communication with the domain controller.	ipv4-address	Not Specified	0.0.0.0
source-ip6	FortiGate IPv6 address to be used for communication with the domain controller.	ipv6-address	Not Specified	::
source-port	Source port to be used for communication with the domain controller.	integer	Minimum value: 0 Maximum value: 65535	0
username	User name to sign in with. Must have proper permissions for service.	string	Maximum length: 64	

config extra-server

Parameter	Description	Type	Size	Default
id	Server ID.	integer	Minimum value: 1 Maximum value: 100	0
ip-address	Domain controller IP address.	ipv4-address	Not Specified	0.0.0.0
port	Port to be used for communication with the domain controller (default = 445).	integer	Minimum value: 0 Maximum value: 65535	445
source-ip-address	FortiGate IPv4 address to be used for communication with the domain controller.	ipv4-address	Not Specified	0.0.0.0

Parameter	Description	Type	Size	Default
source-port	Source port to be used for communication with the domain controller.	integer	Minimum value: 0 Maximum value: 65535	0

config user exchange

Configure MS Exchange server entries.

```

config user exchange
  Description: Configure MS Exchange server entries.
  edit <name>
    set auth-level [connect|call|...]
    set auth-type [spnego|ntlm|...]
    set auto-discover-kdc [enable|disable]
    set connect-protocol [rpc-over-tcp|rpc-over-http|...]
    set domain-name {string}
    set http-auth-type [basic|ntlm]
    set ip {ipv4-address-any}
    set kdc-ip <ipv41>, <ipv42>, ...
    set password {password}
    set server-name {string}
    set ssl-min-proto-version [default|SSLv3|...]
    set username {string}
  next
end

```

config user exchange

Parameter	Description	Type	Size	Default
auth-level	Authentication security level used for the RPC protocol layer.	option	-	privacy
	Option	Description		
	connect	RPC authentication level 'connect'.		
	call	RPC authentication level 'call'.		
	packet	RPC authentication level 'packet'.		
	integrity	RPC authentication level 'integrity'.		
	privacy	RPC authentication level 'privacy'.		

Parameter	Description	Type	Size	Default								
auth-type	Authentication security type used for the RPC protocol layer.	option	-	kerberos								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>spnego</td><td>Negotiate authentication.</td></tr><tr><td>ntlm</td><td>NTLM authentication.</td></tr><tr><td>kerberos</td><td>Kerberos authentication.</td></tr></table>	Option	Description	spnego	Negotiate authentication.	ntlm	NTLM authentication.	kerberos	Kerberos authentication.			
Option	Description											
spnego	Negotiate authentication.											
ntlm	NTLM authentication.											
kerberos	Kerberos authentication.											
auto-discover-kdc	Enable/disable automatic discovery of KDC IP addresses.	option	-	enable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable automatic discovery of KDC IP addresses.</td></tr><tr><td>disable</td><td>Disable automatic discovery of KDC IP addresses.</td></tr></table>	Option	Description	enable	Enable automatic discovery of KDC IP addresses.	disable	Disable automatic discovery of KDC IP addresses.					
Option	Description											
enable	Enable automatic discovery of KDC IP addresses.											
disable	Disable automatic discovery of KDC IP addresses.											
connect-protocol	Connection protocol used to connect to MS Exchange service.	option	-	rpc-over-https								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>rpc-over-tcp</td><td>Connect using RPC-over-TCP. Use for MS Exchange 2010 and earlier versions. Supported in MS Exchange 2013.</td></tr><tr><td>rpc-over-http</td><td>Connect using RPC-over-HTTP. Use for MS Exchange 2016 and later versions. Supported in MS Exchange 2013.</td></tr><tr><td>rpc-over-https</td><td>Connect using RPC-over-HTTPS. Use for MS Exchange 2016 and later versions. Supported in MS Exchange 2013.</td></tr></table>	Option	Description	rpc-over-tcp	Connect using RPC-over-TCP. Use for MS Exchange 2010 and earlier versions. Supported in MS Exchange 2013.	rpc-over-http	Connect using RPC-over-HTTP. Use for MS Exchange 2016 and later versions. Supported in MS Exchange 2013.	rpc-over-https	Connect using RPC-over-HTTPS. Use for MS Exchange 2016 and later versions. Supported in MS Exchange 2013.			
Option	Description											
rpc-over-tcp	Connect using RPC-over-TCP. Use for MS Exchange 2010 and earlier versions. Supported in MS Exchange 2013.											
rpc-over-http	Connect using RPC-over-HTTP. Use for MS Exchange 2016 and later versions. Supported in MS Exchange 2013.											
rpc-over-https	Connect using RPC-over-HTTPS. Use for MS Exchange 2016 and later versions. Supported in MS Exchange 2013.											
domain-name	MS Exchange server fully qualified domain name.	string	Maximum length: 79									
http-auth-type	Authentication security type used for the HTTP transport.	option	-	ntlm								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>basic</td><td>Basic HTTP authentication.</td></tr><tr><td>ntlm</td><td>NTLM HTTP authentication.</td></tr></table>	Option	Description	basic	Basic HTTP authentication.	ntlm	NTLM HTTP authentication.					
Option	Description											
basic	Basic HTTP authentication.											
ntlm	NTLM HTTP authentication.											
ip	Server IPv4 address.	ipv4-address-any	Not Specified	0.0.0.0								
kdc-ip <ipv4>	KDC IPv4 addresses for Kerberos authentication. KDC IPv4 addresses for Kerberos authentication.	string	Maximum length: 79									

Parameter	Description	Type	Size	Default												
name	MS Exchange server entry name.	string	Maximum length: 35													
password	Password for the specified username.	password	Not Specified													
server-name	MS Exchange server hostname.	string	Maximum length: 63													
ssl-min-proto-version	Minimum SSL/TLS protocol version for HTTPS transport (default is to follow system global setting).	option	-	default												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>default</td><td>Follow system global setting.</td></tr><tr><td>SSLv3</td><td>SSLv3.</td></tr><tr><td>TLSv1</td><td>TLSv1.</td></tr><tr><td>TLSv1-1</td><td>TLSv1.1.</td></tr><tr><td>TLSv1-2</td><td>TLSv1.2.</td></tr></table>				Option	Description	default	Follow system global setting.	SSLv3	SSLv3.	TLSv1	TLSv1.	TLSv1-1	TLSv1.1.	TLSv1-2	TLSv1.2.
	Option	Description														
	default	Follow system global setting.														
	SSLv3	SSLv3.														
	TLSv1	TLSv1.														
	TLSv1-1	TLSv1.1.														
TLSv1-2	TLSv1.2.															
username	User name used to sign in to the server. Must have proper permissions for service.	string	Maximum length: 64													

config user external-identity-provider

Configure external identity provider.

```

config user external-identity-provider
  Description: Configure external identity provider.
  edit <name>
    set group-attr-name {string}
    set interface {string}
    set interface-select-method [auto|sdwan|...]
    set port {integer}
    set server-identity-check [disable|enable]
    set source-ip {string}
    set timeout {integer}
    set type {option}
    set url {string}
    set user-attr-name {string}
    set version [v1.0|beta]
  next
end

```

config user external-identity-provider

Parameter	Description	Type	Size	Default								
group-attr-name	Group attribute name in authentication query.	string	Maximum length: 63	id								
interface	Specify outgoing interface to reach server.	string	Maximum length: 15									
interface-select-method	Specify how to select outgoing interface to reach server.	option	-	auto								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>auto</td><td>Set outgoing interface automatically.</td></tr><tr><td>sdwan</td><td>Set outgoing interface by SD-WAN or policy routing rules.</td></tr><tr><td>specify</td><td>Set outgoing interface manually.</td></tr></table>				Option	Description	auto	Set outgoing interface automatically.	sdwan	Set outgoing interface by SD-WAN or policy routing rules.	specify	Set outgoing interface manually.
Option	Description											
auto	Set outgoing interface automatically.											
sdwan	Set outgoing interface by SD-WAN or policy routing rules.											
specify	Set outgoing interface manually.											
name	External identity provider name.	string	Maximum length: 35									
port	External identity provider service port number (0 to use default).	integer	Minimum value: 0 Maximum value: 65535	0								
server-identity-check	Enable/disable server's identity check against its certificate and subject alternative name(s).	option	-	enable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Do not check server's identity against its certificate and subject alternative name(s).</td></tr><tr><td>enable</td><td>Check server's identity against its certificate and subject alternative name(s).</td></tr></table>				Option	Description	disable	Do not check server's identity against its certificate and subject alternative name(s).	enable	Check server's identity against its certificate and subject alternative name(s).		
Option	Description											
disable	Do not check server's identity against its certificate and subject alternative name(s).											
enable	Check server's identity against its certificate and subject alternative name(s).											
source-ip	Use this IPv4/v6 address to connect to the external identity provider.	string	Maximum length: 63									
timeout	Connection timeout value in seconds (default=5).	integer	Minimum value: 1 Maximum value: 60	5								
type	External identity provider type.	option	-									

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>ms-graph</i>	Microsoft Graph server.		
url	External identity provider URL (e.g. "https://example.com:8080/api/v1"). Read-only.	string	Maximum length: 127	
user-attr-name	User attribute name in authentication query.	string	Maximum length: 63	userPrincipalName
version	External identity API version.	option	-	
	Option	Description		
	<i>v1.0</i>	MS Graph REST API v1.0.		
	<i>beta</i>	MS Graph REST API beta (debug build only).		

config user fortitoken

Configure FortiToken.

```

config user fortitoken
    Description: Configure FortiToken.
    edit <serial-number>
        set activation-code {string}
        set activation-expire {integer}
        set comments {var-string}
        set license {string}
        set os-ver {string}
        set reg-id {string}
        set seed {string}
        set status [active|lock]
    next
end

```

config user fortitoken

Parameter	Description	Type	Size	Default
activation-code	Mobile token user activation-code.	string	Maximum length: 32	

Parameter	Description	Type	Size	Default
activation-expire	Mobile token user activation-code expire time.	integer	Minimum value: 0 Maximum value: 4294967295	0
comments	Comment.	var-string	Maximum length: 255	
license	Mobile token license.	string	Maximum length: 31	
os-ver	Device Mobile Version.	string	Maximum length: 15	
reg-id	Device Reg ID.	string	Maximum length: 256	
seed	Token seed.	string	Maximum length: 200	
serial-number	Serial number.	string	Maximum length: 16	
status	Status.	option	-	active
	Option	Description		
	active	Activate FortiToken.		
	lock	Lock FortiToken.		

config user fsso

Configure Fortinet Single Sign On (FSSO) agents.

```
config user fsso
  Description: Configure Fortinet Single Sign On (FSSO) agents.
  edit <name>
    set group-poll-interval {integer}
    set interface {string}
    set interface-select-method [auto|sdwan|...]
    set ldap-poll [enable|disable]
    set ldap-poll-filter {string}
    set ldap-poll-interval {integer}
    set ldap-server {string}
    set logon-timeout {integer}
    set password {password}
    set password2 {password}
    set password3 {password}
    set password4 {password}
    set password5 {password}
```

```

set port {integer}
set port2 {integer}
set port3 {integer}
set port4 {integer}
set port5 {integer}
set server {string}
set server2 {string}
set server3 {string}
set server4 {string}
set server5 {string}
set sni {string}
set source-ip {ipv4-address}
set source-ip6 {ipv6-address}
set ssl [enable|disable]
set ssl-server-host-ip-check [enable|disable]
set ssl-trusted-cert {string}
set type [default|fortinac]
set user-info-server {string}

next
end

```

config user fsso

Parameter	Description	Type	Size	Default								
group-poll-interval	Interval in minutes within to fetch groups from FSSO server, or unset to disable.	integer	Minimum value: 1 Maximum value: 2880	0								
interface	Specify outgoing interface to reach server.	string	Maximum length: 15									
interface-select-method	Specify how to select outgoing interface to reach server.	option	-	auto								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>auto</td><td>Set outgoing interface automatically.</td></tr><tr><td>sdwan</td><td>Set outgoing interface by SD-WAN or policy routing rules.</td></tr><tr><td>specify</td><td>Set outgoing interface manually.</td></tr></table>				Option	Description	auto	Set outgoing interface automatically.	sdwan	Set outgoing interface by SD-WAN or policy routing rules.	specify	Set outgoing interface manually.
Option	Description											
auto	Set outgoing interface automatically.											
sdwan	Set outgoing interface by SD-WAN or policy routing rules.											
specify	Set outgoing interface manually.											
ldap-poll	Enable/disable automatic fetching of groups from LDAP server.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable automatic fetching of groups from LDAP server.</td></tr></table>				Option	Description	enable	Enable automatic fetching of groups from LDAP server.				
Option	Description											
enable	Enable automatic fetching of groups from LDAP server.											

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>disable</i>	Disable automatic fetching of groups from LDAP server.		
ldap-poll-filter	Filter used to fetch groups.	string	Maximum length: 2047	(objectCategory=group)
ldap-poll-interval	Interval in minutes within to fetch groups from LDAP server.	integer	Minimum value: 1 Maximum value: 2880	180
ldap-server	LDAP server to get group information.	string	Maximum length: 35	
logon-timeout	Interval in minutes to keep logons after FSSO server down.	integer	Minimum value: 1 Maximum value: 2880	5
name	Name.	string	Maximum length: 35	
password	Password of the first FSSO collector agent.	password	Not Specified	
password2	Password of the second FSSO collector agent.	password	Not Specified	
password3	Password of the third FSSO collector agent.	password	Not Specified	
password4	Password of the fourth FSSO collector agent.	password	Not Specified	
password5	Password of the fifth FSSO collector agent.	password	Not Specified	
port	Port of the first FSSO collector agent.	integer	Minimum value: 1 Maximum value: 65535	8000
port2	Port of the second FSSO collector agent.	integer	Minimum value: 1 Maximum value: 65535	8000

Parameter	Description	Type	Size	Default						
port3	Port of the third FSSO collector agent.	integer	Minimum value: 1 Maximum value: 65535	8000						
port4	Port of the fourth FSSO collector agent.	integer	Minimum value: 1 Maximum value: 65535	8000						
port5	Port of the fifth FSSO collector agent.	integer	Minimum value: 1 Maximum value: 65535	8000						
server	Domain name or IP address of the first FSSO collector agent.	string	Maximum length: 63							
server2	Domain name or IP address of the second FSSO collector agent.	string	Maximum length: 63							
server3	Domain name or IP address of the third FSSO collector agent.	string	Maximum length: 63							
server4	Domain name or IP address of the fourth FSSO collector agent.	string	Maximum length: 63							
server5	Domain name or IP address of the fifth FSSO collector agent.	string	Maximum length: 63							
sni	Server Name Indication.	string	Maximum length: 255							
source-ip	Source IP for communications to FSSO agent.	ipv4-address	Not Specified	0.0.0.0						
source-ip6	IPv6 source for communications to FSSO agent.	ipv6-address	Not Specified	::						
ssl	Enable/disable use of SSL.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable use of SSL.</td></tr><tr><td>disable</td><td>Disable use of SSL.</td></tr></table>				Option	Description	enable	Enable use of SSL.	disable	Disable use of SSL.
	Option	Description								
	enable	Enable use of SSL.								
disable	Disable use of SSL.									
ssl-server-host-ip-check	Enable/disable server host/IP verification.	option	-	disable						

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>enable</i>	Enable server host/IP verification.		
	<i>disable</i>	Disable server host/IP verification.		
ssl-trusted-cert	Trusted server certificate or CA certificate.	string	Maximum length: 79	
type	Server type.	option	-	default
	Option	Description		
	<i>default</i>	All other unspecified types of servers.		
	<i>fortinac</i>	FortiNAC server.		
user-info-server	LDAP server to get user information.	string	Maximum length: 35	

config user fsso-polling

Configure FSSO active directory servers for polling mode.

```

config user fsso-polling
  Description: Configure FSSO active directory servers for polling mode.
  edit <id>
    config adgrp
      Description: LDAP Group Info.
      edit <name>
        next
      end
      set default-domain {string}
      set ldap-server {string}
      set logon-history {integer}
      set password {password}
      set polling-frequency {integer}
      set port {integer}
      set server {string}
      set smb-ntlmv1-auth [enable|disable]
      set smbv1 [enable|disable]
      set status [enable|disable]
      set user {string}
    next
  end

```

config user fsso-polling

Parameter	Description	Type	Size	Default
default-domain	Default domain managed by this Active Directory server.	string	Maximum length: 35	
id	Active Directory server ID.	integer	Minimum value: 0 Maximum value: 4294967295	
ldap-server	LDAP server name used in LDAP connection strings.	string	Maximum length: 35	
logon-history	Number of hours of logon history to keep, 0 means keep all history.	integer	Minimum value: 0 Maximum value: 48	8
password	Password required to log into this Active Directory server.	password	Not Specified	
polling-frequency	Polling frequency (every 1 to 30 seconds).	integer	Minimum value: 1 Maximum value: 30	10
port	Port to communicate with this Active Directory server.	integer	Minimum value: 0 Maximum value: 65535	0
server	Host name or IP address of the Active Directory server.	string	Maximum length: 63	
smb-ntlmv1-auth	Enable/disable support of NTLMv1 for Samba authentication.	option	-	disable
	Option		Description	
	<i>enable</i>		Enable support of NTLMv1 for Samba authentication.	
	<i>disable</i>		Disable support of NTLMv1 for Samba authentication.	
smbv1	Enable/disable support of SMBv1 for Samba.	option	-	disable
	Option		Description	
	<i>enable</i>		Enable support of SMBv1 for Samba.	
	<i>disable</i>		Disable support of SMBv1 for Samba.	
status	Enable/disable polling for the status of this Active Directory server.	option	-	enable

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		
user	User name required to log into this Active Directory server.	string	Maximum length: 35	

config adgrp

Parameter	Description	Type	Size	Default
name	Name.	string	Maximum length: 511	

config user group

Configure user groups.

```

config user group
  Description: Configure user groups.
  edit <name>
    set auth-concurrent-override [enable|disable]
    set auth-concurrent-value {integer}
    set authtimeout {integer}
    set company [optional|mandatory|...]
    set email [disable|enable]
    set expire {integer}
    set expire-type [immediately|first-successful-login]
    set group-type [firewall|fsso-service|...]
  config guest
    Description: Guest User.
    edit <id>
      set comment {var-string}
      set company {string}
      set email {string}
      set expiration {user}
      set mobile-phone {string}
      set name {string}
      set password {password}
      set sponsor {string}
      set user-id {string}
    next
  end
  set http-digest-realm {string}
  set id {integer}
config match

```

```

Description: Group matches.
edit <id>
    set group-name {string}
    set server-name {string}
next
end
set max-accounts {integer}
set member <name1>, <name2>, ...
set mobile-phone [disable|enable]
set multiple-guest-add [disable|enable]
set password [auto-generate|specify|...]
set sms-custom-server {string}
set sms-server [fortiguard|custom]
set sponsor [optional|mandatory|...]
set sso-attribute-value {string}
set user-id [email|auto-generate|...]
set user-name [disable|enable]
next
end

```

config user group

Parameter	Description	Type	Size	Default
auth-concurrent-override	Enable/disable overriding the global number of concurrent authentication sessions for this user group.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable auth-concurrent-override.		
	<i>disable</i>	Disable auth-concurrent-override.		
auth-concurrent-value	Maximum number of concurrent authenticated connections per user (0 - 100).	integer	Minimum value: 0 0 Maximum value: 100	
authtimeout	Authentication timeout in minutes for this user group. 0 to use the global user setting auth-timeout.	integer	Minimum value: 0 0 Maximum value: 43200	
company	Set the action for the company guest user field.	option	-	optional
	Option	Description		
	<i>optional</i>	Optional.		
	<i>mandatory</i>	Mandatory.		
	<i>disabled</i>	Disabled.		

Parameter	Description	Type	Size	Default										
email	Enable/disable the guest user email address field.	option	-	enable										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>disable</i></td><td>Disable setting.</td></tr><tr><td><i>enable</i></td><td>Enable setting.</td></tr></table>	Option	Description	<i>disable</i>	Disable setting.	<i>enable</i>	Enable setting.							
Option	Description													
<i>disable</i>	Disable setting.													
<i>enable</i>	Enable setting.													
expire	Time in seconds before guest user accounts expire (1 - 31536000).	integer	Minimum value: 1 Maximum value: 31536000	14400										
expire-type	Determine when the expiration countdown begins.	option	-	immediately										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>immediately</i></td><td>Immediately.</td></tr><tr><td><i>first-successful-login</i></td><td>First successful login.</td></tr></table>	Option	Description	<i>immediately</i>	Immediately.	<i>first-successful-login</i>	First successful login.							
Option	Description													
<i>immediately</i>	Immediately.													
<i>first-successful-login</i>	First successful login.													
group-type	Set the group to be for firewall authentication, FSSO, RSSO, or guest users.	option	-	firewall										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>firewall</i></td><td>Firewall.</td></tr><tr><td><i>fsso-service</i></td><td>Fortinet Single Sign-On Service.</td></tr><tr><td><i>rsso</i></td><td>RADIUS based Single Sign-On Service.</td></tr><tr><td><i>guest</i></td><td>Guest.</td></tr></table>	Option	Description	<i>firewall</i>	Firewall.	<i>fsso-service</i>	Fortinet Single Sign-On Service.	<i>rsso</i>	RADIUS based Single Sign-On Service.	<i>guest</i>	Guest.			
Option	Description													
<i>firewall</i>	Firewall.													
<i>fsso-service</i>	Fortinet Single Sign-On Service.													
<i>rsso</i>	RADIUS based Single Sign-On Service.													
<i>guest</i>	Guest.													
http-digest-realm	Realm attribute for MD5-digest authentication.	string	Maximum length: 35											
id	Group ID. Read-only.	integer	Minimum value: 0 Maximum value: 4294967295	0										
max-accounts	Maximum number of guest accounts that can be created for this group (0 means unlimited).	integer	Minimum value: 0 Maximum value: 1024 **	0										
member <name>	Names of users, peers, LDAP servers, RADIUS servers or external idp servers to add to the user group.	string	Maximum length: 511											

Parameter	Description	Type	Size	Default								
	Group member name.											
mobile-phone	Enable/disable the guest user mobile phone number field.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>disable</i></td><td>Disable setting.</td></tr><tr><td><i>enable</i></td><td>Enable setting.</td></tr></table>	Option	Description	<i>disable</i>	Disable setting.	<i>enable</i>	Enable setting.					
Option	Description											
<i>disable</i>	Disable setting.											
<i>enable</i>	Enable setting.											
multiple-guest-add	Enable/disable addition of multiple guests.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>disable</i></td><td>Disable setting.</td></tr><tr><td><i>enable</i></td><td>Enable setting.</td></tr></table>	Option	Description	<i>disable</i>	Disable setting.	<i>enable</i>	Enable setting.					
Option	Description											
<i>disable</i>	Disable setting.											
<i>enable</i>	Enable setting.											
name	Group name.	string	Maximum length: 35									
password	Guest user password type.	option	-	auto-generate								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>auto-generate</i></td><td>Automatically generate.</td></tr><tr><td><i>specify</i></td><td>Specify.</td></tr><tr><td><i>disable</i></td><td>Disable.</td></tr></table>	Option	Description	<i>auto-generate</i>	Automatically generate.	<i>specify</i>	Specify.	<i>disable</i>	Disable.			
Option	Description											
<i>auto-generate</i>	Automatically generate.											
<i>specify</i>	Specify.											
<i>disable</i>	Disable.											
sms-custom-server	SMS server.	string	Maximum length: 35									
sms-server	Send SMS through FortiGuard or other external server.	option	-	fortiguard								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>fortiguard</i></td><td>Send SMS by FortiGuard.</td></tr><tr><td><i>custom</i></td><td>Send SMS by custom server.</td></tr></table>	Option	Description	<i>fortiguard</i>	Send SMS by FortiGuard.	<i>custom</i>	Send SMS by custom server.					
Option	Description											
<i>fortiguard</i>	Send SMS by FortiGuard.											
<i>custom</i>	Send SMS by custom server.											
sponsor	Set the action for the sponsor guest user field.	option	-	optional								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>optional</i></td><td>Optional.</td></tr><tr><td><i>mandatory</i></td><td>Mandatory.</td></tr><tr><td><i>disabled</i></td><td>Disabled.</td></tr></table>	Option	Description	<i>optional</i>	Optional.	<i>mandatory</i>	Mandatory.	<i>disabled</i>	Disabled.			
Option	Description											
<i>optional</i>	Optional.											
<i>mandatory</i>	Mandatory.											
<i>disabled</i>	Disabled.											

Parameter	Description	Type	Size	Default
sso-attribute-value	Name of the RADIUS user group that this local user group represents.	string	Maximum length: 511	
user-id	Guest user ID type.	option	-	email
	Option	Description		
	<i>email</i>	Email address.		
	<i>auto-generate</i>	Automatically generate.		
	<i>specify</i>	Specify.		
user-name	Enable/disable the guest user name entry.	option	-	disable
	Option	Description		
	<i>disable</i>	Disable setting.		
	<i>enable</i>	Enable setting.		

** Values may differ between models.

config guest

Parameter	Description	Type	Size	Default
comment	Comment.	var-string	Maximum length: 255	
company	Set the action for the company guest user field.	string	Maximum length: 35	
email	Email.	string	Maximum length: 64	
expiration	Expire time.	user	Not Specified	
id	Guest ID.	integer	Minimum value: 0 0 Maximum value: 4294967295	
mobile-phone	Mobile phone.	string	Maximum length: 35	
name	Guest name.	string	Maximum length: 64	
password	Guest password.	password	Not Specified	
sponsor	Set the action for the sponsor guest user field.	string	Maximum length: 35	

Parameter	Description	Type	Size	Default
user-id	Guest ID.	string	Maximum length: 64	

config match

Parameter	Description	Type	Size	Default
group-name	Name of matching user or group on remote authentication server.	string	Maximum length: 511	
id	ID.	integer	Minimum value: 0 Maximum value: 4294967295	
server-name	Name of remote auth server.	string	Maximum length: 35	

config user krb-keytab

Configure Kerberos keytab entries.

```
config user krb-keytab
  Description: Configure Kerberos keytab entries.
  edit <name>
    set keytab {string}
    set ldap-server <name1>, <name2>, ...
    set pac-data [enable|disable]
    set principal {string}
  next
end
```

config user krb-keytab

Parameter	Description	Type	Size	Default
keytab	Base64 coded keytab file containing a pre-shared key.	string	Maximum length: 8191	
ldap-server <name>	LDAP server name(s). LDAP server name.	string	Maximum length: 79	
name	Kerberos keytab entry name.	string	Maximum length: 35	
pac-data	Enable/disable parsing PAC data in the ticket.	option	-	enable

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>enable</i>	Enable parsing PAC data in the ticket.		
	<i>disable</i>	Disable parsing PAC data in the ticket.		
principal	Kerberos service principal. For example, HTTP/myfgt.example.com@example.com.	string	Maximum length: 511	

config user ldap

Configure LDAP server entries.

```

config user ldap
  Description: Configure LDAP server entries.
  edit <name>
    set account-key-filter {string}
    set account-key-processing [same|strip]
    set account-key-upn-san [othername|rfc822name|...]
    set antiphish [enable|disable]
    set ca-cert {string}
    set client-cert {string}
    set client-cert-auth [enable|disable]
    set cnid {string}
    set dn {string}
    set group-filter {string}
    set group-member-check [user-attr|group-object|...]
    set group-object-filter {string}
    set group-search-base {string}
    set interface {string}
    set interface-select-method [auto|sdwan|...]
    set member-attr {string}
    set obtain-user-info [enable|disable]
    set password {password}
    set password-attr {string}
    set password-expiry-warning [enable|disable]
    set password-renewal [enable|disable]
    set port {integer}
    set search-type {option1}, {option2}, ...
    set secondary-server {string}
    set secure [disable|starttls|...]
    set server {string}
    set server-identity-check [enable|disable]
    set source-ip {string}
    set source-port {integer}
    set ssl-min-proto-version [default|SSLv3|...]
    set tertiary-server {string}
    set two-factor [disable|fortitoken-cloud]
    set two-factor-authentication [fortitoken|email|...]

```

```

set two-factor-filter {string}
set two-factor-notification [email|sms]
set type [simple|anonymous|...]
set user-info-exchange-server {string}
set username {string}
next
end

```

config user ldap

Parameter	Description	Type	Size	Default								
account-key-filter	Account key filter, using the UPN as the search filter.	string	Maximum length: 2047	(&(userPrincipalName=%s)(!(UserAccountControl:1.2.840.113556.1.4.803:=2)))								
account-key-processing	Account key processing operation, either keep or strip domain string of UPN in the token.	option	-	same								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>same</td><td>Same as UPN.</td></tr><tr><td>strip</td><td>Strip domain string from UPN.</td></tr></table>	Option	Description	same	Same as UPN.	strip	Strip domain string from UPN.					
Option	Description											
same	Same as UPN.											
strip	Strip domain string from UPN.											
account-key-upn-san	Define SAN in certificate for user principle name matching.	option	-	othername								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>othername</td><td>Other name in SAN.</td></tr><tr><td>rfc822name</td><td>RFC822 Email address in SAN.</td></tr><tr><td>dnsname</td><td>DNS name in SAN.</td></tr></table>	Option	Description	othername	Other name in SAN.	rfc822name	RFC822 Email address in SAN.	dnsname	DNS name in SAN.			
Option	Description											
othername	Other name in SAN.											
rfc822name	RFC822 Email address in SAN.											
dnsname	DNS name in SAN.											
antiphish	Enable/disable AntiPhishing credential backend.	option	-	disable								

Parameter	Description	Type	Size	Default
	Option	Description		
	enable	Enable AntiPhishing credential backend.		
	disable	Disable AntiPhishing credential backend.		
ca-cert	CA certificate name.	string	Maximum length: 79	
client-cert	Client certificate name.	string	Maximum length: 79	
client-cert-auth	Enable/disable using client certificate for TLS authentication.	option	-	disable
	Option	Description		
	enable	Enable using client certificate for TLS authentication.		
	disable	Disable using client certificate for TLS authentication.		
cnid	Common name identifier for the LDAP server. The common name identifier for most LDAP servers is "cn".	string	Maximum length: 20	cn
dn	Distinguished name used to look up entries on the LDAP server.	string	Maximum length: 511	
group-filter	Filter used for group matching.	string	Maximum length: 2047	
group-member-check	Group member checking methods.	option	-	user-attr

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>user-attr</i>	User attribute checking.		
	<i>group-object</i>	Group object checking.		
	<i>posix-group-object</i>	POSIX group object checking.		
group-object-filter	Filter used for group searching.	string	Maximum length: 2047	(&(objectcategory=group)(member=*))
group-search-base	Search base used for group searching.	string	Maximum length: 511	
interface	Specify outgoing interface to reach server.	string	Maximum length: 15	
interface-select-method	Specify how to select outgoing interface to reach server.	option	-	auto
	Option	Description		
	<i>auto</i>	Set outgoing interface automatically.		
	<i>sdwan</i>	Set outgoing interface by SD-WAN or policy routing rules.		
	<i>specify</i>	Set outgoing interface manually.		
member-attr	Name of attribute from which to get group membership.	string	Maximum length: 63	memberOf
name	LDAP server entry name.	string	Maximum length: 35	
obtain-user-info	Enable/disable obtaining of user information.	option	-	enable

Parameter	Description	Type	Size	Default
	Option	Description		
	enable	Enable obtaining of user information.		
	disable	Disable obtaining of user information.		
password	Password for initial binding.	password	Not Specified	
password-attr	Name of attribute to get password hash.	string	Maximum length: 35	userPassword
password-expiry-warning	Enable/disable password expiry warnings.	option	-	disable
	Option	Description		
	enable	Enable password expiry warnings.		
	disable	Disable password expiry warnings.		
password-renewal	Enable/disable online password renewal.	option	-	disable
	Option	Description		
	enable	Enable online password renewal.		
	disable	Disable online password renewal.		
port	Port to be used for communication with the LDAP server (default = 389).	integer	Minimum value: 1 Maximum value: 65535	389
search-type	Search type.	option	-	
	Option	Description		
	recursive	Recursively retrieve the user-group chain information of a user in a particular Microsoft AD domain.		

Parameter	Description	Type	Size	Default								
secondary-server	Secondary LDAP server CN domain name or IP.	string	Maximum length: 63									
secure	Port to be used for authentication.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>No SSL.</td></tr><tr><td>starttls</td><td>Use StartTLS.</td></tr><tr><td>ldaps</td><td>Use LDAPS.</td></tr></table>	Option	Description	disable	No SSL.	starttls	Use StartTLS.	ldaps	Use LDAPS.			
Option	Description											
disable	No SSL.											
starttls	Use StartTLS.											
ldaps	Use LDAPS.											
server	LDAP server CN domain name or IP.	string	Maximum length: 63									
server-identity-check	Enable/disable LDAP server identity check (verify server domain name/IP address against the server certificate).	option	-	enable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable server identity check.</td></tr><tr><td>disable</td><td>Disable server identity check.</td></tr></table>	Option	Description	enable	Enable server identity check.	disable	Disable server identity check.					
Option	Description											
enable	Enable server identity check.											
disable	Disable server identity check.											
source-ip	FortiGate IP address to be used for communication with the LDAP server.	string	Maximum length: 63									
source-port	Source port to be used for communication with the LDAP server.	integer	Minimum value: 0 Maximum value: 65535	0								

Parameter	Description	Type	Size	Default												
ssl-min-protocol-version	Minimum supported protocol version for SSL/TLS connections (default is to follow system global setting).	option	-	default												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>default</td><td>Follow system global setting.</td></tr><tr><td>SSLv3</td><td>SSLv3.</td></tr><tr><td>TLSv1</td><td>TLSv1.</td></tr><tr><td>TLSv1-1</td><td>TLSv1.1.</td></tr><tr><td>TLSv1-2</td><td>TLSv1.2.</td></tr></table>	Option	Description	default	Follow system global setting.	SSLv3	SSLv3.	TLSv1	TLSv1.	TLSv1-1	TLSv1.1.	TLSv1-2	TLSv1.2.			
Option	Description															
default	Follow system global setting.															
SSLv3	SSLv3.															
TLSv1	TLSv1.															
TLSv1-1	TLSv1.1.															
TLSv1-2	TLSv1.2.															
tertiary-server	Tertiary LDAP server CN domain name or IP.	string	Maximum length: 63													
two-factor	Enable/disable two-factor authentication.	option	-	disable												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>disable two-factor authentication.</td></tr><tr><td>fortitoken-cloud</td><td>FortiToken Cloud Service.</td></tr></table>	Option	Description	disable	disable two-factor authentication.	fortitoken-cloud	FortiToken Cloud Service.									
Option	Description															
disable	disable two-factor authentication.															
fortitoken-cloud	FortiToken Cloud Service.															
two-factor-authentication	Authentication method by FortiToken Cloud.	option	-													
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>fortitoken</td><td>FortiToken authentication.</td></tr><tr><td>email</td><td>Email one time password.</td></tr><tr><td>sms</td><td>SMS one time password.</td></tr></table>	Option	Description	fortitoken	FortiToken authentication.	email	Email one time password.	sms	SMS one time password.							
Option	Description															
fortitoken	FortiToken authentication.															
email	Email one time password.															
sms	SMS one time password.															

Parameter	Description	Type	Size	Default								
two-factor-filter	Filter used to synchronize users to FortiToken Cloud.	string	Maximum length: 2047									
two-factor-notification	Notification method for user activation by FortiToken Cloud.	option	-									
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>email</td><td>Email notification for activation code.</td></tr><tr><td>sms</td><td>SMS notification for activation code.</td></tr></table>	Option	Description	email	Email notification for activation code.	sms	SMS notification for activation code.					
Option	Description											
email	Email notification for activation code.											
sms	SMS notification for activation code.											
type	Authentication type for LDAP searches.	option	-	simple								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>simple</td><td>Simple password authentication without search.</td></tr><tr><td>anonymous</td><td>Bind using anonymous user search.</td></tr><tr><td>regular</td><td>Bind using username/password and then search.</td></tr></table>	Option	Description	simple	Simple password authentication without search.	anonymous	Bind using anonymous user search.	regular	Bind using username/password and then search.			
Option	Description											
simple	Simple password authentication without search.											
anonymous	Bind using anonymous user search.											
regular	Bind using username/password and then search.											
user-info-exchange-server	MS Exchange server from which to fetch user information.	string	Maximum length: 35									
username	Username (full DN) for initial binding.	string	Maximum length: 511									

config user local

Configure local users.

```
config user local
  Description: Configure local users.
  edit <name>
    set auth-concurrent-override [enable|disable]
    set auth-concurrent-value {integer}
    set authtimeout {integer}
```

```

set email-to {string}
set fortitoken {string}
set id {integer}
set ldap-server {string}
set passwd {password}
set passwd-policy {string}
set passwd-time {user}
set ppk-identity {string}
set ppk-secret {password-3}
set radius-server {string}
set sms-custom-server {string}
set sms-phone {string}
set sms-server [fortiguard|custom]
set status [enable|disable]
set tacacs+-server {string}
set two-factor [disable|fortitoken|...]
set two-factor-authentication [fortitoken|email|...]
set two-factor-notification [email|sms]
set type [password|radius|...]
set username-sensitivity [disable|enable]
set workstation {string}
next
end

```

config user local

Parameter	Description	Type	Size	Default						
auth-concurrent-override	Enable/disable overriding the policy-auth-concurrent under config system global.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable auth-concurrent-override.</td></tr><tr><td><i>disable</i></td><td>Disable auth-concurrent-override.</td></tr></table>	Option	Description	<i>enable</i>	Enable auth-concurrent-override.	<i>disable</i>	Disable auth-concurrent-override.			
Option	Description									
<i>enable</i>	Enable auth-concurrent-override.									
<i>disable</i>	Disable auth-concurrent-override.									
auth-concurrent-value	Maximum number of concurrent logins permitted from the same user.	integer	Minimum value: 0 0 Maximum value: 100							
authtimeout	Time in minutes before the authentication timeout for a user is reached.	integer	Minimum value: 0 0 Maximum value: 1440							
email-to	Two-factor recipient's email address.	string	Maximum length: 63							
fortitoken	Two-factor recipient's FortiToken serial number.	string	Maximum length: 16							

Parameter	Description	Type	Size	Default
id	User ID. Read-only.	integer	Minimum value: 0 0 Maximum value: 4294967295	
ldap-server	Name of LDAP server with which the user must authenticate.	string	Maximum length: 35	
name	Local user name.	string	Maximum length: 64	
passwd	User's password.	password	Not Specified	
passwd-policy	Password policy to apply to this user, as defined in config user password-policy.	string	Maximum length: 35	
passwd-time	Time of the last password update.	user	Not Specified	
ppk-identity	IKEv2 Postquantum Preshared Key Identity.	string	Maximum length: 35	
ppk-secret	IKEv2 Postquantum Preshared Key (ASCII string or hexadecimal encoded with a leading 0x).	password-3	Not Specified	
radius-server	Name of RADIUS server with which the user must authenticate.	string	Maximum length: 35	
sms-custom-server	Two-factor recipient's SMS server.	string	Maximum length: 35	
sms-phone	Two-factor recipient's mobile phone number.	string	Maximum length: 15	
sms-server	Send SMS through FortiGuard or other external server.	option	-	fortiguard
	Option Description			
	<i>fortiguard</i>	Send SMS by FortiGuard.		
	<i>custom</i>	Send SMS by custom server.		
status	Enable/disable allowing the local user to authenticate with the FortiGate unit.	option	-	enable
	Option Description			
	<i>enable</i>	Enable user.		
	<i>disable</i>	Disable user.		
tacacs+-server	Name of TACACS+ server with which the user must authenticate.	string	Maximum length: 35	

Parameter	Description	Type	Size	Default
two-factor	Enable/disable two-factor authentication.	option	-	disable
	Option	Description		
	<i>disable</i>	disable		
	<i>fortitoken</i>	FortiToken		
	<i>fortitoken-cloud</i>	FortiToken Cloud Service.		
	<i>email</i>	Email authentication code.		
	<i>sms</i>	SMS authentication code.		
two-factor-authentication	Authentication method by FortiToken Cloud.	option	-	
	Option	Description		
	<i>fortitoken</i>	FortiToken authentication.		
	<i>email</i>	Email one time password.		
	<i>sms</i>	SMS one time password.		
two-factor-notification	Notification method for user activation by FortiToken Cloud.	option	-	
	Option	Description		
	<i>email</i>	Email notification for activation code.		
	<i>sms</i>	SMS notification for activation code.		
type	Authentication method.	option	-	password
	Option	Description		
	<i>password</i>	Password authentication.		
	<i>radius</i>	RADIUS server authentication.		
	<i>tacacs+</i>	TACACS+ server authentication.		
	<i>ldap</i>	LDAP server authentication.		
username-sensitivity	Enable/disable case and accent sensitivity when performing username matching (accents are stripped and case is ignored when disabled).	option	-	enable

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>disable</i>	Ignore case and accents. Username at prompt not required to match case or accents.		
	<i>enable</i>	Do not ignore case and accents. Username at prompt must be an exact match.		
workstation	Name of the remote user workstation, if you want to limit the user to authenticate only from a particular workstation.	string	Maximum length: 35	

config user nac-policy

Configure NAC policy matching pattern to identify matching NAC devices.

```

config user nac-policy
  Description: Configure NAC policy matching pattern to identify matching NAC devices.
  edit <name>
    set category [device|firewall-user|...]
    set description {string}
    set ems-tag {string}
    set family {string}
    set firewall-address {string}
    set host {string}
    set hw-vendor {string}
    set hw-version {string}
    set mac {string}
    set os {string}
    set src {string}
    set ssid-policy {string}
    set status [enable|disable]
    set sw-version {string}
    set switch-fortilink {string}
    set switch-group <name1>, <name2>, ...
    set switch-mac-policy {string}
    set type {string}
    set user {string}
    set user-group {string}
  next
end

```


config user nac-policy

Parameter	Description	Type	Size	Default
category	Category of NAC policy.	option	-	device
	Option	Description		
	device	Device category.		
	firewall-user	Firewall user category.		
	ems-tag	EMS Tag category.		
description	Description for the NAC policy matching pattern.	string	Maximum length: 63	
ems-tag	NAC policy matching EMS tag.	string	Maximum length: 79	
family	NAC policy matching family.	string	Maximum length: 31	
firewall-address *	Dynamic firewall address to associate MAC which match this policy.	string	Maximum length: 79	
host	NAC policy matching host.	string	Maximum length: 64	
hw-vendor	NAC policy matching hardware vendor.	string	Maximum length: 15	
hw-version	NAC policy matching hardware version.	string	Maximum length: 15	
mac	NAC policy matching MAC address.	string	Maximum length: 17	
name	NAC policy name.	string	Maximum length: 63	
os	NAC policy matching operating system.	string	Maximum length: 31	
src	NAC policy matching source.	string	Maximum length: 15	
ssid-policy	SSID policy to be applied on the matched NAC policy.	string	Maximum length: 35	
status	Enable/disable NAC policy.	option	-	enable
	Option	Description		
	enable	Enable NAC policy.		
	disable	Disable NAC policy.		

Parameter	Description	Type	Size	Default
sw-version	NAC policy matching software version.	string	Maximum length: 15	
switch-fortilink *	FortiLink interface for which this NAC policy belongs to.	string	Maximum length: 15	
switch-group <name> *	List of managed FortiSwitch groups on which NAC policy can be applied. Managed FortiSwitch group name from available options.	string	Maximum length: 79	
switch-mac-policy *	Switch MAC policy action to be applied on the matched NAC policy.	string	Maximum length: 63	
type	NAC policy matching type.	string	Maximum length: 15	
user	NAC policy matching user.	string	Maximum length: 64	
user-group	NAC policy matching user group.	string	Maximum length: 35	

* This parameter may not exist in some models.

config user password-policy

Configure user password policy.

```
config user password-policy
  Description: Configure user password policy.
  edit <name>
    set expire-days {integer}
    set expired-password-renewal [enable|disable]
    set warn-days {integer}
  next
end
```

config user password-policy

Parameter	Description	Type	Size	Default
expire-days	Time in days before the user's password expires.	integer	Minimum value: 0 Maximum value: 999	180

Parameter	Description	Type	Size	Default
expired-password-renewal	Enable/disable renewal of a password that already is expired.	option	-	disable
	Option	Description		
	enable	Enable renewal of a password that already is expired.		
	disable	Disable renewal of a password that already is expired.		
name	Password policy name.	string	Maximum length: 35	
warn-days	Time in days before a password expiration warning message is displayed to the user upon login.	integer	Minimum value: 0 Maximum value: 30	15

config user peer

Configure peer users.

```

config user peer
  Description: Configure peer users.
  edit <name>
    set ca {string}
    set cn {string}
    set cn-type [string|email|...]
    set ldap-mode [password|principal-name]
    set ldap-password {password}
    set ldap-server {string}
    set ldap-username {string}
    set mandatory-ca-verify [enable|disable]
    set ocsf-override-server {string}
    set passwd {password}
    set subject {string}
    set two-factor [enable|disable]
  next
end

```

config user peer

Parameter	Description	Type	Size	Default
ca	Name of the CA certificate.	string	Maximum length: 127	

Parameter	Description	Type	Size	Default												
cn	Peer certificate common name.	string	Maximum length: 255													
cn-type	Peer certificate common name type.	option	-	string												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>string</i></td><td>Normal string.</td></tr><tr><td><i>email</i></td><td>Email address.</td></tr><tr><td><i>FQDN</i></td><td>Fully Qualified Domain Name.</td></tr><tr><td><i>ipv4</i></td><td>IPv4 address.</td></tr><tr><td><i>ipv6</i></td><td>IPv6 address.</td></tr></table>	Option	Description	<i>string</i>	Normal string.	<i>email</i>	Email address.	<i>FQDN</i>	Fully Qualified Domain Name.	<i>ipv4</i>	IPv4 address.	<i>ipv6</i>	IPv6 address.			
	Option	Description														
	<i>string</i>	Normal string.														
	<i>email</i>	Email address.														
	<i>FQDN</i>	Fully Qualified Domain Name.														
	<i>ipv4</i>	IPv4 address.														
	<i>ipv6</i>	IPv6 address.														
ldap-mode	Mode for LDAP peer authentication.	option	-	password												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>password</i></td><td>Username/password.</td></tr><tr><td><i>principal-name</i></td><td>Principal name.</td></tr></table>	Option	Description	<i>password</i>	Username/password.	<i>principal-name</i>	Principal name.									
	Option	Description														
	<i>password</i>	Username/password.														
<i>principal-name</i>	Principal name.															
ldap-password	Password for LDAP server bind.	password	Not Specified													
ldap-server	Name of an LDAP server defined under the user ldap command. Performs client access rights check.	string	Maximum length: 35													
ldap-username	Username for LDAP server bind.	string	Maximum length: 35													
mandatory-ca-verify	Determine what happens to the peer if the CA certificate is not installed. Disable to automatically consider the peer certificate as valid.	option	-	enable												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable setting.</td></tr><tr><td><i>disable</i></td><td>Disable setting.</td></tr></table>	Option	Description	<i>enable</i>	Enable setting.	<i>disable</i>	Disable setting.									
	Option	Description														
	<i>enable</i>	Enable setting.														
<i>disable</i>	Disable setting.															
name	Peer name.	string	Maximum length: 35													
ocsp-override-server	Online Certificate Status Protocol (OCSP) server for certificate retrieval.	string	Maximum length: 35													
passwd	Peer's password used for two-factor authentication.	password	Not Specified													

Parameter	Description	Type	Size	Default
subject	Peer certificate name constraints.	string	Maximum length: 255	
two-factor	Enable/disable two-factor authentication, applying certificate and password-based authentication.	option	-	disable
	Option	Description		
	enable	Enable 2-factor authentication.		
	disable	Disable 2-factor authentication.		

config user peergrp

Configure peer groups.

```
config user peergrp
  Description: Configure peer groups.
  edit <name>
    set member <name1>, <name2>, ...
  next
end
```

config user peergrp

Parameter	Description	Type	Size	Default
member <name>	Peer group members. Peer group member name.	string	Maximum length: 35	
name	Peer group name.	string	Maximum length: 35	

config user pop3

POP3 server entry configuration.

```
config user pop3
  Description: POP3 server entry configuration.
  edit <name>
    set port {integer}
    set secure [none|starttls|...]
    set server {string}
    set ssl-min-proto-version [default|SSLv3|...]
```

```
next
end
```

config user pop3

Parameter	Description	Type	Size	Default												
name	POP3 server entry name.	string	Maximum length: 35													
port	POP3 service port number.	integer	Minimum value: 0 Maximum value: 65535	0												
secure	SSL connection.	option	-	starttls												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>none</td><td>None.</td></tr><tr><td>starttls</td><td>Use StartTLS.</td></tr><tr><td>pop3s</td><td>Use POP3 over SSL.</td></tr></table>	Option	Description	none	None.	starttls	Use StartTLS.	pop3s	Use POP3 over SSL.							
Option	Description															
none	None.															
starttls	Use StartTLS.															
pop3s	Use POP3 over SSL.															
server	Server domain name or IP address.	string	Maximum length: 63													
ssl-min-proto-version	Minimum supported protocol version for SSL/TLS connections (default is to follow system global setting).	option	-	default												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>default</td><td>Follow system global setting.</td></tr><tr><td>SSLv3</td><td>SSLv3.</td></tr><tr><td>TLSv1</td><td>TLSv1.</td></tr><tr><td>TLSv1-1</td><td>TLSv1.1.</td></tr><tr><td>TLSv1-2</td><td>TLSv1.2.</td></tr></table>	Option	Description	default	Follow system global setting.	SSLv3	SSLv3.	TLSv1	TLSv1.	TLSv1-1	TLSv1.1.	TLSv1-2	TLSv1.2.			
Option	Description															
default	Follow system global setting.															
SSLv3	SSLv3.															
TLSv1	TLSv1.															
TLSv1-1	TLSv1.1.															
TLSv1-2	TLSv1.2.															

config user quarantine

Configure quarantine support.

```
config user quarantine
  Description: Configure quarantine support.
  set firewall-groups {string}
```

```

set quarantine [enable|disable]
config targets
    Description: Quarantine entry to hold multiple MACs.
    edit <entry>
        set description {string}
        config macs
            Description: Quarantine MACs.
            edit <mac>
                set description {string}
                set drop [disable|enable]
                set parent {string}
            next
        end
    next
end
set traffic-policy {string}
end

```

config user quarantine

Parameter	Description	Type	Size	Default						
firewall-groups	Firewall address group which includes all quarantine MAC address.	string	Maximum length: 79							
quarantine	Enable/disable quarantine.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable quarantine.</td></tr><tr><td><i>disable</i></td><td>Disable quarantine.</td></tr></table>				Option	Description	<i>enable</i>	Enable quarantine.	<i>disable</i>	Disable quarantine.
	Option	Description								
	<i>enable</i>	Enable quarantine.								
<i>disable</i>	Disable quarantine.									
traffic-policy *	Traffic policy for quarantined MACs.	string	Maximum length: 63							

* This parameter may not exist in some models.

config targets

Parameter	Description	Type	Size	Default
description	Description for the quarantine entry.	string	Maximum length: 63	
entry	Quarantine entry name.	string	Maximum length: 63	

config macs

Parameter	Description	Type	Size	Default
description	Description for the quarantine MAC.	string	Maximum length: 63	
drop	Enable/disable dropping of quarantined device traffic.	option	-	disable
		Option	Description	
		<i>disable</i>	Sends quarantined device traffic to FortiGate.	
		<i>enable</i>	Blocks quarantined device traffic to FortiGate.	
mac	Quarantine MAC.	mac-address	Not Specified	00:00:00:00:00:00
parent	Parent entry name. Read-only.	string	Maximum length: 63	

config user radius

Configure RADIUS server entries.

```
config user radius
  Description: Configure RADIUS server entries.
  edit <name>
    config accounting-server
      Description: Additional accounting servers.
      edit <id>
        set interface {string}
        set interface-select-method [auto|sdwan|...]
        set port {integer}
        set secret {password}
        set server {string}
        set source-ip {string}
        set status [enable|disable]
      next
    end
    set acct-all-servers [enable|disable]
    set acct-interim-interval {integer}
    set all-usergroup [disable|enable]
    set auth-type [auto|ms_chap_v2|...]
    set class <name1>, <name2>, ...
    set delimiter [plus|comma]
    set group-override-attr-type [filter-Id|class]
    set h3c-compatibility [enable|disable]
    set interface {string}
    set interface-select-method [auto|sdwan|...]
```



```

set mac-case [uppercase|lowercase]
set mac-password-delimiter [hyphen|single-hyphen|...]
set mac-username-delimiter [hyphen|single-hyphen|...]
set nas-id {string}
set nas-id-type [legacy|custom|...]
set nas-ip {ipv4-address}
set password-encoding [auto|ISO-8859-1]
set password-renewal [enable|disable]
set radius-coa [enable|disable]
set radius-port {integer}
set require-message-authenticator [enable|disable]
set rso [enable|disable]
set rso-context-timeout {integer}
set rso-endpoint-attribute [User-Name|NAS-IP-Address|...]
set rso-endpoint-block-attribute [User-Name|NAS-IP-Address|...]
set rso-ep-one-ip-only [enable|disable]
set rso-flush-ip-session [enable|disable]
set rso-log-flags {option1}, {option2}, ...
set rso-log-period {integer}
set rso-radius-response [enable|disable]
set rso-radius-server-port {integer}
set rso-secret {password}
set rso-validate-request-secret [enable|disable]
set secondary-secret {password}
set secondary-server {string}
set secret {password}
set server {string}
set source-ip {string}
set sso-attribute [User-Name|NAS-IP-Address|...]
set sso-attribute-key {string}
set sso-attribute-value-override [enable|disable]
set switch-controller-acct-fast-framedip-detect {integer}
set switch-controller-nas-ip-dynamic [enable|disable]
set switch-controller-service-type {option1}, {option2}, ...
set tertiary-secret {password}
set tertiary-server {string}
set timeout {integer}
set use-management-vdom [enable|disable]
set username-case-sensitive [enable|disable]
next
end

```

config user radius

Parameter	Description	Type	Size	Default
acct-all-servers	Enable/disable sending of accounting messages to all configured servers (default = disable).	option	-	disable

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>enable</i>	Send accounting messages to all configured servers.		
	<i>disable</i>	Send accounting message only to servers that are confirmed to be reachable.		
acct-interim-interval	Time in seconds between each accounting interim update message.	integer	Minimum value: 0 60 Maximum value: 86400	
all-usergroup	Enable/disable automatically including this RADIUS server in all user groups.	option	-	disable
	Option	Description		
	<i>disable</i>	Do not automatically include this server in a user group.		
	<i>enable</i>	Include this RADIUS server in every user group.		
auth-type	Authentication methods/protocols permitted for this RADIUS server.	option	-	auto
	Option	Description		
	<i>auto</i>	Use PAP, MSCHAP_v2, and CHAP (in that order).		
	<i>ms_chap_v2</i>	Microsoft Challenge Handshake Authentication Protocol version 2.		
	<i>ms_chap</i>	Microsoft Challenge Handshake Authentication Protocol.		
	<i>chap</i>	Challenge Handshake Authentication Protocol.		
	<i>pap</i>	Password Authentication Protocol.		
class <name>	Class attribute name(s). Class name.	string	Maximum length: 79	
delimiter	Configure delimiter to be used for separating profile group names in the SSO attribute (default = plus character "+").	option	-	plus
	Option	Description		
	<i>plus</i>	Plus character "+".		
	<i>comma</i>	Comma character ",".		
group-override-attr-type	RADIUS attribute type to override user group information.	option	-	

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>filter-Id</i>	Filter-Id		
	<i>class</i>	Class		
h3c-compatibility	Enable/disable compatibility with the H3C, a mechanism that performs security checking for authentication.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable H3C compatibility.		
	<i>disable</i>	Disable H3C compatibility.		
interface	Specify outgoing interface to reach server.	string	Maximum length: 15	
interface-select-method	Specify how to select outgoing interface to reach server.	option	-	auto
	Option	Description		
	<i>auto</i>	Set outgoing interface automatically.		
	<i>sdwan</i>	Set outgoing interface by SD-WAN or policy routing rules.		
	<i>specify</i>	Set outgoing interface manually.		
mac-case	MAC authentication case (default = lowercase).	option	-	lowercase
	Option	Description		
	<i>uppercase</i>	Use uppercase MAC.		
	<i>lowercase</i>	Use lowercase MAC.		
mac-password-delimiter	MAC authentication password delimiter (default = hyphen).	option	-	hyphen
	Option	Description		
	<i>hyphen</i>	Use hyphen as delimiter for MAC authentication password.		
	<i>single-hyphen</i>	Use single hyphen as delimiter for MAC authentication password.		
	<i>colon</i>	Use colon as delimiter for MAC authentication password.		
	<i>none</i>	No delimiter for MAC authentication password.		

Parameter	Description	Type	Size	Default
mac-username-delimiter	MAC authentication username delimiter (default = hyphen).	option	-	hyphen
	Option	Description		
	hyphen	Use hyphen as delimiter for MAC authentication username.		
	single-hyphen	Use single hyphen as delimiter for MAC authentication username.		
	colon	Use colon as delimiter for MAC authentication username.		
	none	No delimiter for MAC authentication username.		
name	RADIUS server entry name.	string	Maximum length: 35	
nas-id	Custom NAS identifier.	string	Maximum length: 255	
nas-id-type	NAS identifier type configuration (default = legacy).	option	-	legacy
	Option	Description		
	legacy	NAS-ID value is the value previously used by each daemon.		
	custom	NAS-ID value is customized.		
	hostname	NAS-ID value is hostname or HA group name if applicable.		
nas-ip	IP address used to communicate with the RADIUS server and used as NAS-IP-Address and Called-Station-ID attributes.	ipv4-address	Not Specified	0.0.0.0
password-encoding	Password encoding.	option	-	auto
	Option	Description		
	auto	Use original password encoding.		
	ISO-8859-1	Use ISO-8859-1 password encoding.		
password-renewal	Enable/disable password renewal.	option	-	enable
	Option	Description		
	enable	Enable password renewal.		
	disable	Disable password renewal.		

Parameter	Description	Type	Size	Default						
radius-coa	Enable to allow a mechanism to change the attributes of an authentication, authorization, and accounting session after it is authenticated.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable RADIUS CoA.</td></tr><tr><td>disable</td><td>Disable RADIUS CoA.</td></tr></table>	Option	Description	enable	Enable RADIUS CoA.	disable	Disable RADIUS CoA.			
Option	Description									
enable	Enable RADIUS CoA.									
disable	Disable RADIUS CoA.									
radius-port	RADIUS service port number.	integer	Minimum value: 0 0 Maximum value: 65535	0						
require-message-authenticator	Require message authenticator in authentication response.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Make the validation of message authenticator mandatory in authentication response.</td></tr><tr><td>disable</td><td>Make the validation of message authenticator optional in authentication response.</td></tr></table>	Option	Description	enable	Make the validation of message authenticator mandatory in authentication response.	disable	Make the validation of message authenticator optional in authentication response.			
Option	Description									
enable	Make the validation of message authenticator mandatory in authentication response.									
disable	Make the validation of message authenticator optional in authentication response.									
rsso	Enable/disable RADIUS based single sign on feature.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable RADIUS based single sign on feature.</td></tr><tr><td>disable</td><td>Disable RADIUS based single sign on feature.</td></tr></table>	Option	Description	enable	Enable RADIUS based single sign on feature.	disable	Disable RADIUS based single sign on feature.			
Option	Description									
enable	Enable RADIUS based single sign on feature.									
disable	Disable RADIUS based single sign on feature.									
rsso-context-timeout	Time in seconds before the logged out user is removed from the "user context list" of logged on users.	integer	Minimum value: 0 0 Maximum value: 4294967295	28800						
rsso-endpoint-attribute	RADIUS attributes used to extract the user end point identifier from the RADIUS Start record.	option	-	Calling-Station-Id						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>User-Name</td><td>Use this attribute.</td></tr><tr><td>NAS-IP-Address</td><td>Use this attribute.</td></tr></table>	Option	Description	User-Name	Use this attribute.	NAS-IP-Address	Use this attribute.			
Option	Description									
User-Name	Use this attribute.									
NAS-IP-Address	Use this attribute.									

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>Framed-IP-Address</i>	Use this attribute.		
	<i>Framed-IP-Netmask</i>	Use this attribute.		
	<i>Filter-Id</i>	Use this attribute.		
	<i>Login-IP-Host</i>	Use this attribute.		
	<i>Reply-Message</i>	Use this attribute.		
	<i>Callback-Number</i>	Use this attribute.		
	<i>Callback-Id</i>	Use this attribute.		
	<i>Framed-Route</i>	Use this attribute.		
	<i>Framed-IPX-Network</i>	Use this attribute.		
	<i>Class</i>	Use this attribute.		
	<i>Called-Station-Id</i>	Use this attribute.		
	<i>Calling-Station-Id</i>	Use this attribute.		
	<i>NAS-Identifier</i>	Use this attribute.		
	<i>Proxy-State</i>	Use this attribute.		
	<i>Login-LAT-Service</i>	Use this attribute.		
	<i>Login-LAT-Node</i>	Use this attribute.		
	<i>Login-LAT-Group</i>	Use this attribute.		
	<i>Framed-AppleTalk-Zone</i>	Use this attribute.		
	<i>Acct-Session-Id</i>	Use this attribute.		
	<i>Acct-Multi-Session-Id</i>	Use this attribute.		

Parameter	Description	Type	Size	Default
rsso-endpoint-block-attribute	RADIUS attributes used to block a user.	option	-	
	Option	Description		
	User-Name	Use this attribute.		
	NAS-IP-Address	Use this attribute.		
	Framed-IP-Address	Use this attribute.		
	Framed-IP-Netmask	Use this attribute.		
	Filter-Id	Use this attribute.		
	Login-IP-Host	Use this attribute.		
	Reply-Message	Use this attribute.		
	Callback-Number	Use this attribute.		
	Callback-Id	Use this attribute.		
	Framed-Route	Use this attribute.		
	Framed-IPX-Network	Use this attribute.		
	Class	Use this attribute.		
	Called-Station-Id	Use this attribute.		
	Calling-Station-Id	Use this attribute.		
	NAS-Identifier	Use this attribute.		
	Proxy-State	Use this attribute.		
	Login-LAT-Service	Use this attribute.		
Login-LAT-Node	Use this attribute.			
Login-LAT-Group	Use this attribute.			

Parameter	Description	Type	Size	Default								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>Framed-AppleTalk-Zone</i></td><td>Use this attribute.</td></tr><tr><td><i>Acct-Session-Id</i></td><td>Use this attribute.</td></tr><tr><td><i>Acct-Multi-Session-Id</i></td><td>Use this attribute.</td></tr></table>	Option	Description	<i>Framed-AppleTalk-Zone</i>	Use this attribute.	<i>Acct-Session-Id</i>	Use this attribute.	<i>Acct-Multi-Session-Id</i>	Use this attribute.			
	Option	Description										
	<i>Framed-AppleTalk-Zone</i>	Use this attribute.										
	<i>Acct-Session-Id</i>	Use this attribute.										
<i>Acct-Multi-Session-Id</i>	Use this attribute.											
rsso-ep-one-ip-only	Enable/disable the replacement of old IP addresses with new ones for the same endpoint on RADIUS accounting Start messages.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable replacement of old IP address with new IP address for the same endpoint on RADIUS accounting start.</td></tr><tr><td><i>disable</i></td><td>Disable replacement of old IP address with new IP address for the same endpoint on RADIUS accounting start.</td></tr></table>	Option	Description	<i>enable</i>	Enable replacement of old IP address with new IP address for the same endpoint on RADIUS accounting start.	<i>disable</i>	Disable replacement of old IP address with new IP address for the same endpoint on RADIUS accounting start.					
	Option	Description										
	<i>enable</i>	Enable replacement of old IP address with new IP address for the same endpoint on RADIUS accounting start.										
<i>disable</i>	Disable replacement of old IP address with new IP address for the same endpoint on RADIUS accounting start.											
rsso-flush-ip-session	Enable/disable flushing user IP sessions on RADIUS accounting Stop messages.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable flush user IP sessions on RADIUS accounting stop.</td></tr><tr><td><i>disable</i></td><td>Disable flush user IP sessions on RADIUS accounting stop.</td></tr></table>	Option	Description	<i>enable</i>	Enable flush user IP sessions on RADIUS accounting stop.	<i>disable</i>	Disable flush user IP sessions on RADIUS accounting stop.					
	Option	Description										
	<i>enable</i>	Enable flush user IP sessions on RADIUS accounting stop.										
<i>disable</i>	Disable flush user IP sessions on RADIUS accounting stop.											
rsso-log-flags	Events to log.	option	-	protocol-error profile-missing accounting-stop-missed accounting-event endpoint-block radiusd-other								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>protocol-error</i></td><td>Enable this log type.</td></tr><tr><td><i>profile-missing</i></td><td>Enable this log type.</td></tr></table>	Option	Description	<i>protocol-error</i>	Enable this log type.	<i>profile-missing</i>	Enable this log type.					
	Option	Description										
	<i>protocol-error</i>	Enable this log type.										
<i>profile-missing</i>	Enable this log type.											

Parameter	Description	Type	Size	Default												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>accounting-stop-missed</td><td>Enable this log type.</td></tr><tr><td>accounting-event</td><td>Enable this log type.</td></tr><tr><td>endpoint-block</td><td>Enable this log type.</td></tr><tr><td>radiusd-other</td><td>Enable this log type.</td></tr><tr><td>none</td><td>Disable all logging.</td></tr></table>	Option	Description	accounting-stop-missed	Enable this log type.	accounting-event	Enable this log type.	endpoint-block	Enable this log type.	radiusd-other	Enable this log type.	none	Disable all logging.			
	Option	Description														
	accounting-stop-missed	Enable this log type.														
	accounting-event	Enable this log type.														
	endpoint-block	Enable this log type.														
	radiusd-other	Enable this log type.														
none	Disable all logging.															
rsso-log-period	Time interval in seconds that group event log messages will be generated for dynamic profile events.	integer	Minimum value: 0 0 Maximum value: 4294967295													
rsso-radius-response	Enable/disable sending RADIUS response packets after receiving Start and Stop records.	option	-	disable												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable sending RADIUS response packets.</td></tr><tr><td>disable</td><td>Disable sending RADIUS response packets.</td></tr></table>	Option	Description	enable	Enable sending RADIUS response packets.	disable	Disable sending RADIUS response packets.									
	Option	Description														
	enable	Enable sending RADIUS response packets.														
disable	Disable sending RADIUS response packets.															
rsso-radius-server-port	UDP port to listen on for RADIUS Start and Stop records.	integer	Minimum value: 0 0 Maximum value: 65535	1813												
rsso-secret	RADIUS secret used by the RADIUS accounting server.	password	Not Specified													
rsso-validate-request-secret	Enable/disable validating the RADIUS request shared secret in the Start or End record.	option	-	disable												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable validating RADIUS request shared secret.</td></tr><tr><td>disable</td><td>Disable validating RADIUS request shared secret.</td></tr></table>	Option	Description	enable	Enable validating RADIUS request shared secret.	disable	Disable validating RADIUS request shared secret.									
	Option	Description														
	enable	Enable validating RADIUS request shared secret.														
disable	Disable validating RADIUS request shared secret.															
secondary-secret	Secret key to access the secondary server.	password	Not Specified													
secondary-server	Secondary RADIUS CN domain name or IP address.	string	Maximum length: 63													

Parameter	Description	Type	Size	Default
secret	Pre-shared secret key used to access the primary RADIUS server.	password	Not Specified	
server	Primary RADIUS server CN domain name or IP address.	string	Maximum length: 63	
source-ip	Source IP address for communications to the RADIUS server.	string	Maximum length: 63	
sso-attribute	RADIUS attribute that contains the profile group name to be extracted from the RADIUS Start record.	option	-	Class

Option	Description
<i>User-Name</i>	Use this attribute.
<i>NAS-IP-Address</i>	Use this attribute.
<i>Framed-IP-Address</i>	Use this attribute.
<i>Framed-IP-Netmask</i>	Use this attribute.
<i>Filter-Id</i>	Use this attribute.
<i>Login-IP-Host</i>	Use this attribute.
<i>Reply-Message</i>	Use this attribute.
<i>Callback-Number</i>	Use this attribute.
<i>Callback-Id</i>	Use this attribute.
<i>Framed-Route</i>	Use this attribute.
<i>Framed-IPX-Network</i>	Use this attribute.
<i>Class</i>	Use this attribute.
<i>Called-Station-Id</i>	Use this attribute.
<i>Calling-Station-Id</i>	Use this attribute.
<i>NAS-Identifier</i>	Use this attribute.
<i>Proxy-State</i>	Use this attribute.

Parameter	Description	Type	Size	Default
	Option	Description		
	Login-LAT-Service	Use this attribute.		
	Login-LAT-Node	Use this attribute.		
	Login-LAT-Group	Use this attribute.		
	Framed-AppleTalk-Zone	Use this attribute.		
	Acct-Session-Id	Use this attribute.		
	Acct-Multi-Session-Id	Use this attribute.		
sso-attribute-key	Key prefix for SSO group value in the SSO attribute.	string	Maximum length: 35	
sso-attribute-value-override	Enable/disable override old attribute value with new value for the same endpoint.	option	-	enable
	Option	Description		
	enable	Enable override old attribute value with new value for the same endpoint.		
	disable	Disable override old attribute value with new value for the same endpoint.		
switch-controller-acct-fast-framedip-detect	Switch controller accounting message Framed-IP detection from DHCP snooping (seconds, default=2).	integer	Minimum value: 2 2 Maximum value: 600	
switch-controller-nas-ip-dynamic *	Enable/Disable switch-controller nas-ip dynamic to dynamically set nas-ip.	option	-	disable
	Option	Description		
	enable	Enable dynamic NAS-IP setting.		
	disable	Disable dynamic NAS-IP setting.		

Parameter	Description	Type	Size	Default																								
switch-controller-service-type	RADIUS service type.	option	-																									
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>login</td><td>User should be connected to a host.</td></tr><tr><td>framed</td><td>User use Framed Protocol.</td></tr><tr><td>callback-login</td><td>User disconnected and called back.</td></tr><tr><td>callback-framed</td><td>User disconnected and called back, then a Framed Protocol.</td></tr><tr><td>outbound</td><td>User granted access to outgoing devices.</td></tr><tr><td>administrative</td><td>User granted access to the administrative unsigned interface.</td></tr><tr><td>nas-prompt</td><td>User provided a command prompt on the NAS.</td></tr><tr><td>authenticate-only</td><td>Authentication requested, and no auth info needs to be returned.</td></tr><tr><td>callback-nas-prompt</td><td>User disconnected and called back, then provided a command prompt.</td></tr><tr><td>call-check</td><td>Used by the NAS in an Access-Request packet, Access-Accept to answer the call.</td></tr><tr><td>callback-administrative</td><td>User disconnected and called back, granted access to the admin unsigned interface.</td></tr></table>	Option	Description	login	User should be connected to a host.	framed	User use Framed Protocol.	callback-login	User disconnected and called back.	callback-framed	User disconnected and called back, then a Framed Protocol.	outbound	User granted access to outgoing devices.	administrative	User granted access to the administrative unsigned interface.	nas-prompt	User provided a command prompt on the NAS.	authenticate-only	Authentication requested, and no auth info needs to be returned.	callback-nas-prompt	User disconnected and called back, then provided a command prompt.	call-check	Used by the NAS in an Access-Request packet, Access-Accept to answer the call.	callback-administrative	User disconnected and called back, granted access to the admin unsigned interface.			
Option	Description																											
login	User should be connected to a host.																											
framed	User use Framed Protocol.																											
callback-login	User disconnected and called back.																											
callback-framed	User disconnected and called back, then a Framed Protocol.																											
outbound	User granted access to outgoing devices.																											
administrative	User granted access to the administrative unsigned interface.																											
nas-prompt	User provided a command prompt on the NAS.																											
authenticate-only	Authentication requested, and no auth info needs to be returned.																											
callback-nas-prompt	User disconnected and called back, then provided a command prompt.																											
call-check	Used by the NAS in an Access-Request packet, Access-Accept to answer the call.																											
callback-administrative	User disconnected and called back, granted access to the admin unsigned interface.																											
tertiary-secret	Secret key to access the tertiary server.	password	Not Specified																									
tertiary-server	Tertiary RADIUS CN domain name or IP address.	string	Maximum length: 63																									
timeout	Time in seconds between re-sending authentication requests.	integer	Minimum value: 5 1 Maximum value: 300																									
use-management-vdom	Enable/disable using management VDOM to send requests.	option	-	disable																								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Send requests using the management VDOM.</td></tr><tr><td>disable</td><td>Send requests using the current VDOM.</td></tr></table>	Option	Description	enable	Send requests using the management VDOM.	disable	Send requests using the current VDOM.																					
Option	Description																											
enable	Send requests using the management VDOM.																											
disable	Send requests using the current VDOM.																											
username-case-sensitive	Enable/disable case sensitive user names.	option	-	disable																								

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>enable</i>	Enable username case-sensitive.		
	<i>disable</i>	Disable username case-sensitive.		

* This parameter may not exist in some models.

config accounting-server

Parameter	Description	Type	Size	Default
id	ID (0 - 4294967295).	integer	Minimum value: 0 0 Maximum value: 4294967295	
interface	Specify outgoing interface to reach server.	string	Maximum length: 15	
interface-select-method	Specify how to select outgoing interface to reach server.	option	-	auto
	Option	Description		
	<i>auto</i>	Set outgoing interface automatically.		
	<i>sdwan</i>	Set outgoing interface by SD-WAN or policy routing rules.		
	<i>specify</i>	Set outgoing interface manually.		
port	RADIUS accounting port number.	integer	Minimum value: 0 0 Maximum value: 65535	
secret	Secret key.	password	Not Specified	
server	Server CN domain name or IP address.	string	Maximum length: 63	
source-ip	Source IP address for communications to the RADIUS server.	string	Maximum length: 63	
status	Status.	option	-	disable
	Option	Description		
	<i>enable</i>	Log to remote syslog server.		
	<i>disable</i>	Do not log to remote syslog server.		

config user saml

SAML server entry configuration.

```
config user saml
  Description: SAML server entry configuration.
  edit <name>
    set adfs-claim [enable|disable]
    set cert {string}
    set clock-tolerance {integer}
    set digest-method [sha1|sha256]
    set entity-id {string}
    set group-claim-type [email|given-name|...]
    set group-name {string}
    set idp-cert {string}
    set idp-entity-id {string}
    set idp-single-logout-url {string}
    set idp-single-sign-on-url {string}
    set limit-relaystate [enable|disable]
    set single-logout-url {string}
    set single-sign-on-url {string}
    set user-claim-type [email|given-name|...]
    set user-name {string}
  next
end
```

config user saml

Parameter	Description	Type	Size	Default
adfs-claim	Enable/disable ADFS Claim for user/group attribute in assertion statement (default = disable).	option	-	disable
	Option	Description		
	<i>enable</i>	Enable ADFS Claim for user/group attribute in assertion statement.		
	<i>disable</i>	Disable ADFS Claim for user/group attribute in assertion statement.		
cert	Certificate to sign SAML messages.	string	Maximum length: 35	
clock-tolerance	Clock skew tolerance in seconds (0 - 300, default = 15, 0 = no tolerance).	integer	Minimum value: 0 Maximum value: 300	15
digest-method	Digest method algorithm (default = sha1).	option	-	sha1

Parameter	Description	Type	Size	Default
	Option	Description		
	sha1	Digest Method Algorithm is SHA1.		
	sha256	Digest Method Algorithm is SHA256.		
entity-id	SP entity ID.	string	Maximum length: 255	
group-claim-type	Group claim in assertion statement.	option	-	group
	Option	Description		
	email	E-mail address of the user.		
	given-name	Given name of the user.		
	name	Unique name of the user.		
	upn	User principal name (UPN) of the user.		
	common-name	Common name of the user.		
	email-adfs-1x	E-mail address of the user when interoperating with AD FS 1.1 or ADFS 1.0.		
	group	Group that the user is a member of.		
	upn-adfs-1x	User principal name (UPN) of the user.		
	role	Role that the user has.		
	sur-name	Surname of the user		
	ppid	Private identifier of the user.		
	name-identifier	SAML name identifier of the user.		
	authentication-method	Method used to authenticate the user.		
	deny-only-group-sid	Deny-only group SID of the user.		
	deny-only-primary-sid	Deny-only primary SID of the user.		
	deny-only-primary-group-sid	Deny-only primary group SID of the user.		
group-sid	Group SID of the user.			

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>primary-group-sid</i>	Primary group SID of the user.		
	<i>primary-sid</i>	Primary SID of the user.		
	<i>windows-account-name</i>	Domain account name of the user in the form of <domain>\<user>.		
group-name	Group name in assertion statement.	string	Maximum length: 255	
idp-cert	IDP Certificate name.	string	Maximum length: 35	
idp-entity-id	IDP entity ID.	string	Maximum length: 255	
idp-single-logout-url	IDP single logout url.	string	Maximum length: 255	
idp-single-sign-on-url	IDP single sign-on URL.	string	Maximum length: 255	
limit-relaystate	Enable/disable limiting of relay-state parameter when it exceeds SAML 2.0 specification limits (80 bytes).	option	-	disable
	Option	Description		
	<i>enable</i>	Enable limiting of relay-state parameter when it exceeds SAML 2.0 specification limits (80 bytes).		
	<i>disable</i>	Disable limiting of relay-state parameter when it exceeds SAML 2.0 specification limits (80 bytes).		
name	SAML server entry name.	string	Maximum length: 35	
single-logout-url	SP single logout URL.	string	Maximum length: 255	
single-sign-on-url	SP single sign-on URL.	string	Maximum length: 255	
user-claim-type	User name claim in assertion statement.	option	-	upn
	Option	Description		
	<i>email</i>	E-mail address of the user.		

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>given-name</i>	Given name of the user.		
	<i>name</i>	Unique name of the user.		
	<i>upn</i>	User principal name (UPN) of the user.		
	<i>common-name</i>	Common name of the user.		
	<i>email-adfs-1x</i>	E-mail address of the user when interoperating with AD FS 1.1 or ADFS 1.0.		
	<i>group</i>	Group that the user is a member of.		
	<i>upn-adfs-1x</i>	User principal name (UPN) of the user.		
	<i>role</i>	Role that the user has.		
	<i>sur-name</i>	Surname of the user		
	<i>ppid</i>	Private identifier of the user.		
	<i>name-identifier</i>	SAML name identifier of the user.		
	<i>authentication-method</i>	Method used to authenticate the user.		
	<i>deny-only-group-sid</i>	Deny-only group SID of the user.		
	<i>deny-only-primary-sid</i>	Deny-only primary SID of the user.		
	<i>deny-only-primary-group-sid</i>	Deny-only primary group SID of the user.		
	<i>group-sid</i>	Group SID of the user.		
	<i>primary-group-sid</i>	Primary group SID of the user.		
	<i>primary-sid</i>	Primary SID of the user.		
	<i>windows-account-name</i>	Domain account name of the user in the form of <domain>\<user>.		
user-name	User name in assertion statement.	string	Maximum length: 255	

config user security-exempt-list

Configure security exemption list.

```

config user security-exempt-list
  Description: Configure security exemption list.
  edit <name>
    set description {string}
    config rule
      Description: Configure rules for exempting users from captive portal authentication.
      edit <id>
        set dstaddr <name1>, <name2>, ...
        set service <name1>, <name2>, ...
        set srcaddr <name1>, <name2>, ...
      next
    end
  next
end

```

config user security-exempt-list

Parameter	Description	Type	Size	Default
description	Description.	string	Maximum length: 127	
name	Name of the exempt list.	string	Maximum length: 35	

config rule

Parameter	Description	Type	Size	Default
dstaddr <name>	Destination addresses or address groups. Address or group name.	string	Maximum length: 79	
id	ID.	integer	Minimum value: 0 Maximum value: 4294967295	
service <name>	Destination services. Service name.	string	Maximum length: 79	
srcaddr <name>	Source addresses or address groups. Address or group name.	string	Maximum length: 79	

config user setting

Configure user authentication setting.

```

config user setting
    Description: Configure user authentication setting.
    set auth-blackout-time {integer}
    set auth-ca-cert {string}
    set auth-cert {string}
    set auth-http-basic [enable|disable]
    set auth-invalid-max {integer}
    set auth-lockout-duration {integer}
    set auth-lockout-threshold {integer}
    set auth-on-demand [always|implicitly]
    set auth-portal-timeout {integer}
    config auth-ports
        Description: Set up non-standard ports for authentication with HTTP, HTTPS, FTP, and
        TELNET.
        edit <id>
            set port {integer}
            set type [http|https|...]
        next
    end
    set auth-secure-http [enable|disable]
    set auth-src-mac [enable|disable]
    set auth-ssl-allow-renegotiation [enable|disable]
    set auth-ssl-max-proto-version [sslv3|tlsv1|...]
    set auth-ssl-min-proto-version [default|SSLv3|...]
    set auth-ssl-sigalgs [no-rsa-pss|all]
    set auth-timeout {integer}
    set auth-timeout-type [idle-timeout|hard-timeout|...]
    set auth-type {option1}, {option2}, ...
    set per-policy-disclaimer [enable|disable]
    set radius-ses-timeout-act [hard-timeout|ignore-timeout]
end

```

config user setting

Parameter	Description	Type	Size	Default
auth-blackout-time	Time in seconds an IP address is denied access after failing to authenticate five times within one minute.	integer	Minimum value: 0 0 Maximum value: 3600	
auth-ca-cert	HTTPS CA certificate for policy authentication.	string	Maximum length: 35	
auth-cert	HTTPS server certificate for policy authentication.	string	Maximum length: 35	
auth-http-basic	Enable/disable use of HTTP basic authentication for identity-based firewall policies.	option	-	disable

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		
auth-invalid-max	Maximum number of failed authentication attempts before the user is blocked.	integer	Minimum value: 5 1 Maximum value: 100	
auth-lockout-duration	Lockout period in seconds after too many login failures.	integer	Minimum value: 0 0 Maximum value: 4294967295	
auth-lockout-threshold	Maximum number of failed login attempts before login lockout is triggered.	integer	Minimum value: 3 1 Maximum value: 10	
auth-on-demand	Always/implicitly trigger firewall authentication on demand.	option	-	implicitly
	Option	Description		
	<i>always</i>	Always trigger firewall authentication on demand.		
	<i>implicitly</i>	Implicitly trigger firewall authentication on demand.		
auth-portal-timeout	Time in minutes before captive portal user have to re-authenticate (1 - 30 min, default 3 min).	integer	Minimum value: 3 1 Maximum value: 30	
auth-secure-http	Enable/disable redirecting HTTP user authentication to more secure HTTPS.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		
auth-src-mac	Enable/disable source MAC for user identity.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable source MAC for user identity.		
	<i>disable</i>	Disable source MAC for user identity.		
auth-ssl-allow-renegotiation	Allow/forbid SSL re-negotiation for HTTPS authentication.	option	-	disable

Parameter	Description	Type	Size	Default												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Allow SSL re-negotiation.</td></tr><tr><td><i>disable</i></td><td>Forbid SSL re-negotiation.</td></tr></table>	Option	Description	<i>enable</i>	Allow SSL re-negotiation.	<i>disable</i>	Forbid SSL re-negotiation.									
	Option	Description														
	<i>enable</i>	Allow SSL re-negotiation.														
<i>disable</i>	Forbid SSL re-negotiation.															
auth-ssl-max-proto-version	Maximum supported protocol version for SSL/TLS connections (default is no limit).	option	-													
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>sslsv3</i></td><td>SSLv3.</td></tr><tr><td><i>tlsv1</i></td><td>TLSv1.</td></tr><tr><td><i>tlsv1-1</i></td><td>TLSv1.1.</td></tr><tr><td><i>tlsv1-2</i></td><td>TLSv1.2.</td></tr><tr><td><i>tlsv1-3</i></td><td>TLSv1.3.</td></tr></table>	Option	Description	<i>sslsv3</i>	SSLv3.	<i>tlsv1</i>	TLSv1.	<i>tlsv1-1</i>	TLSv1.1.	<i>tlsv1-2</i>	TLSv1.2.	<i>tlsv1-3</i>	TLSv1.3.			
	Option	Description														
	<i>sslsv3</i>	SSLv3.														
	<i>tlsv1</i>	TLSv1.														
	<i>tlsv1-1</i>	TLSv1.1.														
	<i>tlsv1-2</i>	TLSv1.2.														
<i>tlsv1-3</i>	TLSv1.3.															
auth-ssl-min-proto-version	Minimum supported protocol version for SSL/TLS connections (default is to follow system global setting).	option	-	default												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>default</i></td><td>Follow system global setting.</td></tr><tr><td><i>SSLv3</i></td><td>SSLv3.</td></tr><tr><td><i>TLSv1</i></td><td>TLSv1.</td></tr><tr><td><i>TLSv1-1</i></td><td>TLSv1.1.</td></tr><tr><td><i>TLSv1-2</i></td><td>TLSv1.2.</td></tr></table>	Option	Description	<i>default</i>	Follow system global setting.	<i>SSLv3</i>	SSLv3.	<i>TLSv1</i>	TLSv1.	<i>TLSv1-1</i>	TLSv1.1.	<i>TLSv1-2</i>	TLSv1.2.			
	Option	Description														
	<i>default</i>	Follow system global setting.														
	<i>SSLv3</i>	SSLv3.														
	<i>TLSv1</i>	TLSv1.														
	<i>TLSv1-1</i>	TLSv1.1.														
<i>TLSv1-2</i>	TLSv1.2.															
auth-ssl-sigalgs	Set signature algorithms related to HTTPS authentication (affects TLS version <= 1.2 only, default is to enable all).	option	-	all												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>no-rsa-pss</i></td><td>Disable RSA-PSS signature algorithms for HTTPS authentication.</td></tr><tr><td><i>all</i></td><td>Enable all supported signature algorithms for HTTPS authentication.</td></tr></table>	Option	Description	<i>no-rsa-pss</i>	Disable RSA-PSS signature algorithms for HTTPS authentication.	<i>all</i>	Enable all supported signature algorithms for HTTPS authentication.									
	Option	Description														
	<i>no-rsa-pss</i>	Disable RSA-PSS signature algorithms for HTTPS authentication.														
<i>all</i>	Enable all supported signature algorithms for HTTPS authentication.															
auth-timeout	Time in minutes before the firewall user authentication timeout requires the user to re-authenticate.	integer	Minimum value: 5 1 Maximum value: 1440													
auth-timeout-type	Control if authenticated users have to login again after a hard timeout, after an idle timeout, or after a session timeout.	option	-	idle-timeout												

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>idle-timeout</i>	Idle timeout.		
	<i>hard-timeout</i>	Hard timeout.		
	<i>new-session</i>	New session timeout.		
auth-type	Supported firewall policy authentication protocols/methods.	option	-	http https ftp telnet
	Option	Description		
	<i>http</i>	Allow HTTP authentication.		
	<i>https</i>	Allow HTTPS authentication.		
	<i>ftp</i>	Allow FTP authentication.		
	<i>telnet</i>	Allow TELNET authentication.		
per-policy-disclaimer	Enable/disable per policy disclaimer.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable per policy disclaimer.		
	<i>disable</i>	Disable per policy disclaimer.		
radius-ses-timeout-act	Set the RADIUS session timeout to a hard timeout or to ignore RADIUS server session timeouts.	option	-	hard-timeout
	Option	Description		
	<i>hard-timeout</i>	Use session timeout from RADIUS as hard-timeout.		
	<i>ignore-timeout</i>	Ignore session timeout from RADIUS.		

config auth-ports

Parameter	Description	Type	Size	Default
id	ID.	integer	Minimum value: 0 Maximum value: 4294967295	0
port	Non-standard port for firewall user authentication.	integer	Minimum value: 1 Maximum value: 65535	1024

Parameter	Description	Type	Size	Default
type	Service type.	option	-	http
	Option	Description		
	<i>http</i>	HTTP service.		
	<i>https</i>	HTTPS service.		
	<i>ftp</i>	FTP service.		
	<i>telnet</i>	TELNET service.		

config user tacacs+

Configure TACACS+ server entries.

```

config user tacacs+
  Description: Configure TACACS+ server entries.
  edit <name>
    set authen-type [mschap|chap|...]
    set authorization [enable|disable]
    set interface {string}
    set interface-select-method [auto|sdwan|...]
    set key {password}
    set port {integer}
    set secondary-key {password}
    set secondary-server {string}
    set server {string}
    set source-ip {string}
    set tertiary-key {password}
    set tertiary-server {string}
  next
end

```

config user tacacs+

Parameter	Description	Type	Size	Default
authen-type	Allowed authentication protocols/methods.	option	-	auto
	Option	Description		
	<i>mschap</i>	MSCHAP.		
	<i>chap</i>	CHAP.		
	<i>pap</i>	PAP.		

Parameter	Description	Type	Size	Default								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>ascii</i></td><td>ASCII.</td></tr><tr><td><i>auto</i></td><td>Use PAP, MSCHAP, and CHAP (in that order).</td></tr></table>	Option	Description	<i>ascii</i>	ASCII.	<i>auto</i>	Use PAP, MSCHAP, and CHAP (in that order).					
	Option	Description										
	<i>ascii</i>	ASCII.										
<i>auto</i>	Use PAP, MSCHAP, and CHAP (in that order).											
authorization	Enable/disable TACACS+ authorization.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable TACACS+ authorization.</td></tr><tr><td><i>disable</i></td><td>Disable TACACS+ authorization.</td></tr></table>	Option	Description	<i>enable</i>	Enable TACACS+ authorization.	<i>disable</i>	Disable TACACS+ authorization.					
	Option	Description										
	<i>enable</i>	Enable TACACS+ authorization.										
<i>disable</i>	Disable TACACS+ authorization.											
interface	Specify outgoing interface to reach server.	string	Maximum length: 15									
interface-select-method	Specify how to select outgoing interface to reach server.	option	-	auto								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>auto</i></td><td>Set outgoing interface automatically.</td></tr><tr><td><i>sdwan</i></td><td>Set outgoing interface by SD-WAN or policy routing rules.</td></tr><tr><td><i>specify</i></td><td>Set outgoing interface manually.</td></tr></table>	Option	Description	<i>auto</i>	Set outgoing interface automatically.	<i>sdwan</i>	Set outgoing interface by SD-WAN or policy routing rules.	<i>specify</i>	Set outgoing interface manually.			
	Option	Description										
	<i>auto</i>	Set outgoing interface automatically.										
	<i>sdwan</i>	Set outgoing interface by SD-WAN or policy routing rules.										
<i>specify</i>	Set outgoing interface manually.											
key	Key to access the primary server.	password	Not Specified									
name	TACACS+ server entry name.	string	Maximum length: 35									
port	Port number of the TACACS+ server.	integer	Minimum value: 1 Maximum value: 65535	49								
secondary-key	Key to access the secondary server.	password	Not Specified									
secondary-server	Secondary TACACS+ server CN domain name or IP address.	string	Maximum length: 63									
server	Primary TACACS+ server CN domain name or IP address.	string	Maximum length: 63									
source-ip	Source IP address for communications to TACACS+ server.	string	Maximum length: 63									

Parameter	Description	Type	Size	Default
tertiary-key	Key to access the tertiary server.	password	Not Specified	
tertiary-server	Tertiary TACACS+ server CN domain name or IP address.	string	Maximum length: 63	

videofilter

This section includes syntax for the following commands:

- [config videofilter profile on page 1819](#)
- [config videofilter youtube-channel-filter on page 1821](#)
- [config videofilter youtube-key on page 1822](#)

config videofilter profile

Configure VideoFilter profile.

```
config videofilter profile
  Description: Configure VideoFilter profile.
  edit <name>
    set comment {var-string}
    set dailymotion [enable|disable]
    set default-action [allow|monitor|...]
    config fortiguard-category
      Description: Configure FortiGuard categories.
      config filters
        Description: Configure VideoFilter FortiGuard category.
        edit <id>
          set action [allow|monitor|...]
          set category-id {integer}
          set log [enable|disable]
        next
      end
    end
    set log [enable|disable]
    set replacemsg-group {string}
    set vimeo [enable|disable]
    set youtube [enable|disable]
    set youtube-channel-filter {integer}
  next
end
```

config videofilter profile

Parameter	Description	Type	Size	Default
comment	Comment.	var-string	Maximum length: 255	

Parameter	Description	Type	Size	Default								
dailymotion	Enable/disable Dailymotion video source.	option	-	enable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable Dailymotion source.</td></tr><tr><td><i>disable</i></td><td>Disable Dailymotion source.</td></tr></table>	Option	Description	<i>enable</i>	Enable Dailymotion source.	<i>disable</i>	Disable Dailymotion source.					
Option	Description											
<i>enable</i>	Enable Dailymotion source.											
<i>disable</i>	Disable Dailymotion source.											
default-action	Video filter default action.	option	-	monitor								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>allow</i></td><td>Allow videos to be accessed.</td></tr><tr><td><i>monitor</i></td><td>Monitor videos.</td></tr><tr><td><i>block</i></td><td>Block videos.</td></tr></table>	Option	Description	<i>allow</i>	Allow videos to be accessed.	<i>monitor</i>	Monitor videos.	<i>block</i>	Block videos.			
Option	Description											
<i>allow</i>	Allow videos to be accessed.											
<i>monitor</i>	Monitor videos.											
<i>block</i>	Block videos.											
log	Enable/disable logging.	option	-	enable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable logging.</td></tr><tr><td><i>disable</i></td><td>Disable logging.</td></tr></table>	Option	Description	<i>enable</i>	Enable logging.	<i>disable</i>	Disable logging.					
Option	Description											
<i>enable</i>	Enable logging.											
<i>disable</i>	Disable logging.											
name	Name.	string	Maximum length: 35									
replacemsg-group	Replacement message group.	string	Maximum length: 35									
vimeo	Enable/disable Vimeo video source.	option	-	enable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable Vimeo source.</td></tr><tr><td><i>disable</i></td><td>Disable Vimeo source.</td></tr></table>	Option	Description	<i>enable</i>	Enable Vimeo source.	<i>disable</i>	Disable Vimeo source.					
Option	Description											
<i>enable</i>	Enable Vimeo source.											
<i>disable</i>	Disable Vimeo source.											
youtube	Enable/disable YouTube video source.	option	-	enable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable YouTube source.</td></tr><tr><td><i>disable</i></td><td>Disable YouTube source.</td></tr></table>	Option	Description	<i>enable</i>	Enable YouTube source.	<i>disable</i>	Disable YouTube source.					
Option	Description											
<i>enable</i>	Enable YouTube source.											
<i>disable</i>	Disable YouTube source.											
youtube-channel-filter	Set YouTube channel filter.	integer	Minimum value: 0 0 Maximum value: 4294967295									

config filters

Parameter	Description	Type	Size	Default
action	VideoFilter action.	option	-	monitor
	Option	Description		
	<i>allow</i>	Allow videos to be accessed.		
	<i>monitor</i>	Monitor videos.		
	<i>block</i>	Block videos.		
category-id	Category ID.	integer	Minimum value: 0 0 Maximum value: 4294967295	0
id	ID.	integer	Minimum value: 0 0 Maximum value: 4294967295	0
log	Enable/disable logging.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable logging.		
	<i>disable</i>	Disable logging.		

config videofilter youtube-channel-filter

Configure YouTube channel filter.

```
config videofilter youtube-channel-filter
  Description: Configure YouTube channel filter.
  edit <id>
    set comment {var-string}
    config entries
      Description: YouTube filter entries.
      edit <id>
        set action [allow|monitor|...]
        set channel-id {string}
        set comment {var-string}
      next
    end
    set log [enable|disable]
    set name {string}
  next
end
```

config videofilter youtube-channel-filter

Parameter	Description	Type	Size	Default						
comment	Comment.	var-string	Maximum length: 255							
id	ID.	integer	Minimum value: 0 Maximum value: 4294967295	0						
log	Enable/disable logging.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable logging.</td></tr><tr><td>disable</td><td>Disable logging.</td></tr></table>				Option	Description	enable	Enable logging.	disable	Disable logging.
	Option	Description								
	enable	Enable logging.								
disable	Disable logging.									
name	Name.	string	Maximum length: 35							

config entries

Parameter	Description	Type	Size	Default
action	YouTube channel filter action.	option	-	monitor
	Option	Description		
	<i>allow</i>	Allow videos to be accessed.		
	<i>monitor</i>	Monitor videos.		
	<i>block</i>	Block videos.		
channel-id	Channel ID.	string	Maximum length: 255	
comment	Comment.	var-string	Maximum length: 255	
id	ID.	integer	Minimum value: 0 0 Maximum value: 4294967295	

config videofilter youtube-key

Configure YouTube API keys.

```
config videofilter youtube-key
  Description: Configure YouTube API keys.
  edit <id>
    set key {string}
  next
end
```

config videofilter youtube-key

Parameter	Description	Type	Size	Default
id	ID.	integer	Minimum value: 0 Maximum value: 4294967295	0
key	Key.	string	Maximum length: 47	

voip

This section includes syntax for the following commands:

- [config voip profile on page 1824](#)

config voip profile

Configure VoIP profiles.

```
config voip profile
  Description: Configure VoIP profiles.
  edit <name>
    set comment {var-string}
    set feature-set [ips|voipd]
    config msrp
      Description: MSRP.
      set log-violations [disable|enable]
      set max-msg-size {integer}
      set max-msg-size-action [pass|block|...]
      set status [disable|enable]
    end
    config sccp
      Description: SCCP.
      set block-mcast [disable|enable]
      set log-call-summary [disable|enable]
      set log-violations [disable|enable]
      set max-calls {integer}
      set status [disable|enable]
      set verify-header [disable|enable]
    end
    config sip
      Description: SIP.
      set ack-rate {integer}
      set ack-rate-track [none|src-ip|...]
      set block-ack [disable|enable]
      set block-bye [disable|enable]
      set block-cancel [disable|enable]
      set block-geo-red-options [disable|enable]
      set block-info [disable|enable]
      set block-invite [disable|enable]
      set block-long-lines [disable|enable]
      set block-message [disable|enable]
      set block-notify [disable|enable]
      set block-options [disable|enable]
      set block-prack [disable|enable]
```

```
set block-publish [disable|enable]
set block-refer [disable|enable]
set block-register [disable|enable]
set block-subscribe [disable|enable]
set block-unknown [disable|enable]
set block-update [disable|enable]
set bye-rate {integer}
set bye-rate-track [none|src-ip|...]
set call-id-regex {var-string}
set call-keepalive {integer}
set cancel-rate {integer}
set cancel-rate-track [none|src-ip|...]
set contact-fixup [disable|enable]
set content-type-regex {var-string}
set hnt-restrict-source-ip [disable|enable]
set hosted-nat-traversal [disable|enable]
set info-rate {integer}
set info-rate-track [none|src-ip|...]
set invite-rate {integer}
set invite-rate-track [none|src-ip|...]
set ips-rtp [disable|enable]
set log-call-summary [disable|enable]
set log-violations [disable|enable]
set malformed-header-allow [discard|pass|...]
set malformed-header-call-id [discard|pass|...]
set malformed-header-contact [discard|pass|...]
set malformed-header-content-length [discard|pass|...]
set malformed-header-content-type [discard|pass|...]
set malformed-header-cseq [discard|pass|...]
set malformed-header-expires [discard|pass|...]
set malformed-header-from [discard|pass|...]
set malformed-header-max-forwards [discard|pass|...]
set malformed-header-no-proxy-require [discard|pass|...]
set malformed-header-no-require [discard|pass|...]
set malformed-header-p-asserted-identity [discard|pass|...]
set malformed-header-rack [discard|pass|...]
set malformed-header-record-route [discard|pass|...]
set malformed-header-route [discard|pass|...]
set malformed-header-rseq [discard|pass|...]
set malformed-header-sdp-a [discard|pass|...]
set malformed-header-sdp-b [discard|pass|...]
set malformed-header-sdp-c [discard|pass|...]
set malformed-header-sdp-i [discard|pass|...]
set malformed-header-sdp-k [discard|pass|...]
set malformed-header-sdp-m [discard|pass|...]
set malformed-header-sdp-o [discard|pass|...]
set malformed-header-sdp-r [discard|pass|...]
set malformed-header-sdp-s [discard|pass|...]
set malformed-header-sdp-t [discard|pass|...]
set malformed-header-sdp-v [discard|pass|...]
set malformed-header-sdp-z [discard|pass|...]
set malformed-header-to [discard|pass|...]
```



```

set malformed-header-via [discard|pass|...]
set malformed-request-line [discard|pass|...]
set max-body-length {integer}
set max-dialogs {integer}
set max-idle-dialogs {integer}
set max-line-length {integer}
set message-rate {integer}
set message-rate-track [none|src-ip|...]
set nat-port-range {user}
set nat-trace [disable|enable]
set no-sdp-fixup [disable|enable]
set notify-rate {integer}
set notify-rate-track [none|src-ip|...]
set open-contact-pinhole [disable|enable]
set open-record-route-pinhole [disable|enable]
set open-register-pinhole [disable|enable]
set open-via-pinhole [disable|enable]
set options-rate {integer}
set options-rate-track [none|src-ip|...]
set prack-rate {integer}
set prack-rate-track [none|src-ip|...]
set preserve-override [disable|enable]
set provisional-invite-expiry-time {integer}
set publish-rate {integer}
set publish-rate-track [none|src-ip|...]
set refer-rate {integer}
set refer-rate-track [none|src-ip|...]
set register-contact-trace [disable|enable]
set register-rate {integer}
set register-rate-track [none|src-ip|...]
set rfc2543-branch [disable|enable]
set rtp [disable|enable]
set ssl-algorithm [high|medium|...]
set ssl-auth-client {string}
set ssl-auth-server {string}
set ssl-client-certificate {string}
set ssl-client-renegotiation [allow|deny|...]
set ssl-max-version [ssl-3.0|tls-1.0|...]
set ssl-min-version [ssl-3.0|tls-1.0|...]
set ssl-mode [off|full]
set ssl-pfs [require|deny|...]
set ssl-send-empty-frags [enable|disable]
set ssl-server-certificate {string}
set status [disable|enable]
set strict-register [disable|enable]
set subscribe-rate {integer}
set subscribe-rate-track [none|src-ip|...]
set unknown-header [discard|pass|...]
set update-rate {integer}
set update-rate-track [none|src-ip|...]
end
next

```

end

config voip profile

Parameter	Description	Type	Size	Default
comment	Comment.	var-string	Maximum length: 255	
feature-set	IPS or voipd (SIP-ALG) inspection feature set.	option	-	voipd
	Option	Description		
	<i>ips</i>	IPS Engine feature set for ips-voip-filter.		
	<i>voipd</i>	SIP ALG feature set for voip-profile.		
name	Profile name.	string	Maximum length: 35	

config msrp

Parameter	Description	Type	Size	Default
log-violations	Enable/disable logging of MSRP violations.	option	-	enable
	Option	Description		
	<i>disable</i>	Disable status.		
	<i>enable</i>	Enable status.		
max-msg-size	Maximum allowable MSRP message size (1-65535).	integer	Minimum value: 0 Maximum value: 65535	0
max-msg-size-action	Action for violation of max-msg-size.	option	-	pass
	Option	Description		
	<i>pass</i>	Pass or allow matching traffic.		
	<i>block</i>	Block or drop matching traffic.		
	<i>reset</i>	Reset sessions for matching traffic.		
	<i>monitor</i>	Pass and log matching traffic.		
status	Enable/disable MSRP.	option	-	enable

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>disable</i>	Disable status.		
	<i>enable</i>	Enable status.		

config sccp

Parameter	Description	Type	Size	Default
block-mcast	Enable/disable block multicast RTP connections.	option	-	disable
	Option	Description		
	<i>disable</i>	Disable status.		
	<i>enable</i>	Enable status.		
log-call-summary	Enable/disable log summary of SCCP calls.	option	-	disable
	Option	Description		
	<i>disable</i>	Disable status.		
	<i>enable</i>	Enable status.		
log-violations	Enable/disable logging of SCCP violations.	option	-	disable
	Option	Description		
	<i>disable</i>	Disable status.		
	<i>enable</i>	Enable status.		
max-calls	Maximum calls per minute per SCCP client (max 65535).	integer	Minimum value: 0 Maximum value: 65535	0
status	Enable/disable SCCP.	option	-	enable
	Option	Description		
	<i>disable</i>	Disable status.		
	<i>enable</i>	Enable status.		
verify-header	Enable/disable verify SCCP header content.	option	-	disable

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>disable</i>	Disable status.		
	<i>enable</i>	Enable status.		

config sip

Parameter	Description	Type	Size	Default
ack-rate	ACK request rate limit (per second, per policy).	integer	Minimum value: 0 Maximum value: 4294967295	0
ack-rate-track	Track the packet protocol field.	option	-	none
	Option	Description		
	<i>none</i>	None.		
	<i>src-ip</i>	Source IP.		
	<i>dest-ip</i>	Destination IP.		
block-ack	Enable/disable block ACK requests.	option	-	disable
	Option	Description		
	<i>disable</i>	Disable status.		
	<i>enable</i>	Enable status.		
block-bye	Enable/disable block BYE requests.	option	-	disable
	Option	Description		
	<i>disable</i>	Disable status.		
	<i>enable</i>	Enable status.		
block-cancel	Enable/disable block CANCEL requests.	option	-	disable
	Option	Description		
	<i>disable</i>	Disable status.		
	<i>enable</i>	Enable status.		
block-geo-red-options	Enable/disable block OPTIONS requests, but OPTIONS requests still notify for redundancy.	option	-	disable

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>disable</i>	Disable status.		
	<i>enable</i>	Enable status.		
block-info	Enable/disable block INFO requests.	option	-	disable
	Option	Description		
	<i>disable</i>	Disable status.		
	<i>enable</i>	Enable status.		
block-invite	Enable/disable block INVITE requests.	option	-	disable
	Option	Description		
	<i>disable</i>	Disable status.		
	<i>enable</i>	Enable status.		
block-long-lines	Enable/disable block requests with headers exceeding max-line-length.	option	-	enable
	Option	Description		
	<i>disable</i>	Disable status.		
	<i>enable</i>	Enable status.		
block-message	Enable/disable block MESSAGE requests.	option	-	disable
	Option	Description		
	<i>disable</i>	Disable status.		
	<i>enable</i>	Enable status.		
block-notify	Enable/disable block NOTIFY requests.	option	-	disable
	Option	Description		
	<i>disable</i>	Disable status.		
	<i>enable</i>	Enable status.		
block-options	Enable/disable block OPTIONS requests and no OPTIONS as notifying message for redundancy either.	option	-	disable

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>disable</i>	Disable status.		
	<i>enable</i>	Enable status.		
block-prack	Enable/disable block prack requests.	option	-	disable
	Option	Description		
	<i>disable</i>	Disable status.		
	<i>enable</i>	Enable status.		
block-publish	Enable/disable block PUBLISH requests.	option	-	disable
	Option	Description		
	<i>disable</i>	Disable status.		
	<i>enable</i>	Enable status.		
block-refer	Enable/disable block REFER requests.	option	-	disable
	Option	Description		
	<i>disable</i>	Disable status.		
	<i>enable</i>	Enable status.		
block-register	Enable/disable block REGISTER requests.	option	-	disable
	Option	Description		
	<i>disable</i>	Disable status.		
	<i>enable</i>	Enable status.		
block-subscribe	Enable/disable block SUBSCRIBE requests.	option	-	disable
	Option	Description		
	<i>disable</i>	Disable status.		
	<i>enable</i>	Enable status.		
block-unknown	Block unrecognized SIP requests (enabled by default).	option	-	enable

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>disable</i>	Disable status.		
	<i>enable</i>	Enable status.		
block-update	Enable/disable block UPDATE requests.	option	-	disable
	Option	Description		
	<i>disable</i>	Disable status.		
	<i>enable</i>	Enable status.		
bye-rate	BYE request rate limit (per second, per policy).	integer	Minimum value: 0 0 Maximum value: 4294967295	
bye-rate-track	Track the packet protocol field.	option	-	none
	Option	Description		
	<i>none</i>	None.		
	<i>src-ip</i>	Source IP.		
	<i>dest-ip</i>	Destination IP.		
call-id-regex	Validate PCRE regular expression for Call-Id header value.	var-string	Maximum length: 511	
call-keepalive	Continue tracking calls with no RTP for this many minutes.	integer	Minimum value: 0 0 Maximum value: 10080	
cancel-rate	CANCEL request rate limit (per second, per policy).	integer	Minimum value: 0 0 Maximum value: 4294967295	
cancel-rate-track	Track the packet protocol field.	option	-	none
	Option	Description		
	<i>none</i>	None.		
	<i>src-ip</i>	Source IP.		
	<i>dest-ip</i>	Destination IP.		

Parameter	Description	Type	Size	Default
contact-fixup	Fixup contact anyway even if contact's IP:port doesn't match session's IP:port.	option	-	enable
	Option Description			
	<i>disable</i>	Disable status.		
	<i>enable</i>	Enable status.		
content-type-regex	Validate PCRE regular expression for Content-Type header value.	var-string	Maximum length: 511	
hnt-restrict-source-ip	Enable/disable restrict RTP source IP to be the same as SIP source IP when HNT is enabled.	option	-	disable
	Option Description			
	<i>disable</i>	Disable status.		
	<i>enable</i>	Enable status.		
hosted-nat-traversal	Hosted NAT Traversal (HNT).	option	-	disable
	Option Description			
	<i>disable</i>	Disable status.		
	<i>enable</i>	Enable status.		
info-rate	INFO request rate limit (per second, per policy).	integer	Minimum value: 0 Maximum value: 4294967295	
info-rate-track	Track the packet protocol field.	option	-	none
	Option Description			
	<i>none</i>	None.		
	<i>src-ip</i>	Source IP.		
	<i>dest-ip</i>	Destination IP.		
invite-rate	INVITE request rate limit (per second, per policy).	integer	Minimum value: 0 Maximum value: 4294967295	
invite-rate-track	Track the packet protocol field.	option	-	none

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>none</i>	None.		
	<i>src-ip</i>	Source IP.		
	<i>dest-ip</i>	Destination IP.		
ips-rtp	Enable/disable allow IPS on RTP.	option	-	enable
	Option	Description		
	<i>disable</i>	Disable status.		
	<i>enable</i>	Enable status.		
log-call-summary	Enable/disable logging of SIP call summary.	option	-	enable
	Option	Description		
	<i>disable</i>	Disable status.		
	<i>enable</i>	Enable status.		
log-violations	Enable/disable logging of SIP violations.	option	-	disable
	Option	Description		
	<i>disable</i>	Disable status.		
	<i>enable</i>	Enable status.		
malformed-header-allow	Action for malformed Allow header.	option	-	pass
	Option	Description		
	<i>discard</i>	Discard malformed messages.		
	<i>pass</i>	Bypass malformed messages.		
	<i>respond</i>	Respond with error code.		
malformed-header-call-id	Action for malformed Call-ID header.	option	-	pass
	Option	Description		
	<i>discard</i>	Discard malformed messages.		
	<i>pass</i>	Bypass malformed messages.		
	<i>respond</i>	Respond with error code.		

Parameter	Description	Type	Size	Default								
malformed-header-contact	Action for malformed Contact header.	option	-	pass								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>discard</i></td><td>Discard malformed messages.</td></tr><tr><td><i>pass</i></td><td>Bypass malformed messages.</td></tr><tr><td><i>respond</i></td><td>Respond with error code.</td></tr></table>	Option	Description	<i>discard</i>	Discard malformed messages.	<i>pass</i>	Bypass malformed messages.	<i>respond</i>	Respond with error code.			
Option	Description											
<i>discard</i>	Discard malformed messages.											
<i>pass</i>	Bypass malformed messages.											
<i>respond</i>	Respond with error code.											
malformed-header-content-length	Action for malformed Content-Length header.	option	-	pass								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>discard</i></td><td>Discard malformed messages.</td></tr><tr><td><i>pass</i></td><td>Bypass malformed messages.</td></tr><tr><td><i>respond</i></td><td>Respond with error code.</td></tr></table>	Option	Description	<i>discard</i>	Discard malformed messages.	<i>pass</i>	Bypass malformed messages.	<i>respond</i>	Respond with error code.			
Option	Description											
<i>discard</i>	Discard malformed messages.											
<i>pass</i>	Bypass malformed messages.											
<i>respond</i>	Respond with error code.											
malformed-header-content-type	Action for malformed Content-Type header.	option	-	pass								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>discard</i></td><td>Discard malformed messages.</td></tr><tr><td><i>pass</i></td><td>Bypass malformed messages.</td></tr><tr><td><i>respond</i></td><td>Respond with error code.</td></tr></table>	Option	Description	<i>discard</i>	Discard malformed messages.	<i>pass</i>	Bypass malformed messages.	<i>respond</i>	Respond with error code.			
Option	Description											
<i>discard</i>	Discard malformed messages.											
<i>pass</i>	Bypass malformed messages.											
<i>respond</i>	Respond with error code.											
malformed-header-cseq	Action for malformed CSeq header.	option	-	pass								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>discard</i></td><td>Discard malformed messages.</td></tr><tr><td><i>pass</i></td><td>Bypass malformed messages.</td></tr><tr><td><i>respond</i></td><td>Respond with error code.</td></tr></table>	Option	Description	<i>discard</i>	Discard malformed messages.	<i>pass</i>	Bypass malformed messages.	<i>respond</i>	Respond with error code.			
Option	Description											
<i>discard</i>	Discard malformed messages.											
<i>pass</i>	Bypass malformed messages.											
<i>respond</i>	Respond with error code.											
malformed-header-expires	Action for malformed Expires header.	option	-	pass								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>discard</i></td><td>Discard malformed messages.</td></tr><tr><td><i>pass</i></td><td>Bypass malformed messages.</td></tr></table>	Option	Description	<i>discard</i>	Discard malformed messages.	<i>pass</i>	Bypass malformed messages.					
Option	Description											
<i>discard</i>	Discard malformed messages.											
<i>pass</i>	Bypass malformed messages.											

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>respond</i>	Respond with error code.		
malformed-header-from	Action for malformed From header.	option	-	pass
	Option	Description		
	<i>discard</i>	Discard malformed messages.		
	<i>pass</i>	Bypass malformed messages.		
	<i>respond</i>	Respond with error code.		
malformed-header-max-forwards	Action for malformed Max-Forwards header.	option	-	pass
	Option	Description		
	<i>discard</i>	Discard malformed messages.		
	<i>pass</i>	Bypass malformed messages.		
	<i>respond</i>	Respond with error code.		
malformed-header-no-proxy-require	Action for malformed SIP messages without Proxy-Require header.	option	-	pass
	Option	Description		
	<i>discard</i>	Discard malformed messages.		
	<i>pass</i>	Bypass malformed messages.		
	<i>respond</i>	Respond with error code.		
malformed-header-no-require	Action for malformed SIP messages without Require header.	option	-	pass
	Option	Description		
	<i>discard</i>	Discard malformed messages.		
	<i>pass</i>	Bypass malformed messages.		
	<i>respond</i>	Respond with error code.		

Parameter	Description	Type	Size	Default								
malformed-header-p-asserted-identity	Action for malformed P-Asserted-Identity header.	option	-	pass								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>discard</i></td><td>Discard malformed messages.</td></tr><tr><td><i>pass</i></td><td>Bypass malformed messages.</td></tr><tr><td><i>respond</i></td><td>Respond with error code.</td></tr></table>	Option	Description	<i>discard</i>	Discard malformed messages.	<i>pass</i>	Bypass malformed messages.	<i>respond</i>	Respond with error code.			
Option	Description											
<i>discard</i>	Discard malformed messages.											
<i>pass</i>	Bypass malformed messages.											
<i>respond</i>	Respond with error code.											
malformed-header-rack	Action for malformed RACK header.	option	-	pass								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>discard</i></td><td>Discard malformed messages.</td></tr><tr><td><i>pass</i></td><td>Bypass malformed messages.</td></tr><tr><td><i>respond</i></td><td>Respond with error code.</td></tr></table>	Option	Description	<i>discard</i>	Discard malformed messages.	<i>pass</i>	Bypass malformed messages.	<i>respond</i>	Respond with error code.			
Option	Description											
<i>discard</i>	Discard malformed messages.											
<i>pass</i>	Bypass malformed messages.											
<i>respond</i>	Respond with error code.											
malformed-header-record-route	Action for malformed Record-Route header.	option	-	pass								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>discard</i></td><td>Discard malformed messages.</td></tr><tr><td><i>pass</i></td><td>Bypass malformed messages.</td></tr><tr><td><i>respond</i></td><td>Respond with error code.</td></tr></table>	Option	Description	<i>discard</i>	Discard malformed messages.	<i>pass</i>	Bypass malformed messages.	<i>respond</i>	Respond with error code.			
Option	Description											
<i>discard</i>	Discard malformed messages.											
<i>pass</i>	Bypass malformed messages.											
<i>respond</i>	Respond with error code.											
malformed-header-route	Action for malformed Route header.	option	-	pass								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>discard</i></td><td>Discard malformed messages.</td></tr><tr><td><i>pass</i></td><td>Bypass malformed messages.</td></tr><tr><td><i>respond</i></td><td>Respond with error code.</td></tr></table>	Option	Description	<i>discard</i>	Discard malformed messages.	<i>pass</i>	Bypass malformed messages.	<i>respond</i>	Respond with error code.			
Option	Description											
<i>discard</i>	Discard malformed messages.											
<i>pass</i>	Bypass malformed messages.											
<i>respond</i>	Respond with error code.											
malformed-header-rseq	Action for malformed RSeq header.	option	-	pass								

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>discard</i>	Discard malformed messages.		
	<i>pass</i>	Bypass malformed messages.		
	<i>respond</i>	Respond with error code.		
malformed-header-sdp-a	Action for malformed SDP a line.	option	-	pass
	Option	Description		
	<i>discard</i>	Discard malformed messages.		
	<i>pass</i>	Bypass malformed messages.		
	<i>respond</i>	Respond with error code.		
malformed-header-sdp-b	Action for malformed SDP b line.	option	-	pass
	Option	Description		
	<i>discard</i>	Discard malformed messages.		
	<i>pass</i>	Bypass malformed messages.		
	<i>respond</i>	Respond with error code.		
malformed-header-sdp-c	Action for malformed SDP c line.	option	-	pass
	Option	Description		
	<i>discard</i>	Discard malformed messages.		
	<i>pass</i>	Bypass malformed messages.		
	<i>respond</i>	Respond with error code.		
malformed-header-sdp-i	Action for malformed SDP i line.	option	-	pass
	Option	Description		
	<i>discard</i>	Discard malformed messages.		
	<i>pass</i>	Bypass malformed messages.		
	<i>respond</i>	Respond with error code.		
malformed-header-sdp-k	Action for malformed SDP k line.	option	-	pass

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>discard</i>	Discard malformed messages.		
	<i>pass</i>	Bypass malformed messages.		
	<i>respond</i>	Respond with error code.		
malformed-header-sdp-m	Action for malformed SDP m line.	option	-	pass
	Option	Description		
	<i>discard</i>	Discard malformed messages.		
	<i>pass</i>	Bypass malformed messages.		
	<i>respond</i>	Respond with error code.		
malformed-header-sdp-o	Action for malformed SDP o line.	option	-	pass
	Option	Description		
	<i>discard</i>	Discard malformed messages.		
	<i>pass</i>	Bypass malformed messages.		
	<i>respond</i>	Respond with error code.		
malformed-header-sdp-r	Action for malformed SDP r line.	option	-	pass
	Option	Description		
	<i>discard</i>	Discard malformed messages.		
	<i>pass</i>	Bypass malformed messages.		
	<i>respond</i>	Respond with error code.		
malformed-header-sdp-s	Action for malformed SDP s line.	option	-	pass
	Option	Description		
	<i>discard</i>	Discard malformed messages.		
	<i>pass</i>	Bypass malformed messages.		
	<i>respond</i>	Respond with error code.		
malformed-header-sdp-t	Action for malformed SDP t line.	option	-	pass

Parameter	Description	Type	Size	Default
	Option Description			
	<i>discard</i>	Discard malformed messages.		
	<i>pass</i>	Bypass malformed messages.		
	<i>respond</i>	Respond with error code.		
malformed-header-sdp-v	Action for malformed SDP v line.	option	-	pass
	Option Description			
	<i>discard</i>	Discard malformed messages.		
	<i>pass</i>	Bypass malformed messages.		
	<i>respond</i>	Respond with error code.		
malformed-header-sdp-z	Action for malformed SDP z line.	option	-	pass
	Option Description			
	<i>discard</i>	Discard malformed messages.		
	<i>pass</i>	Bypass malformed messages.		
	<i>respond</i>	Respond with error code.		
malformed-header-to	Action for malformed To header.	option	-	pass
	Option Description			
	<i>discard</i>	Discard malformed messages.		
	<i>pass</i>	Bypass malformed messages.		
	<i>respond</i>	Respond with error code.		
malformed-header-via	Action for malformed VIA header.	option	-	pass
	Option Description			
	<i>discard</i>	Discard malformed messages.		
	<i>pass</i>	Bypass malformed messages.		
	<i>respond</i>	Respond with error code.		
malformed-request-line	Action for malformed request line.	option	-	pass

Parameter	Description	Type	Size	Default								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>discard</i></td><td>Discard malformed messages.</td></tr><tr><td><i>pass</i></td><td>Bypass malformed messages.</td></tr><tr><td><i>respond</i></td><td>Respond with error code.</td></tr></table>	Option	Description	<i>discard</i>	Discard malformed messages.	<i>pass</i>	Bypass malformed messages.	<i>respond</i>	Respond with error code.			
	Option	Description										
	<i>discard</i>	Discard malformed messages.										
	<i>pass</i>	Bypass malformed messages.										
<i>respond</i>	Respond with error code.											
max-body-length	Maximum SIP message body length (0 meaning no limit).	integer	Minimum value: 0 0 Maximum value: 4294967295									
max-dialogs	Maximum number of concurrent calls/dialogs (per policy).	integer	Minimum value: 0 0 Maximum value: 4294967295									
max-idle-dialogs	Maximum number established but idle dialogs to retain (per policy).	integer	Minimum value: 0 0 Maximum value: 4294967295									
max-line-length	Maximum SIP header line length (78-4096).	integer	Minimum value: 998 78 Maximum value: 4096									
message-rate	MESSAGE request rate limit (per second, per policy).	integer	Minimum value: 0 0 Maximum value: 4294967295									
message-rate-track	Track the packet protocol field.	option	-	none								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>none</i></td><td>None.</td></tr><tr><td><i>src-ip</i></td><td>Source IP.</td></tr><tr><td><i>dest-ip</i></td><td>Destination IP.</td></tr></table>	Option	Description	<i>none</i>	None.	<i>src-ip</i>	Source IP.	<i>dest-ip</i>	Destination IP.			
	Option	Description										
	<i>none</i>	None.										
	<i>src-ip</i>	Source IP.										
<i>dest-ip</i>	Destination IP.											
nat-port-range	RTP NAT port range.	user	Not Specified	5117-65533								
nat-trace	Enable/disable preservation of original IP in SDP i line.	option	-	enable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>disable</i></td><td>Disable status.</td></tr></table>	Option	Description	<i>disable</i>	Disable status.							
	Option	Description										
<i>disable</i>	Disable status.											

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>enable</i>	Enable status.		
	<i>disable</i>	Disable status.		
no-sdp-fixup	Enable/disable no SDP fix-up.	option	-	disable
	Option	Description		
	<i>disable</i>	Disable status.		
	<i>enable</i>	Enable status.		
notify-rate	NOTIFY request rate limit (per second, per policy).	integer	Minimum value: 0 0 Maximum value: 4294967295	0
notify-rate-track	Track the packet protocol field.	option	-	none
	Option	Description		
	<i>none</i>	None.		
	<i>src-ip</i>	Source IP.		
	<i>dest-ip</i>	Destination IP.		
open-contact-pinhole	Enable/disable open pinhole for non-REGISTER Contact port.	option	-	enable
	Option	Description		
	<i>disable</i>	Disable status.		
	<i>enable</i>	Enable status.		
open-record-route-pinhole	Enable/disable open pinhole for Record-Route port.	option	-	enable
	Option	Description		
	<i>disable</i>	Disable status.		
	<i>enable</i>	Enable status.		
open-register-pinhole	Enable/disable open pinhole for REGISTER Contact port.	option	-	enable
	Option	Description		
	<i>disable</i>	Disable status.		

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>enable</i>	Enable status.		
open-via-pinhole	Enable/disable open pinhole for Via port.	option	-	disable
	Option	Description		
	<i>disable</i>	Disable status.		
	<i>enable</i>	Enable status.		
options-rate	OPTIONS request rate limit (per second, per policy).	integer	Minimum value: 0 0 Maximum value: 4294967295	0
options-rate-track	Track the packet protocol field.	option	-	none
	Option	Description		
	<i>none</i>	None.		
	<i>src-ip</i>	Source IP.		
	<i>dest-ip</i>	Destination IP.		
prack-rate	PRACK request rate limit (per second, per policy).	integer	Minimum value: 0 0 Maximum value: 4294967295	0
prack-rate-track	Track the packet protocol field.	option	-	none
	Option	Description		
	<i>none</i>	None.		
	<i>src-ip</i>	Source IP.		
	<i>dest-ip</i>	Destination IP.		
preserve-override	Override i line to preserve original IPs (default: append).	option	-	disable
	Option	Description		
	<i>disable</i>	Disable status.		
	<i>enable</i>	Enable status.		

Parameter	Description	Type	Size	Default								
provisional-invite-expiry-time	Expiry time (10-3600, in seconds) for provisional INVITE.	integer	Minimum value: 10 Maximum value: 3600	210								
publish-rate	PUBLISH request rate limit (per second, per policy).	integer	Minimum value: 0 Maximum value: 4294967295	0								
publish-rate-track	Track the packet protocol field.	option	-	none								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>none</i></td><td>None.</td></tr><tr><td><i>src-ip</i></td><td>Source IP.</td></tr><tr><td><i>dest-ip</i></td><td>Destination IP.</td></tr></table>				Option	Description	<i>none</i>	None.	<i>src-ip</i>	Source IP.	<i>dest-ip</i>	Destination IP.
	Option	Description										
	<i>none</i>	None.										
	<i>src-ip</i>	Source IP.										
<i>dest-ip</i>	Destination IP.											
refer-rate	REFER request rate limit (per second, per policy).	integer	Minimum value: 0 Maximum value: 4294967295	0								
refer-rate-track	Track the packet protocol field.	option	-	none								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>none</i></td><td>None.</td></tr><tr><td><i>src-ip</i></td><td>Source IP.</td></tr><tr><td><i>dest-ip</i></td><td>Destination IP.</td></tr></table>				Option	Description	<i>none</i>	None.	<i>src-ip</i>	Source IP.	<i>dest-ip</i>	Destination IP.
	Option	Description										
	<i>none</i>	None.										
	<i>src-ip</i>	Source IP.										
<i>dest-ip</i>	Destination IP.											
register-contact-trace	Enable/disable trace original IP/port within the contact header of REGISTER requests.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>disable</i></td><td>Disable status.</td></tr><tr><td><i>enable</i></td><td>Enable status.</td></tr></table>				Option	Description	<i>disable</i>	Disable status.	<i>enable</i>	Enable status.		
	Option	Description										
	<i>disable</i>	Disable status.										
<i>enable</i>	Enable status.											
register-rate	REGISTER request rate limit (per second, per policy).	integer	Minimum value: 0 Maximum value: 4294967295	0								
register-rate-track	Track the packet protocol field.	option	-	none								

Parameter	Description	Type	Size	Default
	Option Description			
	<i>none</i>	None.		
	<i>src-ip</i>	Source IP.		
	<i>dest-ip</i>	Destination IP.		
rfc2543-branch	Enable/disable support via branch compliant with RFC 2543.	option	-	disable
	Option Description			
	<i>disable</i>	Disable status.		
	<i>enable</i>	Enable status.		
rtp	Enable/disable create pinholes for RTP traffic to traverse firewall.	option	-	enable
	Option Description			
	<i>disable</i>	Disable status.		
	<i>enable</i>	Enable status.		
ssl-algorithm *	Relative strength of encryption algorithms accepted in negotiation.	option	-	high
	Option Description			
	<i>high</i>	High encryption. Allow only AES and ChaCha.		
	<i>medium</i>	Medium encryption. Allow AES, ChaCha, 3DES, and RC4.		
	<i>low</i>	Low encryption. Allow AES, ChaCha, 3DES, RC4, and DES.		
ssl-auth-client *	Require a client certificate and authenticate it with the peer/peergrp.	string	Maximum length: 35	
ssl-auth-server *	Authenticate the server's certificate with the peer/peergrp.	string	Maximum length: 35	
ssl-client-certificate *	Name of Certificate to offer to server if requested.	string	Maximum length: 35	
ssl-client-renegotiation *	Allow/block client renegotiation by server.	option	-	allow
	Option Description			
	<i>allow</i>	Allow a SSL client to renegotiate.		
	<i>deny</i>	Abort any SSL connection that attempts to renegotiate.		

Parameter	Description	Type	Size	Default												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>secure</i></td><td>Reject any SSL connection that does not offer a RFC 5746 Secure Renegotiation Indication.</td></tr></table>	Option	Description	<i>secure</i>	Reject any SSL connection that does not offer a RFC 5746 Secure Renegotiation Indication.											
	Option	Description														
<i>secure</i>	Reject any SSL connection that does not offer a RFC 5746 Secure Renegotiation Indication.															
ssl-max-version *	Highest SSL/TLS version to negotiate.	option	-	tls-1.3												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>ssl-3.0</i></td><td>SSL 3.0.</td></tr><tr><td><i>tls-1.0</i></td><td>TLS 1.0.</td></tr><tr><td><i>tls-1.1</i></td><td>TLS 1.1.</td></tr><tr><td><i>tls-1.2</i></td><td>TLS 1.2.</td></tr><tr><td><i>tls-1.3</i></td><td>TLS 1.3.</td></tr></table>	Option	Description	<i>ssl-3.0</i>	SSL 3.0.	<i>tls-1.0</i>	TLS 1.0.	<i>tls-1.1</i>	TLS 1.1.	<i>tls-1.2</i>	TLS 1.2.	<i>tls-1.3</i>	TLS 1.3.			
	Option	Description														
	<i>ssl-3.0</i>	SSL 3.0.														
	<i>tls-1.0</i>	TLS 1.0.														
	<i>tls-1.1</i>	TLS 1.1.														
	<i>tls-1.2</i>	TLS 1.2.														
<i>tls-1.3</i>	TLS 1.3.															
ssl-min-version *	Lowest SSL/TLS version to negotiate.	option	-	tls-1.1												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>ssl-3.0</i></td><td>SSL 3.0.</td></tr><tr><td><i>tls-1.0</i></td><td>TLS 1.0.</td></tr><tr><td><i>tls-1.1</i></td><td>TLS 1.1.</td></tr><tr><td><i>tls-1.2</i></td><td>TLS 1.2.</td></tr><tr><td><i>tls-1.3</i></td><td>TLS 1.3.</td></tr></table>	Option	Description	<i>ssl-3.0</i>	SSL 3.0.	<i>tls-1.0</i>	TLS 1.0.	<i>tls-1.1</i>	TLS 1.1.	<i>tls-1.2</i>	TLS 1.2.	<i>tls-1.3</i>	TLS 1.3.			
	Option	Description														
	<i>ssl-3.0</i>	SSL 3.0.														
	<i>tls-1.0</i>	TLS 1.0.														
	<i>tls-1.1</i>	TLS 1.1.														
	<i>tls-1.2</i>	TLS 1.2.														
<i>tls-1.3</i>	TLS 1.3.															
ssl-mode *	SSL/TLS mode for encryption & decryption of traffic.	option	-	off												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>off</i></td><td>No SSL.</td></tr><tr><td><i>full</i></td><td>Client to FortiGate and FortiGate to Server SSL.</td></tr></table>	Option	Description	<i>off</i>	No SSL.	<i>full</i>	Client to FortiGate and FortiGate to Server SSL.									
	Option	Description														
	<i>off</i>	No SSL.														
<i>full</i>	Client to FortiGate and FortiGate to Server SSL.															
ssl-pfs *	SSL Perfect Forward Secrecy.	option	-	allow												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>require</i></td><td>PFS mandatory.</td></tr><tr><td><i>deny</i></td><td>PFS rejected.</td></tr><tr><td><i>allow</i></td><td>PFS allowed.</td></tr></table>	Option	Description	<i>require</i>	PFS mandatory.	<i>deny</i>	PFS rejected.	<i>allow</i>	PFS allowed.							
	Option	Description														
	<i>require</i>	PFS mandatory.														
	<i>deny</i>	PFS rejected.														
<i>allow</i>	PFS allowed.															

Parameter	Description	Type	Size	Default								
ssl-send-empty-frags *	Send empty fragments to avoid attack on CBC IV (SSL 3.0 & TLS 1.0 only).	option	-	enable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Send empty fragments.</td></tr><tr><td><i>disable</i></td><td>Do not send empty fragments.</td></tr></table>	Option	Description	<i>enable</i>	Send empty fragments.	<i>disable</i>	Do not send empty fragments.					
Option	Description											
<i>enable</i>	Send empty fragments.											
<i>disable</i>	Do not send empty fragments.											
ssl-server-certificate *	Name of Certificate return to the client in every SSL connection.	string	Maximum length: 35									
status	Enable/disable SIP.	option	-	enable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>disable</i></td><td>Disable status.</td></tr><tr><td><i>enable</i></td><td>Enable status.</td></tr></table>	Option	Description	<i>disable</i>	Disable status.	<i>enable</i>	Enable status.					
Option	Description											
<i>disable</i>	Disable status.											
<i>enable</i>	Enable status.											
strict-register	Enable/disable only allow the registrar to connect.	option	-	enable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>disable</i></td><td>Disable status.</td></tr><tr><td><i>enable</i></td><td>Enable status.</td></tr></table>	Option	Description	<i>disable</i>	Disable status.	<i>enable</i>	Enable status.					
Option	Description											
<i>disable</i>	Disable status.											
<i>enable</i>	Enable status.											
subscribe-rate	SUBSCRIBE request rate limit (per second, per policy).	integer	Minimum value: 0 Maximum value: 4294967295	0								
subscribe-rate-track	Track the packet protocol field.	option	-	none								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>none</i></td><td>None.</td></tr><tr><td><i>src-ip</i></td><td>Source IP.</td></tr><tr><td><i>dest-ip</i></td><td>Destination IP.</td></tr></table>	Option	Description	<i>none</i>	None.	<i>src-ip</i>	Source IP.	<i>dest-ip</i>	Destination IP.			
Option	Description											
<i>none</i>	None.											
<i>src-ip</i>	Source IP.											
<i>dest-ip</i>	Destination IP.											
unknown-header	Action for unknown SIP header.	option	-	pass								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>discard</i></td><td>Discard malformed messages.</td></tr></table>	Option	Description	<i>discard</i>	Discard malformed messages.							
Option	Description											
<i>discard</i>	Discard malformed messages.											

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>pass</i>	Bypass malformed messages.		
	<i>respond</i>	Respond with error code.		
update-rate	UPDATE request rate limit (per second, per policy).	integer	Minimum value: 0 0 Maximum value: 4294967295	0
update-rate-track	Track the packet protocol field.	option	-	none
	Option	Description		
	<i>none</i>	None.		
	<i>src-ip</i>	Source IP.		
	<i>dest-ip</i>	Destination IP.		

* This parameter may not exist in some models.

vpn

This section includes syntax for the following commands:

- [config vpn certificate ca on page 1849](#)
- [config vpn certificate crl on page 1851](#)
- [config vpn certificate local on page 1853](#)
- [config vpn certificate ocsf-server on page 1857](#)
- [config vpn certificate remote on page 1858](#)
- [config vpn certificate setting on page 1859](#)
- [config vpn ipsec concentrator on page 1864](#)
- [config vpn ipsec fec on page 1865](#)
- [config vpn ipsec forticlient on page 1867](#)
- [config vpn ipsec manualkey-interface on page 1869](#)
- [config vpn ipsec manualkey on page 1867](#)
- [config vpn ipsec phase1-interface on page 1896](#)
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- [config vpn pptp on page 1949](#)
- [config vpn ssl client on page 1950](#)
- [config vpn ssl settings on page 1952](#)
- [config vpn ssl web host-check-software on page 1966](#)
- [config vpn ssl web portal on page 1967](#)
- [config vpn ssl web realm on page 1988](#)
- [config vpn ssl web user-bookmark on page 1989](#)
- [config vpn ssl web user-group-bookmark on page 1996](#)

config vpn certificate ca

CA certificate.

```
config vpn certificate ca
  Description: CA certificate.
  edit <name>
    set auto-update-days {integer}
    set auto-update-days-warning {integer}
    set ca {user}
```



```

set ca-identifier {string}
set obsolete [disable|enable]
set range [global|vdom]
set scep-url {string}
set source [factory|user|...]
set source-ip {ipv4-address}
set ssl-inspection-trusted [enable|disable]
next
end

```

config vpn certificate ca

Parameter	Description	Type	Size	Default
auto-update-days	Number of days to wait before requesting an updated CA certificate (0 - 4294967295, 0 = disabled).	integer	Minimum value: 0 Maximum value: 4294967295	0
auto-update-days-warning	Number of days before an expiry-warning message is generated (0 - 4294967295, 0 = disabled).	integer	Minimum value: 0 Maximum value: 4294967295	0
ca	CA certificate as a PEM file.	user	Not Specified	
ca-identifier	CA identifier of the SCEP server.	string	Maximum length: 255	
name	Name.	string	Maximum length: 79	
obsolete	Enable/disable this CA as obsoleted.	option	-	disable
	Option		Description	
	<i>disable</i>		Alive.	
	<i>enable</i>		Obsolete.	
range	Either global or VDOM IP address range for the CA certificate.	option	-	vdom
	Option		Description	
	<i>global</i>		Global range.	
	<i>vdom</i>		VDOM IP address range.	
scep-url	URL of the SCEP server.	string	Maximum length: 255	
source	CA certificate source type.	option	-	user

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>factory</i>	Factory installed certificate.		
	<i>user</i>	User generated certificate.		
	<i>bundle</i>	Bundle file certificate.		
source-ip	Source IP address for communications to the SCEP server.	ipv4-address	Not Specified	0.0.0.0
ssl-inspection-trusted	Enable/disable this CA as a trusted CA for SSL inspection.	option	-	enable
	Option	Description		
	<i>enable</i>	Trusted CA for SSL inspection.		
	<i>disable</i>	Untrusted CA for SSL inspection.		

config vpn certificate crl

Certificate Revocation List as a PEM file.

```

config vpn certificate crl
  Description: Certificate Revocation List as a PEM file.
  edit <name>
    set crl {user}
    set http-url {string}
    set ldap-password {password}
    set ldap-server {string}
    set ldap-username {string}
    set range [global|vdom]
    set scep-cert {string}
    set scep-url {string}
    set source [factory|user|...]
    set source-ip {ipv4-address}
    set update-interval {integer}
    set update-vdom {string}
  next
end

```

config vpn certificate crl

Parameter	Description	Type	Size	Default								
crl	Certificate Revocation List as a PEM file.	user	Not Specified									
http-url	HTTP server URL for CRL auto-update.	string	Maximum length: 255									
ldap-password	LDAP server user password.	password	Not Specified									
ldap-server	LDAP server name for CRL auto-update.	string	Maximum length: 35									
ldap-username	LDAP server user name.	string	Maximum length: 63									
name	Name.	string	Maximum length: 35									
range	Either global or VDOM IP address range for the certificate.	option	-	vdom								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>global</td><td>Global range.</td></tr><tr><td>vdom</td><td>VDOM IP address range.</td></tr></table>				Option	Description	global	Global range.	vdom	VDOM IP address range.		
Option	Description											
global	Global range.											
vdom	VDOM IP address range.											
scep-cert	Local certificate for SCEP communication for CRL auto-update.	string	Maximum length: 35	Fortinet_CA_SSL								
scep-url	SCEP server URL for CRL auto-update.	string	Maximum length: 255									
source	Certificate source type.	option	-	user								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>factory</td><td>Factory installed certificate.</td></tr><tr><td>user</td><td>User generated certificate.</td></tr><tr><td>bundle</td><td>Bundle file certificate.</td></tr></table>				Option	Description	factory	Factory installed certificate.	user	User generated certificate.	bundle	Bundle file certificate.
Option	Description											
factory	Factory installed certificate.											
user	User generated certificate.											
bundle	Bundle file certificate.											
source-ip	Source IP address for communications to a HTTP or SCEP CA server.	ipv4-address	Not Specified	0.0.0.0								
update-interval	Time in seconds before the FortiGate checks for an updated CRL. Set to 0 to update only when it expires.	integer	Minimum value: 0 Maximum value: 4294967295	0								
update-vdom	VDOM for CRL update.	string	Maximum length: 31	root								

config vpn certificate local

Local keys and certificates.

```
config vpn certificate local
  Description: Local keys and certificates.
  edit <name>
    set acme-ca-url {string}
    set acme-domain {string}
    set acme-email {string}
    set acme-renew-window {integer}
    set acme-rsa-key-size {integer}
    set auto-regenerate-days {integer}
    set auto-regenerate-days-warning {integer}
    set ca-identifier {string}
    set certificate {user}
    set cmp-path {string}
    set cmp-regeneration-method [keyupdate|renewal]
    set cmp-server {string}
    set cmp-server-cert {string}
    set comments {string}
    set csr {user}
    set enroll-protocol [none|scep|...]
    set ike-localid {string}
    set ike-localid-type [asn1dn|fqdn]
    set name-encoding [printable|utf8]
    set password {password}
    set private-key {user}
    set private-key-retain [enable|disable]
    set range [global|vdom]
    set scep-password {password}
    set scep-url {string}
    set source [factory|user|...]
    set source-ip {ipv4-address}
    set state {user}
  next
end
```

config vpn certificate local

Parameter	Description	Type	Size	Default
acme-ca-url	The URL for the ACME CA server (Let's Encrypt is the default provider).	string	Maximum length: 255	https://acme-v02.api.letsencrypt.org/directory

Parameter	Description	Type	Size	Default
acme-domain	A valid domain that resolves to this FortiGate unit.	string	Maximum length: 255	
acme-email	Contact email address that is required by some CAs like LetsEncrypt.	string	Maximum length: 255	
acme-renew-window	Beginning of the renewal window (in days before certificate expiration, 30 by default).	integer	Minimum value: 30 1 Maximum value: 100	
acme-rsa-key-size	Length of the RSA private key of the generated cert (Minimum 2048 bits).	integer	Minimum value: 2048 2048 Maximum value: 4096	
auto-regenerate-days	Number of days to wait before expiry of an updated local certificate is requested (0 = disabled).	integer	Minimum value: 0 0 Maximum value: 4294967295	
auto-regenerate-days-warning	Number of days to wait before an expiry warning message is generated (0 = disabled).	integer	Minimum value: 0 0 Maximum value: 4294967295	
ca-identifier	CA identifier of the CA server for signing via SCEP.	string	Maximum length: 255	
certificate	PEM format certificate.	user	Not Specified	
cmp-path	Path location inside CMP server.	string	Maximum length: 255	
cmp-regeneration-method	CMP auto-regeneration method.	option	-	keyupate

Parameter	Description	Type	Size	Default
	Option Description			
	<i>keyupdate</i>	Key Update.		
	<i>renewal</i>	Renewal.		
cmp-server	Address and port for CMP server (format = address:port).	string	Maximum length: 63	
cmp-server-cert	CMP server certificate.	string	Maximum length: 79	
comments	Comment.	string	Maximum length: 511	
csr	Certificate Signing Request.	user	Not Specified	
enroll-protocol	Certificate enrollment protocol.	option	-	none
	Option Description			
	<i>none</i>	None (default).		
	<i>scep</i>	Simple Certificate Enrollment Protocol.		
	<i>cmpv2</i>	Certificate Management Protocol Version 2.		
	<i>acme2</i>	Automated Certificate Management Environment Version 2.		
ike-localid	Local ID the FortiGate uses for authentication as a VPN client.	string	Maximum length: 63	
ike-localid-type	IKE local ID type.	option	-	asn1dn
	Option Description			
	<i>asn1dn</i>	ASN.1 distinguished name.		
	<i>fqdn</i>	Fully qualified domain name.		
name	Name.	string	Maximum length: 35	
name-encoding	Name encoding method for auto-regeneration.	option	-	printable

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>printable</i>	Printable encoding (default).		
	<i>utf8</i>	UTF-8 encoding.		
password	Password as a PEM file.	password	Not Specified	
private-key	PEM format key encrypted with a password.	user	Not Specified	
private-key-retain	Enable/disable retention of private key during SCEP renewal (default = disable).	option	-	disable
	Option	Description		
	<i>enable</i>	Keep the existing private key during SCEP renewal.		
	<i>disable</i>	Generate a new private key during SCEP renewal.		
range	Either a global or VDOM IP address range for the certificate.	option	-	vdom
	Option	Description		
	<i>global</i>	Global range.		
	<i>vdom</i>	VDOM IP address range.		
scep-password	SCEP server challenge password for auto-regeneration.	password	Not Specified	
scep-url	SCEP server URL.	string	Maximum length: 255	
source	Certificate source type.	option	-	user
	Option	Description		
	<i>factory</i>	Factory installed certificate.		

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>user</i>	User generated certificate.		
	<i>bundle</i>	Bundle file certificate.		
source-ip	Source IP address for communications to the SCEP server.	ipv4-address	Not Specified	0.0.0.0
state	Certificate Signing Request State. Read-only.	user	Not Specified	

config vpn certificate ocsf-server

OCSP server configuration.

```

config vpn certificate ocsf-server
  Description: OCSP server configuration.
  edit <name>
    set cert {string}
    set secondary-cert {string}
    set secondary-url {string}
    set source-ip {string}
    set unavail-action [revoke|ignore]
    set url {string}
  next
end

```

config vpn certificate ocsf-server

Parameter	Description	Type	Size	Default
cert	OCSP server certificate.	string	Maximum length: 127	
name	OCSP server entry name.	string	Maximum length: 35	
secondary-cert	Secondary OCSP server certificate.	string	Maximum length: 127	
secondary-url	Secondary OCSP server URL.	string	Maximum length: 127	

Parameter	Description	Type	Size	Default
source-ip	Source IP address for dynamic AIA and OCSP queries.	string	Maximum length: 63	
unavail-action	Action when server is unavailable (revoke the certificate or ignore the result of the check).	option	-	revoke
	Option	Description		
	revoke	Revoke certificate if server is unavailable.		
	ignore	Ignore OCSP check if server is unavailable.		
url	OCSP server URL.	string	Maximum length: 127	

config vpn certificate remote

Remote certificate as a PEM file.

```

config vpn certificate remote
    Description: Remote certificate as a PEM file.
    edit <name>
        set range [global|vdom]
        set remote {user}
        set source [factory|user|...]
    next
end

```

config vpn certificate remote

Parameter	Description	Type	Size	Default
name	Name.	string	Maximum length: 35	
range	Either the global or VDOM IP address range for the remote certificate.	option	-	vdom
	Option	Description		
	global	Global range.		
	vdom	VDOM IP address range.		
remote	Remote certificate.	user	Not Specified	
source	Remote certificate source type.	option	-	user

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>factory</i>	Factory installed certificate.		
	<i>user</i>	User generated certificate.		
	<i>bundle</i>	Bundle file certificate.		

config vpn certificate setting

VPN certificate setting.

```

config vpn certificate setting
  Description: VPN certificate setting.
  set cert-expire-warning {integer}
  set certname-dsa1024 {string}
  set certname-dsa2048 {string}
  set certname-ecdsa256 {string}
  set certname-ecdsa384 {string}
  set certname-ecdsa521 {string}
  set certname-ed25519 {string}
  set certname-ed448 {string}
  set certname-rsa1024 {string}
  set certname-rsa2048 {string}
  set certname-rsa4096 {string}
  set check-ca-cert [enable|disable]
  set check-ca-chain [enable|disable]
  set cmp-key-usage-checking [enable|disable]
  set cmp-save-extra-certs [enable|disable]
  set cn-allow-multi [disable|enable]
  set cn-match [substring|value]
  config crl-verification
    Description: CRL verification options.
    set chain-crl-absence [ignore|revoke]
    set expiry [ignore|revoke]
    set leaf-crl-absence [ignore|revoke]
  end
  set interface {string}
  set interface-select-method [auto|sdwan|...]
  set ocsp-default-server {string}
  set ocsp-option [certificate|server]
  set ocsp-status [enable|disable]
  set proxy {string}
  set proxy-password {password}
  set proxy-port {integer}
  set proxy-username {string}
  set source-ip {string}
  set ssl-min-proto-version [default|SSLv3|...]
  set strict-ocsp-check [enable|disable]

```

```

set subject-match [substring|value]
set subject-set [subset|superset]
end

```

config vpn certificate setting

Parameter	Description	Type	Size	Default
cert-expire-warning	Number of days before a certificate expires to send a warning. Set to 0 to disable sending of the warning (0 - 100, default = 14).	integer	Minimum value: 0 Maximum value: 100	14
certname-dsa1024	1024 bit DSA key certificate for re-signing server certificates for SSL inspection.	string	Maximum length: 35	Fortinet_SSL_DSA1024
certname-dsa2048	2048 bit DSA key certificate for re-signing server certificates for SSL inspection.	string	Maximum length: 35	Fortinet_SSL_DSA2048
certname-ecdsa256	256 bit ECDSA key certificate for re-signing server certificates for SSL inspection.	string	Maximum length: 35	Fortinet_SSL_ECDSA256
certname-ecdsa384	384 bit ECDSA key certificate for re-signing server certificates for SSL inspection.	string	Maximum length: 35	Fortinet_SSL_ECDSA384
certname-ecdsa521	521 bit ECDSA key certificate for re-signing server certificates for SSL inspection.	string	Maximum length: 35	Fortinet_SSL_ECDSA521
certname-ed25519	253 bit EdDSA key certificate for re-signing server certificates for SSL inspection.	string	Maximum length: 35	Fortinet_SSL_ED25519
certname-ed448	456 bit EdDSA key certificate for re-signing server certificates for SSL inspection.	string	Maximum length: 35	Fortinet_SSL_ED448
certname-rsa1024	1024 bit RSA key certificate for re-signing server certificates for SSL inspection.	string	Maximum length: 35	Fortinet_SSL_RSA1024
certname-rsa2048	2048 bit RSA key certificate for re-signing server certificates for SSL inspection.	string	Maximum length: 35	Fortinet_SSL_RSA2048
certname-rsa4096	4096 bit RSA key certificate for re-signing server certificates for SSL inspection.	string	Maximum length: 35	Fortinet_SSL_RSA4096

Parameter	Description	Type	Size	Default						
check-ca-cert	Enable/disable verification of the user certificate and pass authentication if any CA in the chain is trusted (default = enable).	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable verification of the user certificate.</td></tr><tr><td><i>disable</i></td><td>Disable verification of the user certificate.</td></tr></table>	Option	Description	<i>enable</i>	Enable verification of the user certificate.	<i>disable</i>	Disable verification of the user certificate.			
Option	Description									
<i>enable</i>	Enable verification of the user certificate.									
<i>disable</i>	Disable verification of the user certificate.									
check-ca-chain	Enable/disable verification of the entire certificate chain and pass authentication only if the chain is complete and all of the CAs in the chain are trusted (default = disable).	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable verification of the entire certificate chain.</td></tr><tr><td><i>disable</i></td><td>Disable verification of the entire certificate chain.</td></tr></table>	Option	Description	<i>enable</i>	Enable verification of the entire certificate chain.	<i>disable</i>	Disable verification of the entire certificate chain.			
Option	Description									
<i>enable</i>	Enable verification of the entire certificate chain.									
<i>disable</i>	Disable verification of the entire certificate chain.									
cmp-key-usage-checking	Enable/disable server certificate key usage checking in CMP mode (default = enable).	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable server certificate key usage checking in CMP mode.</td></tr><tr><td><i>disable</i></td><td>Disable server certificate key usage checking in CMP mode.</td></tr></table>	Option	Description	<i>enable</i>	Enable server certificate key usage checking in CMP mode.	<i>disable</i>	Disable server certificate key usage checking in CMP mode.			
Option	Description									
<i>enable</i>	Enable server certificate key usage checking in CMP mode.									
<i>disable</i>	Disable server certificate key usage checking in CMP mode.									
cmp-save-extra-certs	Enable/disable saving extra certificates in CMP mode (default = disable).	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable saving extra certificates in CMP mode.</td></tr><tr><td><i>disable</i></td><td>Disable saving extra certificates in CMP mode.</td></tr></table>	Option	Description	<i>enable</i>	Enable saving extra certificates in CMP mode.	<i>disable</i>	Disable saving extra certificates in CMP mode.			
Option	Description									
<i>enable</i>	Enable saving extra certificates in CMP mode.									
<i>disable</i>	Disable saving extra certificates in CMP mode.									
cn-allow-multi	When searching for a matching certificate, allow multiple CN fields in certificate subject name (default = enable).	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>disable</i></td><td>Does not allow multiple CN entries in certificate matching.</td></tr><tr><td><i>enable</i></td><td>Allow multiple CN entries in certificate matching.</td></tr></table>	Option	Description	<i>disable</i>	Does not allow multiple CN entries in certificate matching.	<i>enable</i>	Allow multiple CN entries in certificate matching.			
Option	Description									
<i>disable</i>	Does not allow multiple CN entries in certificate matching.									
<i>enable</i>	Allow multiple CN entries in certificate matching.									

Parameter	Description	Type	Size	Default								
cn-match	When searching for a matching certificate, control how to do CN value matching with certificate subject name (default = substring).	option	-	substring								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>substring</td><td>Find a match if the name being searched for is a part or the same as a certificate CN.</td></tr><tr><td>value</td><td>Find a match if the name being searched for is same as a certificate CN.</td></tr></table>	Option	Description	substring	Find a match if the name being searched for is a part or the same as a certificate CN.	value	Find a match if the name being searched for is same as a certificate CN.					
Option	Description											
substring	Find a match if the name being searched for is a part or the same as a certificate CN.											
value	Find a match if the name being searched for is same as a certificate CN.											
interface	Specify outgoing interface to reach server.	string	Maximum length: 15									
interface-select-method	Specify how to select outgoing interface to reach server.	option	-	auto								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>auto</td><td>Set outgoing interface automatically.</td></tr><tr><td>sdwan</td><td>Set outgoing interface by SD-WAN or policy routing rules.</td></tr><tr><td>specify</td><td>Set outgoing interface manually.</td></tr></table>	Option	Description	auto	Set outgoing interface automatically.	sdwan	Set outgoing interface by SD-WAN or policy routing rules.	specify	Set outgoing interface manually.			
Option	Description											
auto	Set outgoing interface automatically.											
sdwan	Set outgoing interface by SD-WAN or policy routing rules.											
specify	Set outgoing interface manually.											
ocsp-default-server	Default OCSP server.	string	Maximum length: 35									
ocsp-option	Specify whether the OCSP URL is from certificate or configured OCSP server.	option	-	server								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>certificate</td><td>Use URL from certificate.</td></tr><tr><td>server</td><td>Use URL from configured OCSP server.</td></tr></table>	Option	Description	certificate	Use URL from certificate.	server	Use URL from configured OCSP server.					
Option	Description											
certificate	Use URL from certificate.											
server	Use URL from configured OCSP server.											
ocsp-status	Enable/disable receiving certificates using the OCSP.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable setting.</td></tr><tr><td>disable</td><td>Disable setting.</td></tr></table>	Option	Description	enable	Enable setting.	disable	Disable setting.					
Option	Description											
enable	Enable setting.											
disable	Disable setting.											
proxy	Proxy server FQDN or IP for OCSP/CA queries during certificate verification.	string	Maximum length: 127									
proxy-password	Proxy server password.	password	Not Specified									

Parameter	Description	Type	Size	Default												
proxy-port	Proxy server port (1 - 65535, default = 8080).	integer	Minimum value: 1 Maximum value: 65535	8080												
proxy-username	Proxy server user name.	string	Maximum length: 63													
source-ip	Source IP address for dynamic AIA and OCSP queries.	string	Maximum length: 63													
ssl-min-proto-version	Minimum supported protocol version for SSL/TLS connections (default is to follow system global setting).	option	-	default												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>default</td><td>Follow system global setting.</td></tr><tr><td>SSLv3</td><td>SSLv3.</td></tr><tr><td>TLSv1</td><td>TLSv1.</td></tr><tr><td>TLSv1-1</td><td>TLSv1.1.</td></tr><tr><td>TLSv1-2</td><td>TLSv1.2.</td></tr></table>				Option	Description	default	Follow system global setting.	SSLv3	SSLv3.	TLSv1	TLSv1.	TLSv1-1	TLSv1.1.	TLSv1-2	TLSv1.2.
Option	Description															
default	Follow system global setting.															
SSLv3	SSLv3.															
TLSv1	TLSv1.															
TLSv1-1	TLSv1.1.															
TLSv1-2	TLSv1.2.															
strict-ocsp-check	Enable/disable strict mode OCSP checking.	option	-	disable												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable strict mode OCSP checking.</td></tr><tr><td>disable</td><td>Disable strict mode OCSP checking.</td></tr></table>				Option	Description	enable	Enable strict mode OCSP checking.	disable	Disable strict mode OCSP checking.						
Option	Description															
enable	Enable strict mode OCSP checking.															
disable	Disable strict mode OCSP checking.															
subject-match	When searching for a matching certificate, control how to do RDN value matching with certificate subject name (default = substring).	option	-	substring												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>substring</td><td>Find a match if the name being searched for is a part or the same as a certificate subject RDN.</td></tr><tr><td>value</td><td>Find a match if the name being searched for is same as a certificate subject RDN.</td></tr></table>				Option	Description	substring	Find a match if the name being searched for is a part or the same as a certificate subject RDN.	value	Find a match if the name being searched for is same as a certificate subject RDN.						
Option	Description															
substring	Find a match if the name being searched for is a part or the same as a certificate subject RDN.															
value	Find a match if the name being searched for is same as a certificate subject RDN.															
subject-set	When searching for a matching certificate, control how to do RDN set matching with certificate subject name (default = subset).	option	-	subset												

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>subset</i>	Find a match if the name being searched for is a subset of a certificate subject.		
	<i>superset</i>	Find a match if the name being searched for is a superset of a certificate subject.		

config crl-verification

Parameter	Description	Type	Size	Default
chain-crl-absence	CRL verification option when CRL of any certificate in chain is absent (default = ignore).	option	-	ignore
	Option	Description		
	<i>ignore</i>	CRL verification is ignored if CRL of any certificate in chain is absent.		
	<i>revoke</i>	Certificate will be revoked if CRL of any certificate in chain is absent.		
expiry	CRL verification option when CRL is expired (default = ignore).	option	-	ignore
	Option	Description		
	<i>ignore</i>	Certificate status will be verified even if CRL is expired.		
	<i>revoke</i>	Certificate will be revoked if CRL is expired.		
leaf-crl-absence	CRL verification option when leaf CRL is absent (default = ignore).	option	-	ignore
	Option	Description		
	<i>ignore</i>	CRL verification against leaf certificate is ignored if CRL is absent.		
	<i>revoke</i>	Certificate will be revoked if CRL of leaf certificate is absent.		

config vpn ipsec concentrator

Concentrator configuration.

```

config vpn ipsec concentrator
  Description: Concentrator configuration.
  edit <id>
    set member <name1>, <name2>, ...
    set name {string}
    set src-check [disable|enable]

```

```
next
end
```

config vpn ipsec concentrator

Parameter	Description	Type	Size	Default						
id	Concentrator ID (1 - 65535).	integer	Minimum value: 1 Maximum value: 65535	0						
member <name>	Names of up to 3 VPN tunnels to add to the concentrator. Member name.	string	Maximum length: 79							
name	Concentrator name.	string	Maximum length: 35							
src-check	Enable to check source address of phase 2 selector. Disable to check only the destination selector.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Ignore source selector when choosing tunnel.</td></tr><tr><td>enable</td><td>Use source selector to choose tunnel.</td></tr></table>				Option	Description	disable	Ignore source selector when choosing tunnel.	enable	Use source selector to choose tunnel.
Option	Description									
disable	Ignore source selector when choosing tunnel.									
enable	Use source selector to choose tunnel.									

config vpn ipsec fec

Configure Forward Error Correction (FEC) mapping profiles.

```
config vpn ipsec fec
  Description: Configure Forward Error Correction (FEC) mapping profiles.
  edit <name>
    config mappings
      Description: FEC redundancy mapping table.
      edit <seqno>
        set bandwidth-bi-threshold {integer}
        set bandwidth-down-threshold {integer}
        set bandwidth-up-threshold {integer}
        set base {integer}
        set latency-threshold {integer}
        set packet-loss-threshold {integer}
        set redundant {integer}
      next
    next
  end
```



```
next
end
```

config vpn ipsec fec

Parameter	Description	Type	Size	Default
name	Profile name.	string	Maximum length: 35	

config mappings

Parameter	Description	Type	Size	Default
bandwidth-bi-threshold	Apply FEC parameters when available bi-bandwidth is $\geq$ threshold (kbps, 0 means no threshold).	integer	Minimum value: 0 Maximum value: 4294967295	0
bandwidth-down-threshold	Apply FEC parameters when available down bandwidth is $\geq$ threshold (kbps, 0 means no threshold).	integer	Minimum value: 0 Maximum value: 4294967295	0
bandwidth-up-threshold	Apply FEC parameters when available up bandwidth is $\geq$ threshold (kbps, 0 means no threshold).	integer	Minimum value: 0 Maximum value: 4294967295	0
base	Number of base FEC packets (1 - 20).	integer	Minimum value: 1 Maximum value: 20	0
latency-threshold	Apply FEC parameters when latency is $\leq$ threshold (0 means no threshold).	integer	Minimum value: 0 Maximum value: 4294967295	0
packet-loss-threshold	Apply FEC parameters when packet loss is $\geq$ threshold (0 - 100, 0 means no threshold).	integer	Minimum value: 0 Maximum value: 100	0
redundant	Number of redundant FEC packets (1 - 5).	integer	Minimum value: 1 Maximum value: 5	0
seqno	Sequence number (1 - 64).	integer	Minimum value: 0 Maximum value: 64	0

config vpn ipsec forticlient

Configure FortiClient policy realm.

```
config vpn ipsec forticlient
  Description: Configure FortiClient policy realm.
  edit <realm>
    set phase2name {string}
    set status [enable|disable]
    set usergroupname {string}
  next
end
```

config vpn ipsec forticlient

Parameter	Description	Type	Size	Default						
phase2name	Phase 2 tunnel name that you defined in the FortiClient dialup configuration.	string	Maximum length: 35							
realm	FortiClient realm name.	string	Maximum length: 35							
status	Enable/disable this FortiClient configuration.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable setting.</td></tr><tr><td><i>disable</i></td><td>Disable setting.</td></tr></table>				Option	Description	<i>enable</i>	Enable setting.	<i>disable</i>	Disable setting.
	Option	Description								
	<i>enable</i>	Enable setting.								
<i>disable</i>	Disable setting.									
usergroupname	User group name for FortiClient users.	string	Maximum length: 35							

config vpn ipsec manualkey

Configure IPsec manual keys.

```
config vpn ipsec manualkey
  Description: Configure IPsec manual keys.
  edit <name>
    set authentication [null|md5|...]
    set authkey {user}
    set enckey {user}
    set encryption [null|des|...]
    set interface {string}
    set local-gw {ipv4-address-any}
    set localspi {user}
    set npu-offload [enable|disable]
```

```

    set remote-gw {ipv4-address}
    set remotespi {user}
next
end

```

config vpn ipsec manualkey

Parameter	Description	Type	Size	Default																						
authentication	Authentication algorithm. Must be the same for both ends of the tunnel.	option	-	null																						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>null</i></td><td>Null.</td></tr><tr><td><i>md5</i></td><td>MD5.</td></tr><tr><td><i>sha1</i></td><td>SHA1.</td></tr><tr><td><i>sha256</i></td><td>SHA256.</td></tr><tr><td><i>sha384</i></td><td>SHA384.</td></tr><tr><td><i>sha512</i></td><td>SHA512.</td></tr></table>	Option	Description	<i>null</i>	Null.	<i>md5</i>	MD5.	<i>sha1</i>	SHA1.	<i>sha256</i>	SHA256.	<i>sha384</i>	SHA384.	<i>sha512</i>	SHA512.											
	Option	Description																								
	<i>null</i>	Null.																								
	<i>md5</i>	MD5.																								
	<i>sha1</i>	SHA1.																								
	<i>sha256</i>	SHA256.																								
	<i>sha384</i>	SHA384.																								
	<i>sha512</i>	SHA512.																								
authkey	Hexadecimal authentication key in 16-digit (8-byte) segments separated by hyphens.	user	Not Specified																							
enckey	Hexadecimal encryption key in 16-digit (8-byte) segments separated by hyphens.	user	Not Specified																							
encryption	Encryption algorithm. Must be the same for both ends of the tunnel.	option	-	null																						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>null</i></td><td>Null.</td></tr><tr><td><i>des</i></td><td>DES.</td></tr><tr><td><i>3des</i></td><td>3DES.</td></tr><tr><td><i>aes128</i></td><td>AES128.</td></tr><tr><td><i>aes192</i></td><td>AES192.</td></tr><tr><td><i>aes256</i></td><td>AES256.</td></tr><tr><td><i>aria128</i></td><td>ARIA128.</td></tr><tr><td><i>aria192</i></td><td>ARIA192.</td></tr><tr><td><i>aria256</i></td><td>ARIA256.</td></tr><tr><td><i>seed</i></td><td>Seed.</td></tr></table>	Option	Description	<i>null</i>	Null.	<i>des</i>	DES.	<i>3des</i>	3DES.	<i>aes128</i>	AES128.	<i>aes192</i>	AES192.	<i>aes256</i>	AES256.	<i>aria128</i>	ARIA128.	<i>aria192</i>	ARIA192.	<i>aria256</i>	ARIA256.	<i>seed</i>	Seed.			
	Option	Description																								
	<i>null</i>	Null.																								
	<i>des</i>	DES.																								
	<i>3des</i>	3DES.																								
	<i>aes128</i>	AES128.																								
	<i>aes192</i>	AES192.																								
	<i>aes256</i>	AES256.																								
	<i>aria128</i>	ARIA128.																								
	<i>aria192</i>	ARIA192.																								
	<i>aria256</i>	ARIA256.																								
	<i>seed</i>	Seed.																								

Parameter	Description	Type	Size	Default						
interface	Name of the physical, aggregate, or VLAN interface.	string	Maximum length: 15							
local-gw	Local gateway.	ipv4-address-any	Not Specified	0.0.0.0						
localspi	Local SPI, a hexadecimal 8-digit (4-byte) tag. Discerns between two traffic streams with different encryption rules.	user	Not Specified							
name	IPsec tunnel name.	string	Maximum length: 35							
npu-offload *	Enable/disable NPU offloading.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable NPU offloading.</td></tr><tr><td>disable</td><td>Disable NPU offloading.</td></tr></table>				Option	Description	enable	Enable NPU offloading.	disable	Disable NPU offloading.
Option	Description									
enable	Enable NPU offloading.									
disable	Disable NPU offloading.									
remote-gw	Peer gateway.	ipv4-address	Not Specified	0.0.0.0						
remotespi	Remote SPI, a hexadecimal 8-digit (4-byte) tag. Discerns between two traffic streams with different encryption rules.	user	Not Specified							

* This parameter may not exist in some models.

config vpn ipsec manualkey-interface

Configure IPsec manual keys.

```

config vpn ipsec manualkey-interface
  Description: Configure IPsec manual keys.
  edit <name>
    set addr-type [4|6]
    set auth-alg [null|md5|...]
    set auth-key {user}
    set enc-alg [null|des|...]
    set enc-key {user}
    set interface {string}
    set ip-version [4|6]
    set local-gw {ipv4-address-any}
    set local-gw6 {ipv6-address}
    set local-spi {user}
    set npu-offload [enable|disable]
    set remote-gw {ipv4-address}
    set remote-gw6 {ipv6-address}

```

```

        set remote-spi {user}
    next
end

```

config vpn ipsec manualkey-interface

Parameter	Description	Type	Size	Default																
addr-type	IP version to use for IP packets.	option	-	4																
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>4</td><td>Use IPv4 addressing for IP packets.</td></tr><tr><td>6</td><td>Use IPv6 addressing for IP packets.</td></tr></table>	Option	Description	4	Use IPv4 addressing for IP packets.	6	Use IPv6 addressing for IP packets.													
	Option	Description																		
	4	Use IPv4 addressing for IP packets.																		
6	Use IPv6 addressing for IP packets.																			
auth-alg	Authentication algorithm. Must be the same for both ends of the tunnel.	option	-	null																
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>null</td><td>null</td></tr><tr><td>md5</td><td>md5</td></tr><tr><td>sha1</td><td>sha1</td></tr><tr><td>sha256</td><td>sha256</td></tr><tr><td>sha384</td><td>sha384</td></tr><tr><td>sha512</td><td>sha512</td></tr></table>	Option	Description	null	null	md5	md5	sha1	sha1	sha256	sha256	sha384	sha384	sha512	sha512					
	Option	Description																		
	null	null																		
	md5	md5																		
	sha1	sha1																		
	sha256	sha256																		
	sha384	sha384																		
sha512	sha512																			
auth-key	Hexadecimal authentication key in 16-digit (8-byte) segments separated by hyphens.	user	Not Specified																	
enc-alg	Encryption algorithm. Must be the same for both ends of the tunnel.	option	-	null																
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>null</td><td>null</td></tr><tr><td>des</td><td>des</td></tr><tr><td>3des</td><td>3des</td></tr><tr><td>aes128</td><td>aes128</td></tr><tr><td>aes192</td><td>aes192</td></tr><tr><td>aes256</td><td>aes256</td></tr><tr><td>aria128</td><td>aria128</td></tr></table>	Option	Description	null	null	des	des	3des	3des	aes128	aes128	aes192	aes192	aes256	aes256	aria128	aria128			
	Option	Description																		
	null	null																		
	des	des																		
	3des	3des																		
	aes128	aes128																		
	aes192	aes192																		
aes256	aes256																			
aria128	aria128																			

Parameter	Description	Type	Size	Default								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>aria192</td><td>aria192</td></tr><tr><td>aria256</td><td>aria256</td></tr><tr><td>seed</td><td>seed</td></tr></table>	Option	Description	aria192	aria192	aria256	aria256	seed	seed			
	Option	Description										
	aria192	aria192										
	aria256	aria256										
seed	seed											
enc-key	Hexadecimal encryption key in 16-digit (8-byte) segments separated by hyphens.	user	Not Specified									
interface	Name of the physical, aggregate, or VLAN interface.	string	Maximum length: 15									
ip-version	IP version to use for VPN interface.	option	-	4								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>4</td><td>Use IPv4 addressing for gateways.</td></tr><tr><td>6</td><td>Use IPv6 addressing for gateways.</td></tr></table>	Option	Description	4	Use IPv4 addressing for gateways.	6	Use IPv6 addressing for gateways.					
	Option	Description										
	4	Use IPv4 addressing for gateways.										
6	Use IPv6 addressing for gateways.											
local-gw	IPv4 address of the local gateway's external interface.	ipv4-address-any	Not Specified	0.0.0.0								
local-gw6	Local IPv6 address of VPN gateway.	ipv6-address	Not Specified	::								
local-spi	Local SPI, a hexadecimal 8-digit (4-byte) tag. Discerns between two traffic streams with different encryption rules.	user	Not Specified									
name	IPsec tunnel name.	string	Maximum length: 15									
npu-offload *	Enable/disable offloading IPsec VPN manual key sessions to NPUs.	option	-	enable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable NPU offloading.</td></tr><tr><td>disable</td><td>Disable NPU offloading.</td></tr></table>	Option	Description	enable	Enable NPU offloading.	disable	Disable NPU offloading.					
	Option	Description										
	enable	Enable NPU offloading.										
disable	Disable NPU offloading.											
remote-gw	IPv4 address of the remote gateway's external interface.	ipv4-address	Not Specified	0.0.0.0								
remote-gw6	Remote IPv6 address of VPN gateway.	ipv6-address	Not Specified	::								
remote-spi	Remote SPI, a hexadecimal 8-digit (4-byte) tag. Discerns between two traffic streams with different encryption rules.	user	Not Specified									

* This parameter may not exist in some models.

config vpn ipsec phase1

Configure VPN remote gateway.

```
config vpn ipsec phase1
  Description: Configure VPN remote gateway.
  edit <name>
    set acct-verify [enable|disable]
    set add-gw-route [enable|disable]
    set add-route [disable|enable]
    set assign-ip [disable|enable]
    set assign-ip-from [range|usrgrp|...]
    set authmethod [psk|signature]
    set authmethod-remote [psk|signature]
    set authpasswd {password}
    set authusr {string}
    set authusrgrp {string}
    set auto-negotiate [enable|disable]
    set azure-ad-autoconnect [enable|disable]
    set backup-gateway <address1>, <address2>, ...
    set banner {var-string}
    set cert-id-validation [enable|disable]
    set cert-trust-store [local|ems]
    set certificate <name1>, <name2>, ...
    set childless-ike [enable|disable]
    set client-auto-negotiate [disable|enable]
    set client-keep-alive [disable|enable]
    set comments {var-string}
    set dev-id {string}
    set dev-id-notification [disable|enable]
    set dhcp-ra-giaddr {ipv4-address}
    set dhcp6-ra-linkaddr {ipv6-address}
    set dhgrp {option1}, {option2}, ...
    set digital-signature-auth [enable|disable]
    set distance {integer}
    set dns-mode [manual|auto]
    set domain {string}
    set dpd [disable|on-idle|...]
    set dpd-retrycount {integer}
    set dpd-retryinterval {user}
    set eap [enable|disable]
    set eap-exclude-peergrp {string}
    set eap-identity [use-id-payload|send-request]
    set ems-sn-check [enable|disable]
    set enforce-unique-id [disable|keep-new|...]
    set esn [require|allow|...]
    set exchange-fgt-device-id [enable|disable]
    set fec-base {integer}
    set fec-codec [rs|xor]
    set fec-egress [enable|disable]
    set fec-health-check {string}
```

```

set fec-ingress [enable|disable]
set fec-mapping-profile {string}
set fec-receive-timeout {integer}
set fec-redundant {integer}
set fec-send-timeout {integer}
set fgsp-sync [enable|disable]
set forticlient-enforcement [enable|disable]
set fragmentation [enable|disable]
set fragmentation-mtu {integer}
set group-authentication [enable|disable]
set group-authentication-secret {password-3}
set ha-sync-esp-seqno [enable|disable]
set idle-timeout [enable|disable]
set idle-timeoutinterval {integer}
set ike-version [1|2]
set inbound-dscp-copy [enable|disable]
set include-local-lan [disable|enable]
set interface {string}
set internal-domain-list <domain-name1>, <domain-name2>, ...
set ip-delay-interval {integer}
set ipv4-dns-server1 {ipv4-address}
set ipv4-dns-server2 {ipv4-address}
set ipv4-dns-server3 {ipv4-address}
set ipv4-end-ip {ipv4-address}
config ipv4-exclude-range
    Description: Configuration Method IPv4 exclude ranges.
    edit <id>
        set end-ip {ipv4-address}
        set start-ip {ipv4-address}
    next
end
set ipv4-name {string}
set ipv4-netmask {ipv4-netmask}
set ipv4-split-exclude {string}
set ipv4-split-include {string}
set ipv4-start-ip {ipv4-address}
set ipv4-wins-server1 {ipv4-address}
set ipv4-wins-server2 {ipv4-address}
set ipv6-dns-server1 {ipv6-address}
set ipv6-dns-server2 {ipv6-address}
set ipv6-dns-server3 {ipv6-address}
set ipv6-end-ip {ipv6-address}
config ipv6-exclude-range
    Description: Configuration method IPv6 exclude ranges.
    edit <id>
        set end-ip {ipv6-address}
        set start-ip {ipv6-address}
    next
end
set ipv6-name {string}
set ipv6-prefix {integer}
set ipv6-split-exclude {string}

```



```
set ipv6-split-include {string}
set ipv6-start-ip {ipv6-address}
set keepalive {integer}
set keylife {integer}
set link-cost {integer}
set local-gw {ipv4-address}
set localid {string}
set localid-type [auto|fqdn|...]
set loopback-asymroute [enable|disable]
set mesh-selector-type [disable|subnet|...]
set mode [aggressive|main]
set mode-cfg [disable|enable]
set mode-cfg-allow-client-selector [disable|enable]
set nattraversal [enable|disable|...]
set negotiate-timeout {integer}
set network-id {integer}
set network-overlay [disable|enable]
set npu-offload [enable|disable]
set peer {string}
set peergrp {string}
set peerid {string}
set peertype [any|one|...]
set ppk [disable|allow|...]
set ppk-identity {string}
set ppk-secret {password-3}
set priority {integer}
set proposal {option1}, {option2}, ...
set psksecret {password-3}
set psksecret-remote {password-3}
set reauth [disable|enable]
set rekey [enable|disable]
set remote-gw {ipv4-address}
set remote-gw-country {string}
set remote-gw-end-ip {ipv4-address-any}
set remote-gw-match [any|ipmask|...]
set remote-gw-start-ip {ipv4-address-any}
set remote-gw-subnet {ipv4-classnet-any}
set remote-gw6-country {string}
set remote-gw6-end-ip {ipv6-address}
set remote-gw6-match [any|ipprefix|...]
set remote-gw6-start-ip {ipv6-address}
set remote-gw6-subnet {ipv6-network}
set remotegw-ddns {string}
set rsa-signature-format [pkcs1|pss]
set rsa-signature-hash-override [enable|disable]
set save-password [disable|enable]
set send-cert-chain [enable|disable]
set signature-hash-alg {option1}, {option2}, ...
set split-include-service {string}
set suite-b [disable|suite-b-gcm-128|...]
set type [static|dynamic|...]
set unity-support [disable|enable]
```

```

    set usrgrp {string}
    set wizard-type [custom|dialup-forticlient|...]
    set xauthtype [disable|client|...]
next
end

```

config vpn ipsec phase1

Parameter	Description	Type	Size	Default
acct-verify	Enable/disable verification of RADIUS accounting record.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable verification of RADIUS accounting record.		
	<i>disable</i>	Disable verification of RADIUS accounting record.		
add-gw-route	Enable/disable automatically add a route to the remote gateway.	option	-	disable
	Option	Description		
	<i>enable</i>	Automatically add a route to the remote gateway.		
	<i>disable</i>	Do not automatically add a route to the remote gateway.		
add-route	Enable/disable control addition of a route to peer destination selector.	option	-	disable
	Option	Description		
	<i>disable</i>	Do not add a route to destination of peer selector.		
	<i>enable</i>	Add route to destination of peer selector.		
assign-ip	Enable/disable assignment of IP to IPsec interface via configuration method.	option	-	enable
	Option	Description		
	<i>disable</i>	Do not assign an IP address to the IPsec interface.		
	<i>enable</i>	Assign an IP address to the IPsec interface.		
assign-ip-from	Method by which the IP address will be assigned.	option	-	range
	Option	Description		
	<i>range</i>	Assign IP address from locally defined range.		

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>usrgrp</i>	Assign IP address via user group.		
	<i>dhcp</i>	Assign IP address via DHCP.		
	<i>name</i>	Assign IP address from firewall address or group.		
authmethod	Authentication method.	option	-	psk
	Option	Description		
	<i>psk</i>	PSK authentication method.		
	<i>signature</i>	Signature authentication method.		
authmethod-remote	Authentication method (remote side).	option	-	
	Option	Description		
	<i>psk</i>	PSK authentication method.		
	<i>signature</i>	Signature authentication method.		
authpasswd	XAuth password (max 35 characters).	password	Not Specified	
authusr	XAuth user name.	string	Maximum length: 64	
authusrgrp	Authentication user group.	string	Maximum length: 35	
auto-negotiate	Enable/disable automatic initiation of IKE SA negotiation.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable automatic initiation of IKE SA negotiation.		
	<i>disable</i>	Disable automatic initiation of IKE SA negotiation.		
azure-ad-autoconnect	Enable/disable Azure AD Auto-Connect for FortiClient.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable Azure AD Auto-Connect for FortiClient.		
	<i>disable</i>	Disable Azure AD Auto-Connect for FortiClient.		
backup-gateway <address>	Instruct unity clients about the backup gateway address(es).	string	Maximum length: 79	

Parameter	Description	Type	Size	Default						
	Address of backup gateway.									
banner	Message that unity client should display after connecting.	var-string	Maximum length: 1024							
cert-id-validation	Enable/disable cross validation of peer ID and the identity in the peer's certificate as specified in RFC 4945.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable cross validation of peer ID and the identity in the peer's certificate as specified in RFC 4945.</td></tr><tr><td><i>disable</i></td><td>Disable cross validation of peer ID and the identity in the peer's certificate as specified in RFC 4945.</td></tr></table>				Option	Description	<i>enable</i>	Enable cross validation of peer ID and the identity in the peer's certificate as specified in RFC 4945.	<i>disable</i>	Disable cross validation of peer ID and the identity in the peer's certificate as specified in RFC 4945.
	Option	Description								
	<i>enable</i>	Enable cross validation of peer ID and the identity in the peer's certificate as specified in RFC 4945.								
<i>disable</i>	Disable cross validation of peer ID and the identity in the peer's certificate as specified in RFC 4945.									
cert-trust-store	CA certificate trust store.	option	-	local						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>local</i></td><td>Use local CA certificate.</td></tr><tr><td><i>ems</i></td><td>Use EMS CA certificate.</td></tr></table>				Option	Description	<i>local</i>	Use local CA certificate.	<i>ems</i>	Use EMS CA certificate.
	Option	Description								
	<i>local</i>	Use local CA certificate.								
<i>ems</i>	Use EMS CA certificate.									
certificate <name>	Names of up to 4 signed personal certificates. Certificate name.	string	Maximum length: 79							
childless-ike	Enable/disable childless IKEv2 initiation (RFC 6023).	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable childless IKEv2 initiation (RFC 6023).</td></tr><tr><td><i>disable</i></td><td>Disable childless IKEv2 initiation (RFC 6023).</td></tr></table>				Option	Description	<i>enable</i>	Enable childless IKEv2 initiation (RFC 6023).	<i>disable</i>	Disable childless IKEv2 initiation (RFC 6023).
	Option	Description								
	<i>enable</i>	Enable childless IKEv2 initiation (RFC 6023).								
<i>disable</i>	Disable childless IKEv2 initiation (RFC 6023).									
client-auto-negotiate	Enable/disable allowing the VPN client to bring up the tunnel when there is no traffic.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>disable</i></td><td>Disable allowing the VPN client to bring up the tunnel when there is no traffic.</td></tr><tr><td><i>enable</i></td><td>Enable allowing the VPN client to bring up the tunnel when there is no traffic.</td></tr></table>				Option	Description	<i>disable</i>	Disable allowing the VPN client to bring up the tunnel when there is no traffic.	<i>enable</i>	Enable allowing the VPN client to bring up the tunnel when there is no traffic.
	Option	Description								
	<i>disable</i>	Disable allowing the VPN client to bring up the tunnel when there is no traffic.								
<i>enable</i>	Enable allowing the VPN client to bring up the tunnel when there is no traffic.									

Parameter	Description	Type	Size	Default																		
client-keep-alive	Enable/disable allowing the VPN client to keep the tunnel up when there is no traffic.	option	-	disable																		
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>disable</i></td><td>Disable allowing the VPN client to keep the tunnel up when there is no traffic.</td></tr><tr><td><i>enable</i></td><td>Enable allowing the VPN client to keep the tunnel up when there is no traffic.</td></tr></table>	Option	Description	<i>disable</i>	Disable allowing the VPN client to keep the tunnel up when there is no traffic.	<i>enable</i>	Enable allowing the VPN client to keep the tunnel up when there is no traffic.															
Option	Description																					
<i>disable</i>	Disable allowing the VPN client to keep the tunnel up when there is no traffic.																					
<i>enable</i>	Enable allowing the VPN client to keep the tunnel up when there is no traffic.																					
comments	Comment.	var-string	Maximum length: 255																			
dev-id	Device ID carried by the device ID notification.	string	Maximum length: 63																			
dev-id-notification	Enable/disable device ID notification.	option	-	disable																		
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>disable</i></td><td>Disable device ID notification.</td></tr><tr><td><i>enable</i></td><td>Enable device ID notification.</td></tr></table>	Option	Description	<i>disable</i>	Disable device ID notification.	<i>enable</i>	Enable device ID notification.															
Option	Description																					
<i>disable</i>	Disable device ID notification.																					
<i>enable</i>	Enable device ID notification.																					
dhcp-ra-giaddr	Relay agent gateway IP address to use in the giaddr field of DHCP requests.	ipv4-address	Not Specified	0.0.0.0																		
dhcp6-ra-linkaddr	Relay agent IPv6 link address to use in DHCP6 requests.	ipv6-address	Not Specified	::																		
dhgrp	DH group.	option	-	14																		
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>1</td><td>DH Group 1.</td></tr><tr><td>2</td><td>DH Group 2.</td></tr><tr><td>5</td><td>DH Group 5.</td></tr><tr><td>14</td><td>DH Group 14.</td></tr><tr><td>15</td><td>DH Group 15.</td></tr><tr><td>16</td><td>DH Group 16.</td></tr><tr><td>17</td><td>DH Group 17.</td></tr><tr><td>18</td><td>DH Group 18.</td></tr></table>	Option	Description	1	DH Group 1.	2	DH Group 2.	5	DH Group 5.	14	DH Group 14.	15	DH Group 15.	16	DH Group 16.	17	DH Group 17.	18	DH Group 18.			
Option	Description																					
1	DH Group 1.																					
2	DH Group 2.																					
5	DH Group 5.																					
14	DH Group 14.																					
15	DH Group 15.																					
16	DH Group 16.																					
17	DH Group 17.																					
18	DH Group 18.																					

Parameter	Description	Type	Size	Default																				
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>19</td><td>DH Group 19.</td></tr><tr><td>20</td><td>DH Group 20.</td></tr><tr><td>21</td><td>DH Group 21.</td></tr><tr><td>27</td><td>DH Group 27.</td></tr><tr><td>28</td><td>DH Group 28.</td></tr><tr><td>29</td><td>DH Group 29.</td></tr><tr><td>30</td><td>DH Group 30.</td></tr><tr><td>31</td><td>DH Group 31.</td></tr><tr><td>32</td><td>DH Group 32.</td></tr></table>	Option	Description	19	DH Group 19.	20	DH Group 20.	21	DH Group 21.	27	DH Group 27.	28	DH Group 28.	29	DH Group 29.	30	DH Group 30.	31	DH Group 31.	32	DH Group 32.			
	Option	Description																						
	19	DH Group 19.																						
	20	DH Group 20.																						
	21	DH Group 21.																						
	27	DH Group 27.																						
	28	DH Group 28.																						
	29	DH Group 29.																						
	30	DH Group 30.																						
	31	DH Group 31.																						
32	DH Group 32.																							
digital-signature-auth	Enable/disable IKEv2 Digital Signature Authentication (RFC 7427).	option	-	disable																				
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable IKEv2 Digital Signature Authentication (RFC 7427).</td></tr><tr><td>disable</td><td>Disable IKEv2 Digital Signature Authentication (RFC 7427).</td></tr></table>	Option	Description	enable	Enable IKEv2 Digital Signature Authentication (RFC 7427).	disable	Disable IKEv2 Digital Signature Authentication (RFC 7427).																	
	Option	Description																						
	enable	Enable IKEv2 Digital Signature Authentication (RFC 7427).																						
disable	Disable IKEv2 Digital Signature Authentication (RFC 7427).																							
distance	Distance for routes added by IKE (1 - 255).	integer	Minimum value: 1 Maximum value: 255	15																				
dns-mode	DNS server mode.	option	-	manual																				
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>manual</td><td>Manually configure DNS servers.</td></tr><tr><td>auto</td><td>Use default DNS servers.</td></tr></table>	Option	Description	manual	Manually configure DNS servers.	auto	Use default DNS servers.																	
	Option	Description																						
	manual	Manually configure DNS servers.																						
auto	Use default DNS servers.																							
domain	Instruct unity clients about the single default DNS domain.	string	Maximum length: 63																					
dpd	Dead Peer Detection mode.	option	-	on-demand																				
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Disable Dead Peer Detection.</td></tr><tr><td>on-idle</td><td>Trigger Dead Peer Detection when IPsec is idle.</td></tr></table>	Option	Description	disable	Disable Dead Peer Detection.	on-idle	Trigger Dead Peer Detection when IPsec is idle.																	
	Option	Description																						
	disable	Disable Dead Peer Detection.																						
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Parameter	Description	Type	Size	Default								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>on-demand</i></td><td>Trigger Dead Peer Detection when IPsec traffic is sent but no reply is received from the peer.</td></tr></table>				Option	Description	<i>on-demand</i>	Trigger Dead Peer Detection when IPsec traffic is sent but no reply is received from the peer.				
	Option	Description										
	<i>on-demand</i>	Trigger Dead Peer Detection when IPsec traffic is sent but no reply is received from the peer.										
dpd-retrycount	Number of DPD retry attempts.	integer	Minimum value: 0 Maximum value: 10	3								
dpd-retryinterval	DPD retry interval.	user	Not Specified									
eap	Enable/disable IKEv2 EAP authentication.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable IKEv2 EAP authentication.</td></tr><tr><td><i>disable</i></td><td>Disable IKEv2 EAP authentication.</td></tr></table>				Option	Description	<i>enable</i>	Enable IKEv2 EAP authentication.	<i>disable</i>	Disable IKEv2 EAP authentication.		
	Option	Description										
	<i>enable</i>	Enable IKEv2 EAP authentication.										
<i>disable</i>	Disable IKEv2 EAP authentication.											
eap-exclude-peergrp	Peer group excluded from EAP authentication.	string	Maximum length: 35									
eap-identity	IKEv2 EAP peer identity type.	option	-	use-id-payload								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>use-id-payload</i></td><td>Use IKEv2 IDi payload to resolve peer identity.</td></tr><tr><td><i>send-request</i></td><td>Use EAP identity request to resolve peer identity.</td></tr></table>				Option	Description	<i>use-id-payload</i>	Use IKEv2 IDi payload to resolve peer identity.	<i>send-request</i>	Use EAP identity request to resolve peer identity.		
	Option	Description										
	<i>use-id-payload</i>	Use IKEv2 IDi payload to resolve peer identity.										
<i>send-request</i>	Use EAP identity request to resolve peer identity.											
ems-sn-check	Enable/disable verification of EMS serial number.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable EMS serial number verification.</td></tr><tr><td><i>disable</i></td><td>Disable EMS serial number verification.</td></tr></table>				Option	Description	<i>enable</i>	Enable EMS serial number verification.	<i>disable</i>	Disable EMS serial number verification.		
	Option	Description										
	<i>enable</i>	Enable EMS serial number verification.										
<i>disable</i>	Disable EMS serial number verification.											
enforce-unique-id	Enable/disable peer ID uniqueness check.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>disable</i></td><td>Disable peer ID uniqueness enforcement.</td></tr><tr><td><i>keep-new</i></td><td>Enforce peer ID uniqueness, keep new connection if collision found.</td></tr><tr><td><i>keep-old</i></td><td>Enforce peer ID uniqueness, keep old connection if collision found.</td></tr></table>				Option	Description	<i>disable</i>	Disable peer ID uniqueness enforcement.	<i>keep-new</i>	Enforce peer ID uniqueness, keep new connection if collision found.	<i>keep-old</i>	Enforce peer ID uniqueness, keep old connection if collision found.
	Option	Description										
	<i>disable</i>	Disable peer ID uniqueness enforcement.										
<i>keep-new</i>	Enforce peer ID uniqueness, keep new connection if collision found.											
<i>keep-old</i>	Enforce peer ID uniqueness, keep old connection if collision found.											

Parameter	Description	Type	Size	Default								
esn *	Extended sequence number (ESN) negotiation.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>require</i></td><td>Require extended sequence number.</td></tr><tr><td><i>allow</i></td><td>Allow extended sequence number.</td></tr><tr><td><i>disable</i></td><td>Disable extended sequence number.</td></tr></table>	Option	Description	<i>require</i>	Require extended sequence number.	<i>allow</i>	Allow extended sequence number.	<i>disable</i>	Disable extended sequence number.			
	Option	Description										
	<i>require</i>	Require extended sequence number.										
	<i>allow</i>	Allow extended sequence number.										
<i>disable</i>	Disable extended sequence number.											
exchange-fgt-device-id	Enable/disable device identifier exchange with peer FortiGate units for use of VPN monitor data by FortiManager.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable exchange of FortiGate device identifier.</td></tr><tr><td><i>disable</i></td><td>Disable exchange of FortiGate device identifier.</td></tr></table>	Option	Description	<i>enable</i>	Enable exchange of FortiGate device identifier.	<i>disable</i>	Disable exchange of FortiGate device identifier.					
	Option	Description										
	<i>enable</i>	Enable exchange of FortiGate device identifier.										
<i>disable</i>	Disable exchange of FortiGate device identifier.											
fec-base	Number of base Forward Error Correction packets (1 - 20).	integer	Minimum value: 1 Maximum value: 20	10								
fec-codec	Forward Error Correction encoding/decoding algorithm.	option	-	rs								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>rs</i></td><td>Reed-Solomon FEC algorithm.</td></tr><tr><td><i>xor</i></td><td>XOR FEC algorithm.</td></tr></table>	Option	Description	<i>rs</i>	Reed-Solomon FEC algorithm.	<i>xor</i>	XOR FEC algorithm.					
	Option	Description										
	<i>rs</i>	Reed-Solomon FEC algorithm.										
<i>xor</i>	XOR FEC algorithm.											
fec-egress	Enable/disable Forward Error Correction for egress IPsec traffic.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable Forward Error Correction for egress IPsec traffic.</td></tr><tr><td><i>disable</i></td><td>Disable Forward Error Correction for egress IPsec traffic.</td></tr></table>	Option	Description	<i>enable</i>	Enable Forward Error Correction for egress IPsec traffic.	<i>disable</i>	Disable Forward Error Correction for egress IPsec traffic.					
	Option	Description										
	<i>enable</i>	Enable Forward Error Correction for egress IPsec traffic.										
<i>disable</i>	Disable Forward Error Correction for egress IPsec traffic.											
fec-health-check	SD-WAN health check.	string	Maximum length: 35									
fec-ingress	Enable/disable Forward Error Correction for ingress IPsec traffic.	option	-	disable								

Parameter	Description	Type	Size	Default
	Option Description			
	<i>enable</i>	Enable Forward Error Correction for ingress IPsec traffic.		
	<i>disable</i>	Disable Forward Error Correction for ingress IPsec traffic.		
fec-mapping-profile	Forward Error Correction (FEC) mapping profile.	string	Maximum length: 35	
fec-receive-timeout	Timeout in milliseconds before dropping Forward Error Correction packets (1 - 1000).	integer	Minimum value: 1 Maximum value: 1000	50
fec-redundant	Number of redundant Forward Error Correction packets (1 - 5 for reed-solomon, 1 for xor).	integer	Minimum value: 1 Maximum value: 5	1
fec-send-timeout	Timeout in milliseconds before sending Forward Error Correction packets (1 - 1000).	integer	Minimum value: 1 Maximum value: 1000	5
fgsp-sync	Enable/disable IPsec syncing of tunnels for FGSP IPsec.	option	-	disable
	Option Description			
	<i>enable</i>	Enable IPsec syncing of tunnels to other cluster members.		
	<i>disable</i>	Disable IPsec syncing of tunnels to other cluster members.		
forticlient-enforcement	Enable/disable FortiClient enforcement.	option	-	disable
	Option Description			
	<i>enable</i>	Enable FortiClient enforcement.		
	<i>disable</i>	Disable FortiClient enforcement.		
fragmentation	Enable/disable fragment IKE message on re-transmission.	option	-	enable
	Option Description			
	<i>enable</i>	Enable intra-IKE fragmentation support on re-transmission.		
	<i>disable</i>	Disable intra-IKE fragmentation support.		

Parameter	Description	Type	Size	Default
fragmentation-mtu	IKE fragmentation MTU (500 - 16000).	integer	Minimum value: 500 Maximum value: 16000	1200
group-authentication	Enable/disable IKEv2 IDi group authentication.	option	-	disable
	Option	Description		
	enable	Enable IKEv2 IDi group authentication.		
	disable	Disable IKEv2 IDi group authentication.		
group-authentication-secret	Password for IKEv2 ID group authentication. ASCII string or hexadecimal indicated by a leading 0x.	password-3	Not Specified	
ha-sync-esp-seqno	Enable/disable sequence number jump ahead for IPsec HA.	option	-	enable
	Option	Description		
	enable	Enable HA syncing of ESP sequence numbers.		
	disable	Disable HA syncing of ESP sequence numbers.		
idle-timeout	Enable/disable IPsec tunnel idle timeout.	option	-	disable
	Option	Description		
	enable	Enable IPsec tunnel idle timeout.		
	disable	Disable IPsec tunnel idle timeout.		
idle-timeoutinterval	IPsec tunnel idle timeout in minutes (5 - 43200).	integer	Minimum value: 5 Maximum value: 43200	15
ike-version	IKE protocol version.	option	-	1
	Option	Description		
	1	Use IKEv1 protocol.		
	2	Use IKEv2 protocol.		

Parameter	Description	Type	Size	Default						
inbound-dscp-copy	Enable/disable copy the dscp in the ESP header to the inner IP Header.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable copy the dscp in the ESP header to the inner IP Header.</td></tr><tr><td>disable</td><td>Disable copy the dscp in the ESP header to the inner IP Header.</td></tr></table>	Option	Description	enable	Enable copy the dscp in the ESP header to the inner IP Header.	disable	Disable copy the dscp in the ESP header to the inner IP Header.			
	Option	Description								
	enable	Enable copy the dscp in the ESP header to the inner IP Header.								
disable	Disable copy the dscp in the ESP header to the inner IP Header.									
include-local-lan	Enable/disable allow local LAN access on unity clients.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Disable local LAN access on Unity clients.</td></tr><tr><td>enable</td><td>Enable local LAN access on Unity clients.</td></tr></table>	Option	Description	disable	Disable local LAN access on Unity clients.	enable	Enable local LAN access on Unity clients.			
	Option	Description								
	disable	Disable local LAN access on Unity clients.								
enable	Enable local LAN access on Unity clients.									
interface	Local physical, aggregate, or VLAN outgoing interface.	string	Maximum length: 35							
internal-domain-list <domain-name>	List of domains for which the client directs DNS queries to the internal DNS servers for resolution. DNS servers are configured in the mode-cfg settings. One or more internal domain names in quotes separated by spaces, like "abc.com xyz.com 123.com" Domain name.	string	Maximum length: 79							
ip-delay-interval	IP address reuse delay interval in seconds (0 - 28800).	integer	Minimum value: 0 Maximum value: 28800	0						
ipv4-dns-server1	IPv4 DNS server 1.	ipv4-address	Not Specified	0.0.0.0						
ipv4-dns-server2	IPv4 DNS server 2.	ipv4-address	Not Specified	0.0.0.0						
ipv4-dns-server3	IPv4 DNS server 3.	ipv4-address	Not Specified	0.0.0.0						
ipv4-end-ip	End of IPv4 range.	ipv4-address	Not Specified	0.0.0.0						
ipv4-name	IPv4 address name.	string	Maximum length: 79							

Parameter	Description	Type	Size	Default
ipv4-netmask	IPv4 Netmask.	ipv4-netmask	Not Specified	255.255.255.255
ipv4-split-exclude	IPv4 subnets that should not be sent over the IPsec tunnel.	string	Maximum length: 79	
ipv4-split-include	IPv4 split-include subnets.	string	Maximum length: 79	
ipv4-start-ip	Start of IPv4 range.	ipv4-address	Not Specified	0.0.0.0
ipv4-wins-server1	WINS server 1.	ipv4-address	Not Specified	0.0.0.0
ipv4-wins-server2	WINS server 2.	ipv4-address	Not Specified	0.0.0.0
ipv6-dns-server1	IPv6 DNS server 1.	ipv6-address	Not Specified	::
ipv6-dns-server2	IPv6 DNS server 2.	ipv6-address	Not Specified	::
ipv6-dns-server3	IPv6 DNS server 3.	ipv6-address	Not Specified	::
ipv6-end-ip	End of IPv6 range.	ipv6-address	Not Specified	::
ipv6-name	IPv6 address name.	string	Maximum length: 79	
ipv6-prefix	IPv6 prefix.	integer	Minimum value: 1 Maximum value: 128	128
ipv6-split-exclude	IPv6 subnets that should not be sent over the IPsec tunnel.	string	Maximum length: 79	
ipv6-split-include	IPv6 split-include subnets.	string	Maximum length: 79	
ipv6-start-ip	Start of IPv6 range.	ipv6-address	Not Specified	::
keepalive	NAT-T keep alive interval.	integer	Minimum value: 10 Maximum value: 900	10

Parameter	Description	Type	Size	Default														
keylife	Time to wait in seconds before phase 1 encryption key expires.	integer	Minimum value: 120 Maximum value: 172800	86400														
link-cost	VPN tunnel underlay link cost.	integer	Minimum value: 0 Maximum value: 255	0														
local-gw	Local VPN gateway.	ipv4-address	Not Specified	0.0.0.0														
localid	Local ID.	string	Maximum length: 63															
localid-type	Local ID type.	option	-	auto														
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>auto</td><td>Select ID type automatically.</td></tr><tr><td>fqdn</td><td>Use fully qualified domain name.</td></tr><tr><td>user-fqdn</td><td>Use user fully qualified domain name.</td></tr><tr><td>keyid</td><td>Use key-id string.</td></tr><tr><td>address</td><td>Use local IP address.</td></tr><tr><td>asn1dn</td><td>Use ASN.1 distinguished name.</td></tr></table>				Option	Description	auto	Select ID type automatically.	fqdn	Use fully qualified domain name.	user-fqdn	Use user fully qualified domain name.	keyid	Use key-id string.	address	Use local IP address.	asn1dn	Use ASN.1 distinguished name.
Option	Description																	
auto	Select ID type automatically.																	
fqdn	Use fully qualified domain name.																	
user-fqdn	Use user fully qualified domain name.																	
keyid	Use key-id string.																	
address	Use local IP address.																	
asn1dn	Use ASN.1 distinguished name.																	
loopback-asymroute	Enable/disable asymmetric routing for IKE traffic on loopback interface.	option	-	enable														
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Allow ingress/egress IKE traffic to be routed over different interfaces.</td></tr><tr><td>disable</td><td>Ingress/egress IKE traffic must be routed over the same interface.</td></tr></table>				Option	Description	enable	Allow ingress/egress IKE traffic to be routed over different interfaces.	disable	Ingress/egress IKE traffic must be routed over the same interface.								
Option	Description																	
enable	Allow ingress/egress IKE traffic to be routed over different interfaces.																	
disable	Ingress/egress IKE traffic must be routed over the same interface.																	
mesh-selector-type	Add selectors containing subsets of the configuration depending on traffic.	option	-	disable														
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Disable.</td></tr><tr><td>subnet</td><td>Enable addition of matching subnet selector.</td></tr><tr><td>host</td><td>Enable addition of host to host selector.</td></tr></table>				Option	Description	disable	Disable.	subnet	Enable addition of matching subnet selector.	host	Enable addition of host to host selector.						
Option	Description																	
disable	Disable.																	
subnet	Enable addition of matching subnet selector.																	
host	Enable addition of host to host selector.																	

Parameter	Description	Type	Size	Default								
mode	ID protection mode used to establish a secure channel.	option	-	main								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>aggressive</i></td><td>Aggressive mode.</td></tr><tr><td><i>main</i></td><td>Main mode.</td></tr></table>	Option	Description	<i>aggressive</i>	Aggressive mode.	<i>main</i>	Main mode.					
Option	Description											
<i>aggressive</i>	Aggressive mode.											
<i>main</i>	Main mode.											
mode-cfg	Enable/disable configuration method.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>disable</i></td><td>Disable Configuration Method.</td></tr><tr><td><i>enable</i></td><td>Enable Configuration Method.</td></tr></table>	Option	Description	<i>disable</i>	Disable Configuration Method.	<i>enable</i>	Enable Configuration Method.					
Option	Description											
<i>disable</i>	Disable Configuration Method.											
<i>enable</i>	Enable Configuration Method.											
mode-cfg-allow-client-selector	Enable/disable mode-cfg client to use custom phase2 selectors.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>disable</i></td><td>Mode-cfg client to use wildcard selectors.</td></tr><tr><td><i>enable</i></td><td>Mode-cfg client to use custom selectors.</td></tr></table>	Option	Description	<i>disable</i>	Mode-cfg client to use wildcard selectors.	<i>enable</i>	Mode-cfg client to use custom selectors.					
Option	Description											
<i>disable</i>	Mode-cfg client to use wildcard selectors.											
<i>enable</i>	Mode-cfg client to use custom selectors.											
name	IPsec remote gateway name.	string	Maximum length: 35									
nattraversal	Enable/disable NAT traversal.	option	-	enable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable IPsec NAT traversal.</td></tr><tr><td><i>disable</i></td><td>Disable IPsec NAT traversal.</td></tr><tr><td><i>forced</i></td><td>Force IPsec NAT traversal on.</td></tr></table>	Option	Description	<i>enable</i>	Enable IPsec NAT traversal.	<i>disable</i>	Disable IPsec NAT traversal.	<i>forced</i>	Force IPsec NAT traversal on.			
Option	Description											
<i>enable</i>	Enable IPsec NAT traversal.											
<i>disable</i>	Disable IPsec NAT traversal.											
<i>forced</i>	Force IPsec NAT traversal on.											
negotiate-timeout	IKE SA negotiation timeout in seconds (1 - 300).	integer	Minimum value: 1 Maximum value: 300	30								
network-id	VPN gateway network ID.	integer	Minimum value: 0 Maximum value: 255	0								
network-overlay	Enable/disable network overlays.	option	-	disable								

Parameter	Description	Type	Size	Default
	Option Description			
	<i>disable</i>	Disable network overlays.		
	<i>enable</i>	Enable network overlays.		
npu-offload *	Enable/disable offloading NPU.	option	-	enable
	Option Description			
	<i>enable</i>	Enable NPU offloading.		
	<i>disable</i>	Disable NPU offloading.		
peer	Accept this peer certificate.	string	Maximum length: 35	
peergrp	Accept this peer certificate group.	string	Maximum length: 35	
peerid	Accept this peer identity.	string	Maximum length: 255	
peertype	Accept this peer type.	option	-	peer
	Option Description			
	<i>any</i>	Accept any peer ID.		
	<i>one</i>	Accept this peer ID.		
	<i>dialup</i>	Accept peer ID in dialup group.		
	<i>peer</i>	Accept this peer certificate.		
	<i>peergrp</i>	Accept this peer certificate group.		
ppk	Enable/disable IKEv2 Postquantum Preshared Key (PPK).	option	-	disable
	Option Description			
	<i>disable</i>	Disable use of IKEv2 Postquantum Preshared Key (PPK).		
	<i>allow</i>	Allow, but do not require, use of IKEv2 Postquantum Preshared Key (PPK).		
	<i>require</i>	Require use of IKEv2 Postquantum Preshared Key (PPK).		
ppk-identity	IKEv2 Postquantum Preshared Key Identity.	string	Maximum length: 35	

Parameter	Description	Type	Size	Default																																														
ppk-secret	IKEv2 Postquantum Preshared Key (ASCII string or hexadecimal encoded with a leading 0x).	password-3	Not Specified																																															
priority	Priority for routes added by IKE (1 - 65535).	integer	Minimum value: 1 Maximum value: 65535	1																																														
proposal	Phase1 proposal.	option	-																																															
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>des-md5</i></td><td>des-md5</td></tr><tr><td><i>des-sha1</i></td><td>des-sha1</td></tr><tr><td><i>des-sha256</i></td><td>des-sha256</td></tr><tr><td><i>des-sha384</i></td><td>des-sha384</td></tr><tr><td><i>des-sha512</i></td><td>des-sha512</td></tr><tr><td><i>3des-md5</i></td><td>3des-md5</td></tr><tr><td><i>3des-sha1</i></td><td>3des-sha1</td></tr><tr><td><i>3des-sha256</i></td><td>3des-sha256</td></tr><tr><td><i>3des-sha384</i></td><td>3des-sha384</td></tr><tr><td><i>3des-sha512</i></td><td>3des-sha512</td></tr><tr><td><i>aes128-md5</i></td><td>aes128-md5</td></tr><tr><td><i>aes128-sha1</i></td><td>aes128-sha1</td></tr><tr><td><i>aes128-sha256</i></td><td>aes128-sha256</td></tr><tr><td><i>aes128-sha384</i></td><td>aes128-sha384</td></tr><tr><td><i>aes128-sha512</i></td><td>aes128-sha512</td></tr><tr><td><i>aes128gcm-prfsha1</i></td><td>aes128gcm-prfsha1</td></tr><tr><td><i>aes128gcm-prfsha256</i></td><td>aes128gcm-prfsha256</td></tr><tr><td><i>aes128gcm-prfsha384</i></td><td>aes128gcm-prfsha384</td></tr><tr><td><i>aes128gcm-prfsha512</i></td><td>aes128gcm-prfsha512</td></tr><tr><td><i>aes192-md5</i></td><td>aes192-md5</td></tr><tr><td><i>aes192-sha1</i></td><td>aes192-sha1</td></tr><tr><td><i>aes192-sha256</i></td><td>aes192-sha256</td></tr></table>				Option	Description	<i>des-md5</i>	des-md5	<i>des-sha1</i>	des-sha1	<i>des-sha256</i>	des-sha256	<i>des-sha384</i>	des-sha384	<i>des-sha512</i>	des-sha512	<i>3des-md5</i>	3des-md5	<i>3des-sha1</i>	3des-sha1	<i>3des-sha256</i>	3des-sha256	<i>3des-sha384</i>	3des-sha384	<i>3des-sha512</i>	3des-sha512	<i>aes128-md5</i>	aes128-md5	<i>aes128-sha1</i>	aes128-sha1	<i>aes128-sha256</i>	aes128-sha256	<i>aes128-sha384</i>	aes128-sha384	<i>aes128-sha512</i>	aes128-sha512	<i>aes128gcm-prfsha1</i>	aes128gcm-prfsha1	<i>aes128gcm-prfsha256</i>	aes128gcm-prfsha256	<i>aes128gcm-prfsha384</i>	aes128gcm-prfsha384	<i>aes128gcm-prfsha512</i>	aes128gcm-prfsha512	<i>aes192-md5</i>	aes192-md5	<i>aes192-sha1</i>	aes192-sha1	<i>aes192-sha256</i>	aes192-sha256
Option	Description																																																	
<i>des-md5</i>	des-md5																																																	
<i>des-sha1</i>	des-sha1																																																	
<i>des-sha256</i>	des-sha256																																																	
<i>des-sha384</i>	des-sha384																																																	
<i>des-sha512</i>	des-sha512																																																	
<i>3des-md5</i>	3des-md5																																																	
<i>3des-sha1</i>	3des-sha1																																																	
<i>3des-sha256</i>	3des-sha256																																																	
<i>3des-sha384</i>	3des-sha384																																																	
<i>3des-sha512</i>	3des-sha512																																																	
<i>aes128-md5</i>	aes128-md5																																																	
<i>aes128-sha1</i>	aes128-sha1																																																	
<i>aes128-sha256</i>	aes128-sha256																																																	
<i>aes128-sha384</i>	aes128-sha384																																																	
<i>aes128-sha512</i>	aes128-sha512																																																	
<i>aes128gcm-prfsha1</i>	aes128gcm-prfsha1																																																	
<i>aes128gcm-prfsha256</i>	aes128gcm-prfsha256																																																	
<i>aes128gcm-prfsha384</i>	aes128gcm-prfsha384																																																	
<i>aes128gcm-prfsha512</i>	aes128gcm-prfsha512																																																	
<i>aes192-md5</i>	aes192-md5																																																	
<i>aes192-sha1</i>	aes192-sha1																																																	
<i>aes192-sha256</i>	aes192-sha256																																																	

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>aes192-sha384</i>	aes192-sha384		
	<i>aes192-sha512</i>	aes192-sha512		
	<i>aes256-md5</i>	aes256-md5		
	<i>aes256-sha1</i>	aes256-sha1		
	<i>aes256-sha256</i>	aes256-sha256		
	<i>aes256-sha384</i>	aes256-sha384		
	<i>aes256-sha512</i>	aes256-sha512		
	<i>aes256gcm-prfsha1</i>	aes256gcm-prfsha1		
	<i>aes256gcm-prfsha256</i>	aes256gcm-prfsha256		
	<i>aes256gcm-prfsha384</i>	aes256gcm-prfsha384		
	<i>aes256gcm-prfsha512</i>	aes256gcm-prfsha512		
	<i>chacha20poly1305-prfsha1</i>	chacha20poly1305-prfsha1		
	<i>chacha20poly1305-prfsha256</i>	chacha20poly1305-prfsha256		
	<i>chacha20poly1305-prfsha384</i>	chacha20poly1305-prfsha384		
	<i>chacha20poly1305-prfsha512</i>	chacha20poly1305-prfsha512		
	<i>aria128-md5</i>	aria128-md5		
	<i>aria128-sha1</i>	aria128-sha1		
	<i>aria128-sha256</i>	aria128-sha256		
	<i>aria128-sha384</i>	aria128-sha384		
	<i>aria128-sha512</i>	aria128-sha512		
	<i>aria192-md5</i>	aria192-md5		
	<i>aria192-sha1</i>	aria192-sha1		
	<i>aria192-sha256</i>	aria192-sha256		
	<i>aria192-sha384</i>	aria192-sha384		
	<i>aria192-sha512</i>	aria192-sha512		
	<i>aria256-md5</i>	aria256-md5		
	<i>aria256-sha1</i>	aria256-sha1		
	<i>aria256-sha256</i>	aria256-sha256		
	<i>aria256-sha384</i>	aria256-sha384		

Parameter	Description	Type	Size	Default														
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>aria256-sha512</i></td><td>aria256-sha512</td></tr><tr><td><i>seed-md5</i></td><td>seed-md5</td></tr><tr><td><i>seed-sha1</i></td><td>seed-sha1</td></tr><tr><td><i>seed-sha256</i></td><td>seed-sha256</td></tr><tr><td><i>seed-sha384</i></td><td>seed-sha384</td></tr><tr><td><i>seed-sha512</i></td><td>seed-sha512</td></tr></table>	Option	Description	<i>aria256-sha512</i>	aria256-sha512	<i>seed-md5</i>	seed-md5	<i>seed-sha1</i>	seed-sha1	<i>seed-sha256</i>	seed-sha256	<i>seed-sha384</i>	seed-sha384	<i>seed-sha512</i>	seed-sha512			
	Option	Description																
	<i>aria256-sha512</i>	aria256-sha512																
	<i>seed-md5</i>	seed-md5																
	<i>seed-sha1</i>	seed-sha1																
	<i>seed-sha256</i>	seed-sha256																
	<i>seed-sha384</i>	seed-sha384																
<i>seed-sha512</i>	seed-sha512																	
psksecret	Pre-shared secret for PSK authentication (ASCII string or hexadecimal encoded with a leading 0x).	password-3	Not Specified															
psksecret-remote	Pre-shared secret for remote side PSK authentication (ASCII string or hexadecimal encoded with a leading 0x).	password-3	Not Specified															
reauth	Enable/disable re-authentication upon IKE SA lifetime expiration.	option	-	disable														
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>disable</i></td><td>Disable IKE SA re-authentication.</td></tr><tr><td><i>enable</i></td><td>Enable IKE SA re-authentication.</td></tr></table>	Option	Description	<i>disable</i>	Disable IKE SA re-authentication.	<i>enable</i>	Enable IKE SA re-authentication.											
	Option	Description																
	<i>disable</i>	Disable IKE SA re-authentication.																
<i>enable</i>	Enable IKE SA re-authentication.																	
rekey	Enable/disable phase1 rekey.	option	-	enable														
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable phase1 rekey.</td></tr><tr><td><i>disable</i></td><td>Disable phase1 rekey.</td></tr></table>	Option	Description	<i>enable</i>	Enable phase1 rekey.	<i>disable</i>	Disable phase1 rekey.											
	Option	Description																
	<i>enable</i>	Enable phase1 rekey.																
<i>disable</i>	Disable phase1 rekey.																	
remote-gw	Remote VPN gateway.	ipv4-address	Not Specified	0.0.0.0														
remote-gw-country	IPv4 addresses associated to a specific country.	string	Maximum length: 2															
remote-gw-end-ip	Last IPv4 address in the range.	ipv4-address-any	Not Specified	0.0.0.0														
remote-gw-match	Set type of IPv4 remote gateway address matching.	option	-	any														

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>any</i>	Match any IPv4 gateway address.		
	<i>ipmask</i>	Match IPv4 gateway address and mask.		
	<i>iprange</i>	Match IPv4 gateway address range.		
	<i>geography</i>	Match IPv4 gateway address from a specified country.		
remote-gw-start-ip	First IPv4 address in the range.	ipv4-address-any	Not Specified	0.0.0.0
remote-gw-subnet	IPv4 address and subnet mask.	ipv4-classnet-any	Not Specified	0.0.0.0 0.0.0.0
remote-gw6-country	IPv6 addresses associated to a specific country.	string	Maximum length: 2	
remote-gw6-end-ip	Last IPv6 address in the range.	ipv6-address	Not Specified	::
remote-gw6-match	Set type of IPv6 remote gateway address matching.	option	-	any
	Option	Description		
	<i>any</i>	Match any IPv6 gateway address.		
	<i>ipprefix</i>	Match IPv6 gateway address and prefix.		
	<i>iprange</i>	Match IPv6 gateway address range.		
	<i>geography</i>	Match IPv6 gateway address from a specified country.		
remote-gw6-start-ip	First IPv6 address in the range.	ipv6-address	Not Specified	::
remote-gw6-subnet	IPv6 address and prefix.	ipv6-network	Not Specified	::/0
remotegw-ddns	Domain name of remote gateway. For example, name.ddns.com.	string	Maximum length: 63	
rsa-signature-format	Digital Signature Authentication RSA signature format.	option	-	pkcs1
	Option	Description		
	<i>pkcs1</i>	RSASSA PKCS#1 v1.5.		
	<i>pss</i>	RSASSA Probabilistic Signature Scheme (PSS).		

Parameter	Description	Type	Size	Default										
rsa-signature-hash-override	Enable/disable IKEv2 RSA signature hash algorithm override.	option	-	disable										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable IKEv2 RSA signature hash algorithm override.</td></tr><tr><td>disable</td><td>Disable IKEv2 RSA signature hash algorithm override.</td></tr></table>	Option	Description	enable	Enable IKEv2 RSA signature hash algorithm override.	disable	Disable IKEv2 RSA signature hash algorithm override.							
Option	Description													
enable	Enable IKEv2 RSA signature hash algorithm override.													
disable	Disable IKEv2 RSA signature hash algorithm override.													
save-password	Enable/disable saving XAuth username and password on VPN clients.	option	-	disable										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Disable saving XAuth username and password on VPN clients.</td></tr><tr><td>enable</td><td>Enable saving XAuth username and password on VPN clients.</td></tr></table>	Option	Description	disable	Disable saving XAuth username and password on VPN clients.	enable	Enable saving XAuth username and password on VPN clients.							
Option	Description													
disable	Disable saving XAuth username and password on VPN clients.													
enable	Enable saving XAuth username and password on VPN clients.													
send-cert-chain	Enable/disable sending certificate chain.	option	-	enable										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable sending certificate chain.</td></tr><tr><td>disable</td><td>Disable sending certificate chain.</td></tr></table>	Option	Description	enable	Enable sending certificate chain.	disable	Disable sending certificate chain.							
Option	Description													
enable	Enable sending certificate chain.													
disable	Disable sending certificate chain.													
signature-hash-alg	Digital Signature Authentication hash algorithms.	option	-	sha2-512										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>sha1</td><td>SHA1.</td></tr><tr><td>sha2-256</td><td>SHA2-256.</td></tr><tr><td>sha2-384</td><td>SHA2-384.</td></tr><tr><td>sha2-512</td><td>SHA2-512.</td></tr></table>	Option	Description	sha1	SHA1.	sha2-256	SHA2-256.	sha2-384	SHA2-384.	sha2-512	SHA2-512.			
Option	Description													
sha1	SHA1.													
sha2-256	SHA2-256.													
sha2-384	SHA2-384.													
sha2-512	SHA2-512.													
split-include-service	Split-include services.	string	Maximum length: 79											
suite-b	Use Suite-B.	option	-	disable										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Do not use UI suite.</td></tr><tr><td>suite-b-gcm-128</td><td>Use Suite-B-GCM-128.</td></tr></table>	Option	Description	disable	Do not use UI suite.	suite-b-gcm-128	Use Suite-B-GCM-128.							
Option	Description													
disable	Do not use UI suite.													
suite-b-gcm-128	Use Suite-B-GCM-128.													

Parameter	Description	Type	Size	Default																				
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>suite-b-gcm-256</i></td><td>Use Suite-B-GCM-256.</td></tr></table>	Option	Description	<i>suite-b-gcm-256</i>	Use Suite-B-GCM-256.																			
	Option	Description																						
<i>suite-b-gcm-256</i>	Use Suite-B-GCM-256.																							
type	Remote gateway type.	option	-	static																				
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>static</i></td><td>Remote VPN gateway has fixed IP address.</td></tr><tr><td><i>dynamic</i></td><td>Remote VPN gateway has dynamic IP address.</td></tr><tr><td><i>ddns</i></td><td>Remote VPN gateway has dynamic IP address and is a dynamic DNS client.</td></tr></table>	Option	Description	<i>static</i>	Remote VPN gateway has fixed IP address.	<i>dynamic</i>	Remote VPN gateway has dynamic IP address.	<i>ddns</i>	Remote VPN gateway has dynamic IP address and is a dynamic DNS client.															
	Option	Description																						
	<i>static</i>	Remote VPN gateway has fixed IP address.																						
	<i>dynamic</i>	Remote VPN gateway has dynamic IP address.																						
<i>ddns</i>	Remote VPN gateway has dynamic IP address and is a dynamic DNS client.																							
unity-support	Enable/disable support for Cisco UNITY Configuration Method extensions.	option	-	enable																				
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>disable</i></td><td>Disable Cisco Unity Configuration Method Extensions.</td></tr><tr><td><i>enable</i></td><td>Enable Cisco Unity Configuration Method Extensions.</td></tr></table>	Option	Description	<i>disable</i>	Disable Cisco Unity Configuration Method Extensions.	<i>enable</i>	Enable Cisco Unity Configuration Method Extensions.																	
	Option	Description																						
	<i>disable</i>	Disable Cisco Unity Configuration Method Extensions.																						
<i>enable</i>	Enable Cisco Unity Configuration Method Extensions.																							
usrgrp	User group name for dialup peers.	string	Maximum length: 35																					
wizard-type	GUI VPN Wizard Type.	option	-	custom																				
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>custom</i></td><td>Custom VPN configuration.</td></tr><tr><td><i>dialup-forticlient</i></td><td>Dial Up - FortiClient Windows, Mac and Android.</td></tr><tr><td><i>dialup-ios</i></td><td>Dial Up - iPhone / iPad Native IPsec Client.</td></tr><tr><td><i>dialup-android</i></td><td>Dial Up - Android Native IPsec Client.</td></tr><tr><td><i>dialup-windows</i></td><td>Dial Up - Windows Native IPsec Client.</td></tr><tr><td><i>dialup-cisco</i></td><td>Dial Up - Cisco IPsec Client.</td></tr><tr><td><i>static-fortigate</i></td><td>Site to Site - FortiGate.</td></tr><tr><td><i>dialup-fortigate</i></td><td>Dial Up - FortiGate.</td></tr><tr><td><i>static-cisco</i></td><td>Site to Site - Cisco.</td></tr></table>	Option	Description	<i>custom</i>	Custom VPN configuration.	<i>dialup-forticlient</i>	Dial Up - FortiClient Windows, Mac and Android.	<i>dialup-ios</i>	Dial Up - iPhone / iPad Native IPsec Client.	<i>dialup-android</i>	Dial Up - Android Native IPsec Client.	<i>dialup-windows</i>	Dial Up - Windows Native IPsec Client.	<i>dialup-cisco</i>	Dial Up - Cisco IPsec Client.	<i>static-fortigate</i>	Site to Site - FortiGate.	<i>dialup-fortigate</i>	Dial Up - FortiGate.	<i>static-cisco</i>	Site to Site - Cisco.			
	Option	Description																						
	<i>custom</i>	Custom VPN configuration.																						
	<i>dialup-forticlient</i>	Dial Up - FortiClient Windows, Mac and Android.																						
	<i>dialup-ios</i>	Dial Up - iPhone / iPad Native IPsec Client.																						
	<i>dialup-android</i>	Dial Up - Android Native IPsec Client.																						
	<i>dialup-windows</i>	Dial Up - Windows Native IPsec Client.																						
	<i>dialup-cisco</i>	Dial Up - Cisco IPsec Client.																						
	<i>static-fortigate</i>	Site to Site - FortiGate.																						
<i>dialup-fortigate</i>	Dial Up - FortiGate.																							
<i>static-cisco</i>	Site to Site - Cisco.																							

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>dialup-cisco-fw</i>	Dialup Up - Cisco Firewall.		
	<i>simplified-static-fortigate</i>	Site to Site - FortiGate (SD-WAN).		
	<i>hub-fortigate-auto-discovery</i>	Hub role in a Hub-and-Spoke auto-discovery VPN.		
	<i>spoke-fortigate-auto-discovery</i>	Spoke role in a Hub-and-Spoke auto-discovery VPN.		
xauthtype	XAuth type.	option	-	disable
	Option	Description		
	<i>disable</i>	Disable.		
	<i>client</i>	Enable as client.		
	<i>pap</i>	Enable as server PAP.		
	<i>chap</i>	Enable as server CHAP.		
	<i>auto</i>	Enable as server auto.		

* This parameter may not exist in some models.

config ipv4-exclude-range

Parameter	Description	Type	Size	Default
end-ip	End of IPv4 exclusive range.	ipv4-address	Not Specified	0.0.0.0
id	ID.	integer	Minimum value: 0 Maximum value: 4294967295	0
start-ip	Start of IPv4 exclusive range.	ipv4-address	Not Specified	0.0.0.0

config ipv6-exclude-range

Parameter	Description	Type	Size	Default
end-ip	End of IPv6 exclusive range.	ipv6-address	Not Specified	::
id	ID.	integer	Minimum value: 0 Maximum value: 4294967295	0
start-ip	Start of IPv6 exclusive range.	ipv6-address	Not Specified	::

config vpn ipsec phase1-interface

Configure VPN remote gateway.

```
config vpn ipsec phase1-interface
  Description: Configure VPN remote gateway.
  edit <name>
    set acct-verify [enable|disable]
    set add-gw-route [enable|disable]
    set add-route [disable|enable]
    set aggregate-member [enable|disable]
    set aggregate-weight {integer}
    set assign-ip [disable|enable]
    set assign-ip-from [range|usrgrp|...]
    set authmethod [psk|signature]
    set authmethod-remote [psk|signature]
    set authpasswd {password}
    set authusr {string}
    set authusrgrp {string}
    set auto-discovery-crossover [allow|block]
    set auto-discovery-forwarder [enable|disable]
    set auto-discovery-offer-interval {integer}
    set auto-discovery-psk [enable|disable]
    set auto-discovery-receiver [enable|disable]
    set auto-discovery-sender [enable|disable]
    set auto-discovery-shortcuts [independent|dependent]
    set auto-negotiate [enable|disable]
    set azure-ad-autoconnect [enable|disable]
    set backup-gateway <address1>, <address2>, ...
    set banner {var-string}
    set cert-id-validation [enable|disable]
    set cert-trust-store [local|ems]
    set certificate <name1>, <name2>, ...
    set childless-ike [enable|disable]
    set client-auto-negotiate [disable|enable]
```

```

set client-keep-alive [disable|enable]
set comments {var-string}
set default-gw {ipv4-address}
set default-gw-priority {integer}
set dev-id {string}
set dev-id-notification [disable|enable]
set dhcp-ra-giaddr {ipv4-address}
set dhcp6-ra-linkaddr {ipv6-address}
set dhgrp {option1}, {option2}, ...
set digital-signature-auth [enable|disable]
set distance {integer}
set dns-mode [manual|auto]
set domain {string}
set dpd [disable|on-idle|...]
set dpd-retrycount {integer}
set dpd-retryinterval {user}
set eap [enable|disable]
set eap-exclude-peergrp {string}
set eap-identity [use-id-payload|send-request]
set ems-sn-check [enable|disable]
set encap-local-gw4 {ipv4-address}
set encap-local-gw6 {ipv6-address}
set encap-remote-gw4 {ipv4-address}
set encap-remote-gw6 {ipv6-address}
set encapsulation [none|gre|...]
set encapsulation-address [ike|ipv4|...]
set enforce-unique-id [disable|keep-new|...]
set esn [require|allow|...]
set exchange-fgt-device-id [enable|disable]
set exchange-interface-ip [enable|disable]
set exchange-ip-addr4 {ipv4-address}
set exchange-ip-addr6 {ipv6-address}
set fec-base {integer}
set fec-codec [rs|xor]
set fec-egress [enable|disable]
set fec-health-check {string}
set fec-ingress [enable|disable]
set fec-mapping-profile {string}
set fec-receive-timeout {integer}
set fec-redundant {integer}
set fec-send-timeout {integer}
set fgsp-sync [enable|disable]
set forticlient-enforcement [enable|disable]
set fragmentation [enable|disable]
set fragmentation-mtu {integer}
set group-authentication [enable|disable]
set group-authentication-secret {password-3}
set ha-sync-esp-seqno [enable|disable]
set idle-timeout [enable|disable]
set idle-timeoutinterval {integer}
set ike-version [1|2]
set inbound-dscp-copy [enable|disable]

```



```

set include-local-lan [disable|enable]
set interface {string}
set internal-domain-list <domain-name1>, <domain-name2>, ...
set ip-delay-interval {integer}
set ip-fragmentation [pre-encapsulation|post-encapsulation]
set ip-version [4|6]
set ipv4-dns-server1 {ipv4-address}
set ipv4-dns-server2 {ipv4-address}
set ipv4-dns-server3 {ipv4-address}
set ipv4-end-ip {ipv4-address}
config ipv4-exclude-range
    Description: Configuration Method IPv4 exclude ranges.
    edit <id>
        set end-ip {ipv4-address}
        set start-ip {ipv4-address}
    next
end
set ipv4-name {string}
set ipv4-netmask {ipv4-netmask}
set ipv4-split-exclude {string}
set ipv4-split-include {string}
set ipv4-start-ip {ipv4-address}
set ipv4-wins-server1 {ipv4-address}
set ipv4-wins-server2 {ipv4-address}
set ipv6-dns-server1 {ipv6-address}
set ipv6-dns-server2 {ipv6-address}
set ipv6-dns-server3 {ipv6-address}
set ipv6-end-ip {ipv6-address}
config ipv6-exclude-range
    Description: Configuration method IPv6 exclude ranges.
    edit <id>
        set end-ip {ipv6-address}
        set start-ip {ipv6-address}
    next
end
set ipv6-name {string}
set ipv6-prefix {integer}
set ipv6-split-exclude {string}
set ipv6-split-include {string}
set ipv6-start-ip {ipv6-address}
set keepalive {integer}
set keylife {integer}
set link-cost {integer}
set local-gw {ipv4-address}
set local-gw6 {ipv6-address}
set localid {string}
set localid-type [auto|fqdn|...]
set loopback-asymroute [enable|disable]
set mesh-selector-type [disable|subnet|...]
set mode [aggressive|main]
set mode-cfg [disable|enable]
set mode-cfg-allow-client-selector [disable|enable]

```

```

set monitor {string}
set monitor-hold-down-delay {integer}
set monitor-hold-down-time {user}
set monitor-hold-down-type [immediate|delay|...]
set monitor-hold-down-weekday [everyday|sunday|...]
set nattraversal [enable|disable|...]
set negotiate-timeout {integer}
set net-device [enable|disable]
set network-id {integer}
set network-overlay [disable|enable]
set npu-offload [enable|disable]
set packet-redistribution [enable|disable]
set passive-mode [enable|disable]
set peer {string}
set peergrp {string}
set peerid {string}
set peertype [any|one|...]
set ppk [disable|allow|...]
set ppk-identity {string}
set ppk-secret {password-3}
set priority {integer}
set proposal {option1}, {option2}, ...
set psksecret {password-3}
set psksecret-remote {password-3}
set reauth [disable|enable]
set rekey [enable|disable]
set remote-gw {ipv4-address}
set remote-gw-country {string}
set remote-gw-end-ip {ipv4-address-any}
set remote-gw-match [any|ipmask|...]
set remote-gw-start-ip {ipv4-address-any}
set remote-gw-subnet {ipv4-classnet-any}
set remote-gw6 {ipv6-address}
set remote-gw6-country {string}
set remote-gw6-end-ip {ipv6-address}
set remote-gw6-match [any|ipprefix|...]
set remote-gw6-start-ip {ipv6-address}
set remote-gw6-subnet {ipv6-network}
set remotegw-ddns {string}
set rsa-signature-format [pkcs1|pss]
set rsa-signature-hash-override [enable|disable]
set save-password [disable|enable]
set send-cert-chain [enable|disable]
set signature-hash-alg {option1}, {option2}, ...
set split-include-service {string}
set suite-b [disable|suite-b-gcm-128|...]
set type [static|dynamic|...]
set unity-support [disable|enable]
set usrgrp {string}
set vni {integer}
set wizard-type [custom|dialup-forticlient|...]
set xauthtype [disable|client|...]

```

```
next
end
```

config vpn ipsec phase1-interface

Parameter	Description	Type	Size	Default						
acct-verify	Enable/disable verification of RADIUS accounting record.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable verification of RADIUS accounting record.</td></tr><tr><td>disable</td><td>Disable verification of RADIUS accounting record.</td></tr></table>	Option	Description	enable	Enable verification of RADIUS accounting record.	disable	Disable verification of RADIUS accounting record.			
Option	Description									
enable	Enable verification of RADIUS accounting record.									
disable	Disable verification of RADIUS accounting record.									
add-gw-route	Enable/disable automatically add a route to the remote gateway.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Automatically add a route to the remote gateway.</td></tr><tr><td>disable</td><td>Do not automatically add a route to the remote gateway.</td></tr></table>	Option	Description	enable	Automatically add a route to the remote gateway.	disable	Do not automatically add a route to the remote gateway.			
Option	Description									
enable	Automatically add a route to the remote gateway.									
disable	Do not automatically add a route to the remote gateway.									
add-route	Enable/disable control addition of a route to peer destination selector.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Do not add a route to destination of peer selector.</td></tr><tr><td>enable</td><td>Add route to destination of peer selector.</td></tr></table>	Option	Description	disable	Do not add a route to destination of peer selector.	enable	Add route to destination of peer selector.			
Option	Description									
disable	Do not add a route to destination of peer selector.									
enable	Add route to destination of peer selector.									
aggregate-member	Enable/disable use as an aggregate member.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable use as an aggregate member.</td></tr><tr><td>disable</td><td>Disable use as an aggregate member.</td></tr></table>	Option	Description	enable	Enable use as an aggregate member.	disable	Disable use as an aggregate member.			
Option	Description									
enable	Enable use as an aggregate member.									
disable	Disable use as an aggregate member.									
aggregate-weight	Link weight for aggregate.	integer	Minimum value: 1 1 Maximum value: 100							
assign-ip	Enable/disable assignment of IP to IPsec interface via configuration method.	option	-	enable						

Parameter	Description	Type	Size	Default
	Option Description			
	<i>disable</i>	Do not assign an IP address to the IPsec interface.		
	<i>enable</i>	Assign an IP address to the IPsec interface.		
assign-ip-from	Method by which the IP address will be assigned.	option	-	range
	Option Description			
	<i>range</i>	Assign IP address from locally defined range.		
	<i>usrgrp</i>	Assign IP address via user group.		
	<i>dhcp</i>	Assign IP address via DHCP.		
	<i>name</i>	Assign IP address from firewall address or group.		
authmethod	Authentication method.	option	-	psk
	Option Description			
	<i>psk</i>	PSK authentication method.		
	<i>signature</i>	Signature authentication method.		
authmethod-remote	Authentication method (remote side).	option	-	
	Option Description			
	<i>psk</i>	PSK authentication method.		
	<i>signature</i>	Signature authentication method.		
authpasswd	XAuth password (max 35 characters).	password	Not Specified	
authusr	XAuth user name.	string	Maximum length: 64	
authusrgrp	Authentication user group.	string	Maximum length: 35	
auto-discovery-crossover	Allow/block set-up of short-cut tunnels between different network IDs.	option	-	allow
	Option Description			
	<i>allow</i>	Allow set-up of short-cut tunnels between different network IDs.		
	<i>block</i>	Block set-up of short-cut tunnels between different network IDs.		

Parameter	Description	Type	Size	Default						
auto-discovery-forwarder	Enable/disable forwarding auto-discovery short-cut messages.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable forwarding auto-discovery short-cut messages.</td></tr><tr><td>disable</td><td>Disable forwarding auto-discovery short-cut messages.</td></tr></table>	Option	Description	enable	Enable forwarding auto-discovery short-cut messages.	disable	Disable forwarding auto-discovery short-cut messages.			
Option	Description									
enable	Enable forwarding auto-discovery short-cut messages.									
disable	Disable forwarding auto-discovery short-cut messages.									
auto-discovery-offer-interval	Interval between shortcut offer messages in seconds (1 - 300, default = 5).	integer	Minimum value: 5 1 Maximum value: 300							
auto-discovery-psk	Enable/disable use of pre-shared secrets for authentication of auto-discovery tunnels.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable use of pre-shared-secret authentication for auto-discovery tunnels.</td></tr><tr><td>disable</td><td>Disable use of authentication defined by 'authmethod' for auto-discovery tunnels.</td></tr></table>	Option	Description	enable	Enable use of pre-shared-secret authentication for auto-discovery tunnels.	disable	Disable use of authentication defined by 'authmethod' for auto-discovery tunnels.			
Option	Description									
enable	Enable use of pre-shared-secret authentication for auto-discovery tunnels.									
disable	Disable use of authentication defined by 'authmethod' for auto-discovery tunnels.									
auto-discovery-receiver	Enable/disable accepting auto-discovery short-cut messages.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable receiving auto-discovery short-cut messages.</td></tr><tr><td>disable</td><td>Disable receiving auto-discovery short-cut messages.</td></tr></table>	Option	Description	enable	Enable receiving auto-discovery short-cut messages.	disable	Disable receiving auto-discovery short-cut messages.			
Option	Description									
enable	Enable receiving auto-discovery short-cut messages.									
disable	Disable receiving auto-discovery short-cut messages.									
auto-discovery-sender	Enable/disable sending auto-discovery short-cut messages.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable sending auto-discovery short-cut messages.</td></tr><tr><td>disable</td><td>Disable sending auto-discovery short-cut messages.</td></tr></table>	Option	Description	enable	Enable sending auto-discovery short-cut messages.	disable	Disable sending auto-discovery short-cut messages.			
Option	Description									
enable	Enable sending auto-discovery short-cut messages.									
disable	Disable sending auto-discovery short-cut messages.									
auto-discovery-shortcuts	Control deletion of child short-cut tunnels when the parent tunnel goes down.	option	-	independent						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>independent</td><td>Short-cut tunnels remain up if the parent tunnel goes down.</td></tr><tr><td>dependent</td><td>Short-cut tunnels are brought down if the parent tunnel goes down.</td></tr></table>	Option	Description	independent	Short-cut tunnels remain up if the parent tunnel goes down.	dependent	Short-cut tunnels are brought down if the parent tunnel goes down.			
Option	Description									
independent	Short-cut tunnels remain up if the parent tunnel goes down.									
dependent	Short-cut tunnels are brought down if the parent tunnel goes down.									

Parameter	Description	Type	Size	Default						
auto-negotiate	Enable/disable automatic initiation of IKE SA negotiation.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable automatic initiation of IKE SA negotiation.</td></tr><tr><td><i>disable</i></td><td>Disable automatic initiation of IKE SA negotiation.</td></tr></table>	Option	Description	<i>enable</i>	Enable automatic initiation of IKE SA negotiation.	<i>disable</i>	Disable automatic initiation of IKE SA negotiation.			
Option	Description									
<i>enable</i>	Enable automatic initiation of IKE SA negotiation.									
<i>disable</i>	Disable automatic initiation of IKE SA negotiation.									
azure-ad-autoconnect	Enable/disable Azure AD Auto-Connect for FortiClient.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable Azure AD Auto-Connect for FortiClient.</td></tr><tr><td><i>disable</i></td><td>Disable Azure AD Auto-Connect for FortiClient.</td></tr></table>	Option	Description	<i>enable</i>	Enable Azure AD Auto-Connect for FortiClient.	<i>disable</i>	Disable Azure AD Auto-Connect for FortiClient.			
Option	Description									
<i>enable</i>	Enable Azure AD Auto-Connect for FortiClient.									
<i>disable</i>	Disable Azure AD Auto-Connect for FortiClient.									
backup-gateway <address>	Instruct unity clients about the backup gateway address(es). Address of backup gateway.	string	Maximum length: 79							
banner	Message that unity client should display after connecting.	var-string	Maximum length: 1024							
cert-id-validation	Enable/disable cross validation of peer ID and the identity in the peer's certificate as specified in RFC 4945.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable cross validation of peer ID and the identity in the peer's certificate as specified in RFC 4945.</td></tr><tr><td><i>disable</i></td><td>Disable cross validation of peer ID and the identity in the peer's certificate as specified in RFC 4945.</td></tr></table>	Option	Description	<i>enable</i>	Enable cross validation of peer ID and the identity in the peer's certificate as specified in RFC 4945.	<i>disable</i>	Disable cross validation of peer ID and the identity in the peer's certificate as specified in RFC 4945.			
Option	Description									
<i>enable</i>	Enable cross validation of peer ID and the identity in the peer's certificate as specified in RFC 4945.									
<i>disable</i>	Disable cross validation of peer ID and the identity in the peer's certificate as specified in RFC 4945.									
cert-trust-store	CA certificate trust store.	option	-	local						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>local</i></td><td>Use local CA certificate.</td></tr><tr><td><i>ems</i></td><td>Use EMS CA certificate.</td></tr></table>	Option	Description	<i>local</i>	Use local CA certificate.	<i>ems</i>	Use EMS CA certificate.			
Option	Description									
<i>local</i>	Use local CA certificate.									
<i>ems</i>	Use EMS CA certificate.									
certificate <name>	The names of up to 4 signed personal certificates. Certificate name.	string	Maximum length: 79							
childless-ike	Enable/disable childless IKEv2 initiation (RFC 6023).	option	-	disable						

Parameter	Description	Type	Size	Default						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable childless IKEv2 initiation (RFC 6023).</td></tr><tr><td><i>disable</i></td><td>Disable childless IKEv2 initiation (RFC 6023).</td></tr></table>	Option	Description	<i>enable</i>	Enable childless IKEv2 initiation (RFC 6023).	<i>disable</i>	Disable childless IKEv2 initiation (RFC 6023).			
Option	Description									
<i>enable</i>	Enable childless IKEv2 initiation (RFC 6023).									
<i>disable</i>	Disable childless IKEv2 initiation (RFC 6023).									
client-auto-negotiate	Enable/disable allowing the VPN client to bring up the tunnel when there is no traffic.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>disable</i></td><td>Disable allowing the VPN client to bring up the tunnel when there is no traffic.</td></tr><tr><td><i>enable</i></td><td>Enable allowing the VPN client to bring up the tunnel when there is no traffic.</td></tr></table>	Option	Description	<i>disable</i>	Disable allowing the VPN client to bring up the tunnel when there is no traffic.	<i>enable</i>	Enable allowing the VPN client to bring up the tunnel when there is no traffic.			
Option	Description									
<i>disable</i>	Disable allowing the VPN client to bring up the tunnel when there is no traffic.									
<i>enable</i>	Enable allowing the VPN client to bring up the tunnel when there is no traffic.									
client-keep-alive	Enable/disable allowing the VPN client to keep the tunnel up when there is no traffic.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>disable</i></td><td>Disable allowing the VPN client to keep the tunnel up when there is no traffic.</td></tr><tr><td><i>enable</i></td><td>Enable allowing the VPN client to keep the tunnel up when there is no traffic.</td></tr></table>	Option	Description	<i>disable</i>	Disable allowing the VPN client to keep the tunnel up when there is no traffic.	<i>enable</i>	Enable allowing the VPN client to keep the tunnel up when there is no traffic.			
Option	Description									
<i>disable</i>	Disable allowing the VPN client to keep the tunnel up when there is no traffic.									
<i>enable</i>	Enable allowing the VPN client to keep the tunnel up when there is no traffic.									
comments	Comment.	var-string	Maximum length: 255							
default-gw	IPv4 address of default route gateway to use for traffic exiting the interface.	ipv4-address	Not Specified	0.0.0.0						
default-gw-priority	Priority for default gateway route. A higher priority number signifies a less preferred route.	integer	Minimum value: 0 Maximum value: 4294967295							
dev-id	Device ID carried by the device ID notification.	string	Maximum length: 63							
dev-id-notification	Enable/disable device ID notification.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>disable</i></td><td>Disable device ID notification.</td></tr></table>	Option	Description	<i>disable</i>	Disable device ID notification.					
Option	Description									
<i>disable</i>	Disable device ID notification.									

Parameter	Description	Type	Size	Default																																				
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable device ID notification.</td></tr></table>	Option	Description	<i>enable</i>	Enable device ID notification.																																			
	Option	Description																																						
<i>enable</i>	Enable device ID notification.																																							
dhcp-ra-giaddr	Relay agent gateway IP address to use in the giaddr field of DHCP requests.	ipv4-address	Not Specified	0.0.0.0																																				
dhcp6-ra-linkaddr	Relay agent IPv6 link address to use in DHCP6 requests.	ipv6-address	Not Specified	::																																				
dhgrp	DH group.	option	-	14																																				
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>1</td><td>DH Group 1.</td></tr><tr><td>2</td><td>DH Group 2.</td></tr><tr><td>5</td><td>DH Group 5.</td></tr><tr><td>14</td><td>DH Group 14.</td></tr><tr><td>15</td><td>DH Group 15.</td></tr><tr><td>16</td><td>DH Group 16.</td></tr><tr><td>17</td><td>DH Group 17.</td></tr><tr><td>18</td><td>DH Group 18.</td></tr><tr><td>19</td><td>DH Group 19.</td></tr><tr><td>20</td><td>DH Group 20.</td></tr><tr><td>21</td><td>DH Group 21.</td></tr><tr><td>27</td><td>DH Group 27.</td></tr><tr><td>28</td><td>DH Group 28.</td></tr><tr><td>29</td><td>DH Group 29.</td></tr><tr><td>30</td><td>DH Group 30.</td></tr><tr><td>31</td><td>DH Group 31.</td></tr><tr><td>32</td><td>DH Group 32.</td></tr></table>	Option	Description	1	DH Group 1.	2	DH Group 2.	5	DH Group 5.	14	DH Group 14.	15	DH Group 15.	16	DH Group 16.	17	DH Group 17.	18	DH Group 18.	19	DH Group 19.	20	DH Group 20.	21	DH Group 21.	27	DH Group 27.	28	DH Group 28.	29	DH Group 29.	30	DH Group 30.	31	DH Group 31.	32	DH Group 32.			
	Option	Description																																						
	1	DH Group 1.																																						
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	28	DH Group 28.																																						
	29	DH Group 29.																																						
	30	DH Group 30.																																						
	31	DH Group 31.																																						
	32	DH Group 32.																																						
digital-signature-auth	Enable/disable IKEv2 Digital Signature Authentication (RFC 7427).	option	-	disable																																				

Parameter	Description	Type	Size	Default
	Option Description			
	<i>enable</i>	Enable IKEv2 Digital Signature Authentication (RFC 7427).		
	<i>disable</i>	Disable IKEv2 Digital Signature Authentication (RFC 7427).		
distance	Distance for routes added by IKE (1 - 255).	integer	Minimum value: 15 Maximum value: 255	
dns-mode	DNS server mode.	option	-	manual
	Option Description			
	<i>manual</i>	Manually configure DNS servers.		
	<i>auto</i>	Use default DNS servers.		
domain	Instruct unity clients about the single default DNS domain.	string	Maximum length: 63	
dpd	Dead Peer Detection mode.	option	-	on-demand
	Option Description			
	<i>disable</i>	Disable Dead Peer Detection.		
	<i>on-idle</i>	Trigger Dead Peer Detection when IPsec is idle.		
	<i>on-demand</i>	Trigger Dead Peer Detection when IPsec traffic is sent but no reply is received from the peer.		
dpd-retrycount	Number of DPD retry attempts.	integer	Minimum value: 3 Maximum value: 10	
dpd-retryinterval	DPD retry interval.	user	Not Specified	
eap	Enable/disable IKEv2 EAP authentication.	option	-	disable
	Option Description			
	<i>enable</i>	Enable IKEv2 EAP authentication.		
	<i>disable</i>	Disable IKEv2 EAP authentication.		
eap-exclude-peergrp	Peer group excluded from EAP authentication.	string	Maximum length: 35	
eap-identity	IKEv2 EAP peer identity type.	option	-	use-id-payload

Parameter	Description	Type	Size	Default										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>use-id-payload</i></td><td>Use IKEv2 IDi payload to resolve peer identity.</td></tr><tr><td><i>send-request</i></td><td>Use EAP identity request to resolve peer identity.</td></tr></table>	Option	Description	<i>use-id-payload</i>	Use IKEv2 IDi payload to resolve peer identity.	<i>send-request</i>	Use EAP identity request to resolve peer identity.							
	Option	Description												
	<i>use-id-payload</i>	Use IKEv2 IDi payload to resolve peer identity.												
<i>send-request</i>	Use EAP identity request to resolve peer identity.													
ems-sn-check	Enable/disable verification of EMS serial number.	option	-	disable										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable EMS serial number verification.</td></tr><tr><td><i>disable</i></td><td>Disable EMS serial number verification.</td></tr></table>	Option	Description	<i>enable</i>	Enable EMS serial number verification.	<i>disable</i>	Disable EMS serial number verification.							
	Option	Description												
	<i>enable</i>	Enable EMS serial number verification.												
<i>disable</i>	Disable EMS serial number verification.													
encap-local-gw4	Local IPv4 address of GRE/VXLAN tunnel.	ipv4-address	Not Specified	0.0.0.0										
encap-local-gw6	Local IPv6 address of GRE/VXLAN tunnel.	ipv6-address	Not Specified	::										
encap-remote-gw4	Remote IPv4 address of GRE/VXLAN tunnel.	ipv4-address	Not Specified	0.0.0.0										
encap-remote-gw6	Remote IPv6 address of GRE/VXLAN tunnel.	ipv6-address	Not Specified	::										
encapsulation	Enable/disable GRE/VXLAN/VPNID encapsulation.	option	-	none										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>none</i></td><td>No additional encapsulation.</td></tr><tr><td><i>gre</i></td><td>GRE encapsulation.</td></tr><tr><td><i>vxlan</i></td><td>VXLAN encapsulation.</td></tr><tr><td><i>vpn-id-ipip</i></td><td>VPN ID with IPIP encapsulation.</td></tr></table>	Option	Description	<i>none</i>	No additional encapsulation.	<i>gre</i>	GRE encapsulation.	<i>vxlan</i>	VXLAN encapsulation.	<i>vpn-id-ipip</i>	VPN ID with IPIP encapsulation.			
	Option	Description												
	<i>none</i>	No additional encapsulation.												
	<i>gre</i>	GRE encapsulation.												
	<i>vxlan</i>	VXLAN encapsulation.												
<i>vpn-id-ipip</i>	VPN ID with IPIP encapsulation.													
encapsulation-address	Source for GRE/VXLAN tunnel address.	option	-	ike										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>ike</i></td><td>Use IKE/IPsec gateway addresses.</td></tr><tr><td><i>ipv4</i></td><td>Specify separate GRE/VXLAN tunnel address.</td></tr><tr><td><i>ipv6</i></td><td>Specify separate GRE/VXLAN tunnel address.</td></tr></table>	Option	Description	<i>ike</i>	Use IKE/IPsec gateway addresses.	<i>ipv4</i>	Specify separate GRE/VXLAN tunnel address.	<i>ipv6</i>	Specify separate GRE/VXLAN tunnel address.					
	Option	Description												
	<i>ike</i>	Use IKE/IPsec gateway addresses.												
	<i>ipv4</i>	Specify separate GRE/VXLAN tunnel address.												
<i>ipv6</i>	Specify separate GRE/VXLAN tunnel address.													
enforce-unique-id	Enable/disable peer ID uniqueness check.	option	-	disable										

Parameter	Description	Type	Size	Default								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>disable</i></td><td>Disable peer ID uniqueness enforcement.</td></tr><tr><td><i>keep-new</i></td><td>Enforce peer ID uniqueness, keep new connection if collision found.</td></tr><tr><td><i>keep-old</i></td><td>Enforce peer ID uniqueness, keep old connection if collision found.</td></tr></table>	Option	Description	<i>disable</i>	Disable peer ID uniqueness enforcement.	<i>keep-new</i>	Enforce peer ID uniqueness, keep new connection if collision found.	<i>keep-old</i>	Enforce peer ID uniqueness, keep old connection if collision found.			
	Option	Description										
	<i>disable</i>	Disable peer ID uniqueness enforcement.										
	<i>keep-new</i>	Enforce peer ID uniqueness, keep new connection if collision found.										
<i>keep-old</i>	Enforce peer ID uniqueness, keep old connection if collision found.											
esn *	Extended sequence number (ESN) negotiation.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>require</i></td><td>Require extended sequence number.</td></tr><tr><td><i>allow</i></td><td>Allow extended sequence number.</td></tr><tr><td><i>disable</i></td><td>Disable extended sequence number.</td></tr></table>	Option	Description	<i>require</i>	Require extended sequence number.	<i>allow</i>	Allow extended sequence number.	<i>disable</i>	Disable extended sequence number.			
	Option	Description										
	<i>require</i>	Require extended sequence number.										
	<i>allow</i>	Allow extended sequence number.										
<i>disable</i>	Disable extended sequence number.											
exchange-fgt-device-id	Enable/disable device identifier exchange with peer FortiGate units for use of VPN monitor data by FortiManager.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable exchange of FortiGate device identifier.</td></tr><tr><td><i>disable</i></td><td>Disable exchange of FortiGate device identifier.</td></tr></table>	Option	Description	<i>enable</i>	Enable exchange of FortiGate device identifier.	<i>disable</i>	Disable exchange of FortiGate device identifier.					
	Option	Description										
	<i>enable</i>	Enable exchange of FortiGate device identifier.										
<i>disable</i>	Disable exchange of FortiGate device identifier.											
exchange-interface-ip	Enable/disable exchange of IPsec interface IP address.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable exchange of IPsec interface IP address.</td></tr><tr><td><i>disable</i></td><td>Disable exchange of IPsec interface IP address.</td></tr></table>	Option	Description	<i>enable</i>	Enable exchange of IPsec interface IP address.	<i>disable</i>	Disable exchange of IPsec interface IP address.					
	Option	Description										
	<i>enable</i>	Enable exchange of IPsec interface IP address.										
<i>disable</i>	Disable exchange of IPsec interface IP address.											
exchange-ip-addr4	IPv4 address to exchange with peers.	ipv4-address	Not Specified	0.0.0.0								
exchange-ip-addr6	IPv6 address to exchange with peers.	ipv6-address	Not Specified	::								
fec-base	Number of base Forward Error Correction packets (1 - 20).	integer	Minimum value: 1 Maximum value: 20	10								
fec-codec	Forward Error Correction encoding/decoding algorithm.	option	-	rs								

Parameter	Description	Type	Size	Default						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>rs</td><td>Reed-Solomon FEC algorithm.</td></tr><tr><td>xor</td><td>XOR FEC algorithm.</td></tr></table>	Option	Description	rs	Reed-Solomon FEC algorithm.	xor	XOR FEC algorithm.			
	Option	Description								
	rs	Reed-Solomon FEC algorithm.								
xor	XOR FEC algorithm.									
fec-egress	Enable/disable Forward Error Correction for egress IPsec traffic.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable Forward Error Correction for egress IPsec traffic.</td></tr><tr><td>disable</td><td>Disable Forward Error Correction for egress IPsec traffic.</td></tr></table>	Option	Description	enable	Enable Forward Error Correction for egress IPsec traffic.	disable	Disable Forward Error Correction for egress IPsec traffic.			
	Option	Description								
	enable	Enable Forward Error Correction for egress IPsec traffic.								
disable	Disable Forward Error Correction for egress IPsec traffic.									
fec-health-check	SD-WAN health check.	string	Maximum length: 35							
fec-ingress	Enable/disable Forward Error Correction for ingress IPsec traffic.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable Forward Error Correction for ingress IPsec traffic.</td></tr><tr><td>disable</td><td>Disable Forward Error Correction for ingress IPsec traffic.</td></tr></table>	Option	Description	enable	Enable Forward Error Correction for ingress IPsec traffic.	disable	Disable Forward Error Correction for ingress IPsec traffic.			
	Option	Description								
	enable	Enable Forward Error Correction for ingress IPsec traffic.								
disable	Disable Forward Error Correction for ingress IPsec traffic.									
fec-mapping-profile	Forward Error Correction (FEC) mapping profile.	string	Maximum length: 35							
fec-receive-timeout	Timeout in milliseconds before dropping Forward Error Correction packets (1 - 1000).	integer	Minimum value: 50 1 Maximum value: 1000							
fec-redundant	Number of redundant Forward Error Correction packets (1 - 5 for reed-solomon, 1 for xor).	integer	Minimum value: 1 1 Maximum value: 5							
fec-send-timeout	Timeout in milliseconds before sending Forward Error Correction packets (1 - 1000).	integer	Minimum value: 5 1 Maximum value: 1000							
fgsp-sync	Enable/disable IPsec syncing of tunnels for FGSP IPsec.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable IPsec syncing of tunnels to other cluster members.</td></tr><tr><td>disable</td><td>Disable IPsec syncing of tunnels to other cluster members.</td></tr></table>	Option	Description	enable	Enable IPsec syncing of tunnels to other cluster members.	disable	Disable IPsec syncing of tunnels to other cluster members.			
	Option	Description								
	enable	Enable IPsec syncing of tunnels to other cluster members.								
disable	Disable IPsec syncing of tunnels to other cluster members.									

Parameter	Description	Type	Size	Default						
forticlient-enforcement	Enable/disable FortiClient enforcement.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable FortiClient enforcement.</td></tr><tr><td>disable</td><td>Disable FortiClient enforcement.</td></tr></table>	Option	Description	enable	Enable FortiClient enforcement.	disable	Disable FortiClient enforcement.			
Option	Description									
enable	Enable FortiClient enforcement.									
disable	Disable FortiClient enforcement.									
fragmentation	Enable/disable fragment IKE message on re-transmission.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable intra-IKE fragmentation support on re-transmission.</td></tr><tr><td>disable</td><td>Disable intra-IKE fragmentation support.</td></tr></table>	Option	Description	enable	Enable intra-IKE fragmentation support on re-transmission.	disable	Disable intra-IKE fragmentation support.			
Option	Description									
enable	Enable intra-IKE fragmentation support on re-transmission.									
disable	Disable intra-IKE fragmentation support.									
fragmentation-mtu	IKE fragmentation MTU (500 - 16000).	integer	Minimum value: 500 Maximum value: 16000	1200						
group-authentication	Enable/disable IKEv2 IDi group authentication.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable IKEv2 IDi group authentication.</td></tr><tr><td>disable</td><td>Disable IKEv2 IDi group authentication.</td></tr></table>	Option	Description	enable	Enable IKEv2 IDi group authentication.	disable	Disable IKEv2 IDi group authentication.			
Option	Description									
enable	Enable IKEv2 IDi group authentication.									
disable	Disable IKEv2 IDi group authentication.									
group-authentication-secret	Password for IKEv2 ID group authentication. ASCII string or hexadecimal indicated by a leading 0x.	password-3	Not Specified							
ha-sync-esp-seqno	Enable/disable sequence number jump ahead for IPsec HA.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable HA syncing of ESP sequence numbers.</td></tr><tr><td>disable</td><td>Disable HA syncing of ESP sequence numbers.</td></tr></table>	Option	Description	enable	Enable HA syncing of ESP sequence numbers.	disable	Disable HA syncing of ESP sequence numbers.			
Option	Description									
enable	Enable HA syncing of ESP sequence numbers.									
disable	Disable HA syncing of ESP sequence numbers.									
idle-timeout	Enable/disable IPsec tunnel idle timeout.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable IPsec tunnel idle timeout.</td></tr><tr><td>disable</td><td>Disable IPsec tunnel idle timeout.</td></tr></table>	Option	Description	enable	Enable IPsec tunnel idle timeout.	disable	Disable IPsec tunnel idle timeout.			
Option	Description									
enable	Enable IPsec tunnel idle timeout.									
disable	Disable IPsec tunnel idle timeout.									

Parameter	Description	Type	Size	Default						
idle-timeoutinterval	IPsec tunnel idle timeout in minutes (5 - 43200).	integer	Minimum value: 5 Maximum value: 43200	15						
ike-version	IKE protocol version.	option	-	1						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>1</td><td>Use IKEv1 protocol.</td></tr><tr><td>2</td><td>Use IKEv2 protocol.</td></tr></table>	Option	Description	1	Use IKEv1 protocol.	2	Use IKEv2 protocol.			
Option	Description									
1	Use IKEv1 protocol.									
2	Use IKEv2 protocol.									
inbound-dscp-copy	Enable/disable copy the dscp in the ESP header to the inner IP Header.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable copy the dscp in the ESP header to the inner IP Header.</td></tr><tr><td>disable</td><td>Disable copy the dscp in the ESP header to the inner IP Header.</td></tr></table>	Option	Description	enable	Enable copy the dscp in the ESP header to the inner IP Header.	disable	Disable copy the dscp in the ESP header to the inner IP Header.			
Option	Description									
enable	Enable copy the dscp in the ESP header to the inner IP Header.									
disable	Disable copy the dscp in the ESP header to the inner IP Header.									
include-local-lan	Enable/disable allow local LAN access on unity clients.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Disable local LAN access on Unity clients.</td></tr><tr><td>enable</td><td>Enable local LAN access on Unity clients.</td></tr></table>	Option	Description	disable	Disable local LAN access on Unity clients.	enable	Enable local LAN access on Unity clients.			
Option	Description									
disable	Disable local LAN access on Unity clients.									
enable	Enable local LAN access on Unity clients.									
interface	Local physical, aggregate, or VLAN outgoing interface.	string	Maximum length: 35							
internal-domain-list <domain-name>	List of domains for which the client directs DNS queries to the internal DNS servers for resolution. DNS servers are configured in the mode-cfg settings. One or more internal domain names in quotes separated by spaces, like "abc.com xyz.com 123.com" Domain name.	string	Maximum length: 79							
ip-delay-interval	IP address reuse delay interval in seconds (0 - 28800).	integer	Minimum value: 0 Maximum value: 28800	0						

Parameter	Description	Type	Size	Default						
ip-fragmentation	Determine whether IP packets are fragmented before or after IPsec encapsulation.	option	-	post-encapsulation						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>pre-encapsulation</i></td><td>Fragment before IPsec encapsulation.</td></tr><tr><td><i>post-encapsulation</i></td><td>Fragment after IPsec encapsulation (RFC compliant).</td></tr></table>	Option	Description	<i>pre-encapsulation</i>	Fragment before IPsec encapsulation.	<i>post-encapsulation</i>	Fragment after IPsec encapsulation (RFC compliant).			
Option	Description									
<i>pre-encapsulation</i>	Fragment before IPsec encapsulation.									
<i>post-encapsulation</i>	Fragment after IPsec encapsulation (RFC compliant).									
ip-version	IP version to use for VPN interface.	option	-	4						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>4</td><td>Use IPv4 addressing for gateways.</td></tr><tr><td>6</td><td>Use IPv6 addressing for gateways.</td></tr></table>	Option	Description	4	Use IPv4 addressing for gateways.	6	Use IPv6 addressing for gateways.			
Option	Description									
4	Use IPv4 addressing for gateways.									
6	Use IPv6 addressing for gateways.									
ipv4-dns-server1	IPv4 DNS server 1.	ipv4-address	Not Specified	0.0.0.0						
ipv4-dns-server2	IPv4 DNS server 2.	ipv4-address	Not Specified	0.0.0.0						
ipv4-dns-server3	IPv4 DNS server 3.	ipv4-address	Not Specified	0.0.0.0						
ipv4-end-ip	End of IPv4 range.	ipv4-address	Not Specified	0.0.0.0						
ipv4-name	IPv4 address name.	string	Maximum length: 79							
ipv4-netmask	IPv4 Netmask.	ipv4-netmask	Not Specified	255.255.255.255						
ipv4-split-exclude	IPv4 subnets that should not be sent over the IPsec tunnel.	string	Maximum length: 79							
ipv4-split-include	IPv4 split-include subnets.	string	Maximum length: 79							
ipv4-start-ip	Start of IPv4 range.	ipv4-address	Not Specified	0.0.0.0						
ipv4-wins-server1	WINS server 1.	ipv4-address	Not Specified	0.0.0.0						
ipv4-wins-server2	WINS server 2.	ipv4-address	Not Specified	0.0.0.0						

Parameter	Description	Type	Size	Default				
ipv6-dns-server1	IPv6 DNS server 1.	ipv6-address	Not Specified	::				
ipv6-dns-server2	IPv6 DNS server 2.	ipv6-address	Not Specified	::				
ipv6-dns-server3	IPv6 DNS server 3.	ipv6-address	Not Specified	::				
ipv6-end-ip	End of IPv6 range.	ipv6-address	Not Specified	::				
ipv6-name	IPv6 address name.	string	Maximum length: 79					
ipv6-prefix	IPv6 prefix.	integer	Minimum value: 128 Maximum value: 128	128				
ipv6-split-exclude	IPv6 subnets that should not be sent over the IPsec tunnel.	string	Maximum length: 79					
ipv6-split-include	IPv6 split-include subnets.	string	Maximum length: 79					
ipv6-start-ip	Start of IPv6 range.	ipv6-address	Not Specified	::				
keepalive	NAT-T keep alive interval.	integer	Minimum value: 10 Maximum value: 900	10				
keylife	Time to wait in seconds before phase 1 encryption key expires.	integer	Minimum value: 120 Maximum value: 172800	86400				
link-cost	VPN tunnel underlay link cost.	integer	Minimum value: 0 Maximum value: 255	0				
local-gw	IPv4 address of the local gateway's external interface.	ipv4-address	Not Specified	0.0.0.0				
local-gw6	IPv6 address of the local gateway's external interface.	ipv6-address	Not Specified	::				
localid	Local ID.	string	Maximum length: 63					
localid-type	Local ID type.	option	-	auto				
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>auto</td><td>Select ID type automatically.</td></tr></table>				Option	Description	auto	Select ID type automatically.
Option	Description							
auto	Select ID type automatically.							

Parameter	Description	Type	Size	Default												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>fqdn</i></td><td>Use fully qualified domain name.</td></tr><tr><td><i>user-fqdn</i></td><td>Use user fully qualified domain name.</td></tr><tr><td><i>keyid</i></td><td>Use key-id string.</td></tr><tr><td><i>address</i></td><td>Use local IP address.</td></tr><tr><td><i>asn1dn</i></td><td>Use ASN.1 distinguished name.</td></tr></table>	Option	Description	<i>fqdn</i>	Use fully qualified domain name.	<i>user-fqdn</i>	Use user fully qualified domain name.	<i>keyid</i>	Use key-id string.	<i>address</i>	Use local IP address.	<i>asn1dn</i>	Use ASN.1 distinguished name.			
	Option	Description														
	<i>fqdn</i>	Use fully qualified domain name.														
	<i>user-fqdn</i>	Use user fully qualified domain name.														
	<i>keyid</i>	Use key-id string.														
	<i>address</i>	Use local IP address.														
<i>asn1dn</i>	Use ASN.1 distinguished name.															
loopback-asymroute	Enable/disable asymmetric routing for IKE traffic on loopback interface.	option	-	enable												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Allow ingress/egress IKE traffic to be routed over different interfaces.</td></tr><tr><td><i>disable</i></td><td>Ingress/egress IKE traffic must be routed over the same interface.</td></tr></table>	Option	Description	<i>enable</i>	Allow ingress/egress IKE traffic to be routed over different interfaces.	<i>disable</i>	Ingress/egress IKE traffic must be routed over the same interface.									
	Option	Description														
	<i>enable</i>	Allow ingress/egress IKE traffic to be routed over different interfaces.														
<i>disable</i>	Ingress/egress IKE traffic must be routed over the same interface.															
mesh-selector-type	Add selectors containing subsets of the configuration depending on traffic.	option	-	disable												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>disable</i></td><td>Disable.</td></tr><tr><td><i>subnet</i></td><td>Enable addition of matching subnet selector.</td></tr><tr><td><i>host</i></td><td>Enable addition of host to host selector.</td></tr></table>	Option	Description	<i>disable</i>	Disable.	<i>subnet</i>	Enable addition of matching subnet selector.	<i>host</i>	Enable addition of host to host selector.							
	Option	Description														
	<i>disable</i>	Disable.														
	<i>subnet</i>	Enable addition of matching subnet selector.														
<i>host</i>	Enable addition of host to host selector.															
mode	The ID protection mode used to establish a secure channel.	option	-	main												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>aggressive</i></td><td>Aggressive mode.</td></tr><tr><td><i>main</i></td><td>Main mode.</td></tr></table>	Option	Description	<i>aggressive</i>	Aggressive mode.	<i>main</i>	Main mode.									
	Option	Description														
	<i>aggressive</i>	Aggressive mode.														
<i>main</i>	Main mode.															
mode-cfg	Enable/disable configuration method.	option	-	disable												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>disable</i></td><td>Disable Configuration Method.</td></tr><tr><td><i>enable</i></td><td>Enable Configuration Method.</td></tr></table>	Option	Description	<i>disable</i>	Disable Configuration Method.	<i>enable</i>	Enable Configuration Method.									
	Option	Description														
	<i>disable</i>	Disable Configuration Method.														
<i>enable</i>	Enable Configuration Method.															

Parameter	Description	Type	Size	Default
mode-cfg-allow-client-selector	Enable/disable mode-cfg client to use custom phase2 selectors.	option	-	disable
	Option	Description		
	<i>disable</i>	Mode-cfg client to use wildcard selectors.		
	<i>enable</i>	Mode-cfg client to use custom selectors.		
monitor	IPsec interface as backup for primary interface.	string	Maximum length: 35	
monitor-hold-down-delay	Time to wait in seconds before recovery once primary re-establishes.	integer	Minimum value: 0 0 Maximum value: 31536000	
monitor-hold-down-time	Time of day at which to fail back to primary after it re-establishes.	user	Not Specified	
monitor-hold-down-type	Recovery time method when primary interface re-establishes.	option	-	immediate
	Option	Description		
	<i>immediate</i>	Fail back immediately after primary recovers.		
	<i>delay</i>	Number of seconds to delay fail back after primary recovers.		
	<i>time</i>	Specify a time at which to fail back after primary recovers.		
monitor-hold-down-weekday	Day of the week to recover once primary re-establishes.	option	-	sunday
	Option	Description		
	<i>everyday</i>	Every Day.		
	<i>sunday</i>	Sunday.		
	<i>monday</i>	Monday.		
	<i>tuesday</i>	Tuesday.		
	<i>wednesday</i>	Wednesday.		
	<i>thursday</i>	Thursday.		
	<i>friday</i>	Friday.		
	<i>saturday</i>	Saturday.		
name	IPsec remote gateway name.	string	Maximum length: 15	

Parameter	Description	Type	Size	Default								
nattraversal	Enable/disable NAT traversal.	option	-	enable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable IPsec NAT traversal.</td></tr><tr><td>disable</td><td>Disable IPsec NAT traversal.</td></tr><tr><td>forced</td><td>Force IPsec NAT traversal on.</td></tr></table>	Option	Description	enable	Enable IPsec NAT traversal.	disable	Disable IPsec NAT traversal.	forced	Force IPsec NAT traversal on.			
Option	Description											
enable	Enable IPsec NAT traversal.											
disable	Disable IPsec NAT traversal.											
forced	Force IPsec NAT traversal on.											
negotiate-timeout	IKE SA negotiation timeout in seconds (1 - 300).	integer	Minimum value: 30 1 Maximum value: 300									
net-device	Enable/disable kernel device creation.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Create a kernel device for every tunnel.</td></tr><tr><td>disable</td><td>Do not create a kernel device for tunnels.</td></tr></table>	Option	Description	enable	Create a kernel device for every tunnel.	disable	Do not create a kernel device for tunnels.					
Option	Description											
enable	Create a kernel device for every tunnel.											
disable	Do not create a kernel device for tunnels.											
network-id	VPN gateway network ID.	integer	Minimum value: 0 0 Maximum value: 255									
network-overlay	Enable/disable network overlays.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Disable network overlays.</td></tr><tr><td>enable</td><td>Enable network overlays.</td></tr></table>	Option	Description	disable	Disable network overlays.	enable	Enable network overlays.					
Option	Description											
disable	Disable network overlays.											
enable	Enable network overlays.											
npu-offload *	Enable/disable offloading NPU.	option	-	enable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable NPU offloading.</td></tr><tr><td>disable</td><td>Disable NPU offloading.</td></tr></table>	Option	Description	enable	Enable NPU offloading.	disable	Disable NPU offloading.					
Option	Description											
enable	Enable NPU offloading.											
disable	Disable NPU offloading.											
packet-redistribution *	Enable/disable packet distribution (RPS) on the IPsec interface.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable packet redistribution.</td></tr><tr><td>disable</td><td>Disable packet redistribution.</td></tr></table>	Option	Description	enable	Enable packet redistribution.	disable	Disable packet redistribution.					
Option	Description											
enable	Enable packet redistribution.											
disable	Disable packet redistribution.											

Parameter	Description	Type	Size	Default
passive-mode	Enable/disable IPsec passive mode for static tunnels.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable IPsec passive mode.		
	<i>disable</i>	Disable IPsec passive mode.		
peer	Accept this peer certificate.	string	Maximum length: 35	
peergrp	Accept this peer certificate group.	string	Maximum length: 35	
peerid	Accept this peer identity.	string	Maximum length: 255	
peertype	Accept this peer type.	option	-	peer
	Option	Description		
	<i>any</i>	Accept any peer ID.		
	<i>one</i>	Accept this peer ID.		
	<i>dialup</i>	Accept peer ID in dialup group.		
	<i>peer</i>	Accept this peer certificate.		
	<i>peergrp</i>	Accept this peer certificate group.		
ppk	Enable/disable IKEv2 Postquantum Preshared Key (PPK).	option	-	disable
	Option	Description		
	<i>disable</i>	Disable use of IKEv2 Postquantum Preshared Key (PPK).		
	<i>allow</i>	Allow, but do not require, use of IKEv2 Postquantum Preshared Key (PPK).		
	<i>require</i>	Require use of IKEv2 Postquantum Preshared Key (PPK).		
ppk-identity	IKEv2 Postquantum Preshared Key Identity.	string	Maximum length: 35	
ppk-secret	IKEv2 Postquantum Preshared Key (ASCII string or hexadecimal encoded with a leading 0x).	password-3	Not Specified	
priority	Priority for routes added by IKE (1 - 65535).	integer	Minimum value: 1 1 Maximum value: 65535	

Parameter	Description	Type	Size	Default
proposal	Phase1 proposal.	option	-	
	Option	Description		
	<i>des-md5</i>	des-md5		
	<i>des-sha1</i>	des-sha1		
	<i>des-sha256</i>	des-sha256		
	<i>des-sha384</i>	des-sha384		
	<i>des-sha512</i>	des-sha512		
	<i>3des-md5</i>	3des-md5		
	<i>3des-sha1</i>	3des-sha1		
	<i>3des-sha256</i>	3des-sha256		
	<i>3des-sha384</i>	3des-sha384		
	<i>3des-sha512</i>	3des-sha512		
	<i>aes128-md5</i>	aes128-md5		
	<i>aes128-sha1</i>	aes128-sha1		
	<i>aes128-sha256</i>	aes128-sha256		
	<i>aes128-sha384</i>	aes128-sha384		
	<i>aes128-sha512</i>	aes128-sha512		
	<i>aes128gcm-prfsha1</i>	aes128gcm-prfsha1		
	<i>aes128gcm-prfsha256</i>	aes128gcm-prfsha256		
	<i>aes128gcm-prfsha384</i>	aes128gcm-prfsha384		
	<i>aes128gcm-prfsha512</i>	aes128gcm-prfsha512		
	<i>aes192-md5</i>	aes192-md5		
	<i>aes192-sha1</i>	aes192-sha1		
	<i>aes192-sha256</i>	aes192-sha256		
	<i>aes192-sha384</i>	aes192-sha384		
	<i>aes192-sha512</i>	aes192-sha512		
	<i>aes256-md5</i>	aes256-md5		
	<i>aes256-sha1</i>	aes256-sha1		
	<i>aes256-sha256</i>	aes256-sha256		
	<i>aes256-sha384</i>	aes256-sha384		

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>aes256-sha512</i>	aes256-sha512		
	<i>aes256gcm-prfsha1</i>	aes256gcm-prfsha1		
	<i>aes256gcm-prfsha256</i>	aes256gcm-prfsha256		
	<i>aes256gcm-prfsha384</i>	aes256gcm-prfsha384		
	<i>aes256gcm-prfsha512</i>	aes256gcm-prfsha512		
	<i>chacha20poly1305-prfsha1</i>	chacha20poly1305-prfsha1		
	<i>chacha20poly1305-prfsha256</i>	chacha20poly1305-prfsha256		
	<i>chacha20poly1305-prfsha384</i>	chacha20poly1305-prfsha384		
	<i>chacha20poly1305-prfsha512</i>	chacha20poly1305-prfsha512		
	<i>aria128-md5</i>	aria128-md5		
	<i>aria128-sha1</i>	aria128-sha1		
	<i>aria128-sha256</i>	aria128-sha256		
	<i>aria128-sha384</i>	aria128-sha384		
	<i>aria128-sha512</i>	aria128-sha512		
	<i>aria192-md5</i>	aria192-md5		
	<i>aria192-sha1</i>	aria192-sha1		
	<i>aria192-sha256</i>	aria192-sha256		
	<i>aria192-sha384</i>	aria192-sha384		
	<i>aria192-sha512</i>	aria192-sha512		
	<i>aria256-md5</i>	aria256-md5		
	<i>aria256-sha1</i>	aria256-sha1		
	<i>aria256-sha256</i>	aria256-sha256		
	<i>aria256-sha384</i>	aria256-sha384		
	<i>aria256-sha512</i>	aria256-sha512		
	<i>seed-md5</i>	seed-md5		
	<i>seed-sha1</i>	seed-sha1		
	<i>seed-sha256</i>	seed-sha256		
	<i>seed-sha384</i>	seed-sha384		
	<i>seed-sha512</i>	seed-sha512		

Parameter	Description	Type	Size	Default										
psksecret	Pre-shared secret for PSK authentication (ASCII string or hexadecimal encoded with a leading 0x).	password-3	Not Specified											
psksecret-remote	Pre-shared secret for remote side PSK authentication (ASCII string or hexadecimal encoded with a leading 0x).	password-3	Not Specified											
reauth	Enable/disable re-authentication upon IKE SA lifetime expiration.	option	-	disable										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Disable IKE SA re-authentication.</td></tr><tr><td>enable</td><td>Enable IKE SA re-authentication.</td></tr></table>	Option	Description	disable	Disable IKE SA re-authentication.	enable	Enable IKE SA re-authentication.							
Option	Description													
disable	Disable IKE SA re-authentication.													
enable	Enable IKE SA re-authentication.													
rekey	Enable/disable phase1 rekey.	option	-	enable										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable phase1 rekey.</td></tr><tr><td>disable</td><td>Disable phase1 rekey.</td></tr></table>	Option	Description	enable	Enable phase1 rekey.	disable	Disable phase1 rekey.							
Option	Description													
enable	Enable phase1 rekey.													
disable	Disable phase1 rekey.													
remote-gw	IPv4 address of the remote gateway's external interface.	ipv4-address	Not Specified	0.0.0.0										
remote-gw-country	IPv4 addresses associated to a specific country.	string	Maximum length: 2											
remote-gw-end-ip	Last IPv4 address in the range.	ipv4-address-any	Not Specified	0.0.0.0										
remote-gw-match	Set type of IPv4 remote gateway address matching.	option	-	any										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>any</td><td>Match any IPv4 gateway address.</td></tr><tr><td>ipmask</td><td>Match IPv4 gateway address and mask.</td></tr><tr><td>iprange</td><td>Match IPv4 gateway address range.</td></tr><tr><td>geography</td><td>Match IPv4 gateway address from a specified country.</td></tr></table>	Option	Description	any	Match any IPv4 gateway address.	ipmask	Match IPv4 gateway address and mask.	iprange	Match IPv4 gateway address range.	geography	Match IPv4 gateway address from a specified country.			
Option	Description													
any	Match any IPv4 gateway address.													
ipmask	Match IPv4 gateway address and mask.													
iprange	Match IPv4 gateway address range.													
geography	Match IPv4 gateway address from a specified country.													
remote-gw-start-ip	First IPv4 address in the range.	ipv4-address-any	Not Specified	0.0.0.0										

Parameter	Description	Type	Size	Default										
remote-gw-subnet	IPv4 address and subnet mask.	ipv4-classnet-any	Not Specified	0.0.0.0 0.0.0.0										
remote-gw6	IPv6 address of the remote gateway's external interface.	ipv6-address	Not Specified	::										
remote-gw6-country	IPv6 addresses associated to a specific country.	string	Maximum length: 2											
remote-gw6-end-ip	Last IPv6 address in the range.	ipv6-address	Not Specified	::										
remote-gw6-match	Set type of IPv6 remote gateway address matching.	option	-	any										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>any</td><td>Match any IPv6 gateway address.</td></tr><tr><td>ipprefix</td><td>Match IPv6 gateway address and prefix.</td></tr><tr><td>iprange</td><td>Match IPv6 gateway address range.</td></tr><tr><td>geography</td><td>Match IPv6 gateway address from a specified country.</td></tr></table>				Option	Description	any	Match any IPv6 gateway address.	ipprefix	Match IPv6 gateway address and prefix.	iprange	Match IPv6 gateway address range.	geography	Match IPv6 gateway address from a specified country.
Option	Description													
any	Match any IPv6 gateway address.													
ipprefix	Match IPv6 gateway address and prefix.													
iprange	Match IPv6 gateway address range.													
geography	Match IPv6 gateway address from a specified country.													
remote-gw6-start-ip	First IPv6 address in the range.	ipv6-address	Not Specified	::										
remote-gw6-subnet	IPv6 address and prefix.	ipv6-network	Not Specified	::/0										
remotegw-ddns	Domain name of remote gateway. For example, name.ddns.com.	string	Maximum length: 63											
rsa-signature-format	Digital Signature Authentication RSA signature format.	option	-	pkcs1										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>pkcs1</td><td>RSASSA PKCS#1 v1.5.</td></tr><tr><td>pss</td><td>RSASSA Probabilistic Signature Scheme (PSS).</td></tr></table>				Option	Description	pkcs1	RSASSA PKCS#1 v1.5.	pss	RSASSA Probabilistic Signature Scheme (PSS).				
Option	Description													
pkcs1	RSASSA PKCS#1 v1.5.													
pss	RSASSA Probabilistic Signature Scheme (PSS).													
rsa-signature-hash-override	Enable/disable IKEv2 RSA signature hash algorithm override.	option	-	disable										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable IKEv2 RSA signature hash algorithm override.</td></tr><tr><td>disable</td><td>Disable IKEv2 RSA signature hash algorithm override.</td></tr></table>				Option	Description	enable	Enable IKEv2 RSA signature hash algorithm override.	disable	Disable IKEv2 RSA signature hash algorithm override.				
Option	Description													
enable	Enable IKEv2 RSA signature hash algorithm override.													
disable	Disable IKEv2 RSA signature hash algorithm override.													

Parameter	Description	Type	Size	Default										
save-password	Enable/disable saving XAuth username and password on VPN clients.	option	-	disable										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Disable saving XAuth username and password on VPN clients.</td></tr><tr><td>enable</td><td>Enable saving XAuth username and password on VPN clients.</td></tr></table>	Option	Description	disable	Disable saving XAuth username and password on VPN clients.	enable	Enable saving XAuth username and password on VPN clients.							
Option	Description													
disable	Disable saving XAuth username and password on VPN clients.													
enable	Enable saving XAuth username and password on VPN clients.													
send-cert-chain	Enable/disable sending certificate chain.	option	-	enable										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable sending certificate chain.</td></tr><tr><td>disable</td><td>Disable sending certificate chain.</td></tr></table>	Option	Description	enable	Enable sending certificate chain.	disable	Disable sending certificate chain.							
Option	Description													
enable	Enable sending certificate chain.													
disable	Disable sending certificate chain.													
signature-hash-alg	Digital Signature Authentication hash algorithms.	option	-	sha2-512										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>sha1</td><td>SHA1.</td></tr><tr><td>sha2-256</td><td>SHA2-256.</td></tr><tr><td>sha2-384</td><td>SHA2-384.</td></tr><tr><td>sha2-512</td><td>SHA2-512.</td></tr></table>	Option	Description	sha1	SHA1.	sha2-256	SHA2-256.	sha2-384	SHA2-384.	sha2-512	SHA2-512.			
Option	Description													
sha1	SHA1.													
sha2-256	SHA2-256.													
sha2-384	SHA2-384.													
sha2-512	SHA2-512.													
split-include-service	Split-include services.	string	Maximum length: 79											
suite-b	Use Suite-B.	option	-	disable										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Do not use UI suite.</td></tr><tr><td>suite-b-gcm-128</td><td>Use Suite-B-GCM-128.</td></tr><tr><td>suite-b-gcm-256</td><td>Use Suite-B-GCM-256.</td></tr></table>	Option	Description	disable	Do not use UI suite.	suite-b-gcm-128	Use Suite-B-GCM-128.	suite-b-gcm-256	Use Suite-B-GCM-256.					
Option	Description													
disable	Do not use UI suite.													
suite-b-gcm-128	Use Suite-B-GCM-128.													
suite-b-gcm-256	Use Suite-B-GCM-256.													
type	Remote gateway type.	option	-	static										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>static</td><td>Remote VPN gateway has fixed IP address.</td></tr><tr><td>dynamic</td><td>Remote VPN gateway has dynamic IP address.</td></tr></table>	Option	Description	static	Remote VPN gateway has fixed IP address.	dynamic	Remote VPN gateway has dynamic IP address.							
Option	Description													
static	Remote VPN gateway has fixed IP address.													
dynamic	Remote VPN gateway has dynamic IP address.													

Parameter	Description	Type	Size	Default																								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>ddns</i></td><td>Remote VPN gateway has dynamic IP address and is a dynamic DNS client.</td></tr></table>	Option	Description	<i>ddns</i>	Remote VPN gateway has dynamic IP address and is a dynamic DNS client.																							
	Option	Description																										
<i>ddns</i>	Remote VPN gateway has dynamic IP address and is a dynamic DNS client.																											
unity-support	Enable/disable support for Cisco UNITY Configuration Method extensions.	option	-	enable																								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>disable</i></td><td>Disable Cisco Unity Configuration Method Extensions.</td></tr><tr><td><i>enable</i></td><td>Enable Cisco Unity Configuration Method Extensions.</td></tr></table>	Option	Description	<i>disable</i>	Disable Cisco Unity Configuration Method Extensions.	<i>enable</i>	Enable Cisco Unity Configuration Method Extensions.																					
	Option	Description																										
	<i>disable</i>	Disable Cisco Unity Configuration Method Extensions.																										
<i>enable</i>	Enable Cisco Unity Configuration Method Extensions.																											
usrgrp	User group name for dialup peers.	string	Maximum length: 35																									
vni	VNI of VXLAN tunnel.	integer	Minimum value: 0 1 Maximum value: 16777215																									
wizard-type	GUI VPN Wizard Type.	option	-	custom																								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>custom</i></td><td>Custom VPN configuration.</td></tr><tr><td><i>dialup-forticlient</i></td><td>Dial Up - FortiClient Windows, Mac and Android.</td></tr><tr><td><i>dialup-ios</i></td><td>Dial Up - iPhone / iPad Native IPsec Client.</td></tr><tr><td><i>dialup-android</i></td><td>Dial Up - Android Native IPsec Client.</td></tr><tr><td><i>dialup-windows</i></td><td>Dial Up - Windows Native IPsec Client.</td></tr><tr><td><i>dialup-cisco</i></td><td>Dial Up - Cisco IPsec Client.</td></tr><tr><td><i>static-fortigate</i></td><td>Site to Site - FortiGate.</td></tr><tr><td><i>dialup-fortigate</i></td><td>Dial Up - FortiGate.</td></tr><tr><td><i>static-cisco</i></td><td>Site to Site - Cisco.</td></tr><tr><td><i>dialup-cisco-fw</i></td><td>Dialup Up - Cisco Firewall.</td></tr><tr><td><i>simplified-static-fortigate</i></td><td>Site to Site - FortiGate (SD-WAN).</td></tr></table>	Option	Description	<i>custom</i>	Custom VPN configuration.	<i>dialup-forticlient</i>	Dial Up - FortiClient Windows, Mac and Android.	<i>dialup-ios</i>	Dial Up - iPhone / iPad Native IPsec Client.	<i>dialup-android</i>	Dial Up - Android Native IPsec Client.	<i>dialup-windows</i>	Dial Up - Windows Native IPsec Client.	<i>dialup-cisco</i>	Dial Up - Cisco IPsec Client.	<i>static-fortigate</i>	Site to Site - FortiGate.	<i>dialup-fortigate</i>	Dial Up - FortiGate.	<i>static-cisco</i>	Site to Site - Cisco.	<i>dialup-cisco-fw</i>	Dialup Up - Cisco Firewall.	<i>simplified-static-fortigate</i>	Site to Site - FortiGate (SD-WAN).			
	Option	Description																										
	<i>custom</i>	Custom VPN configuration.																										
	<i>dialup-forticlient</i>	Dial Up - FortiClient Windows, Mac and Android.																										
	<i>dialup-ios</i>	Dial Up - iPhone / iPad Native IPsec Client.																										
	<i>dialup-android</i>	Dial Up - Android Native IPsec Client.																										
	<i>dialup-windows</i>	Dial Up - Windows Native IPsec Client.																										
	<i>dialup-cisco</i>	Dial Up - Cisco IPsec Client.																										
	<i>static-fortigate</i>	Site to Site - FortiGate.																										
	<i>dialup-fortigate</i>	Dial Up - FortiGate.																										
	<i>static-cisco</i>	Site to Site - Cisco.																										
	<i>dialup-cisco-fw</i>	Dialup Up - Cisco Firewall.																										
<i>simplified-static-fortigate</i>	Site to Site - FortiGate (SD-WAN).																											

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>hub-fortigate-auto-discovery</i>	Hub role in a Hub-and-Spoke auto-discovery VPN.		
	<i>spoke-fortigate-auto-discovery</i>	Spoke role in a Hub-and-Spoke auto-discovery VPN.		
xauthtype	XAuth type.	option	-	disable
	Option	Description		
	<i>disable</i>	Disable.		
	<i>client</i>	Enable as client.		
	<i>pap</i>	Enable as server PAP.		
	<i>chap</i>	Enable as server CHAP.		
	<i>auto</i>	Enable as server auto.		

* This parameter may not exist in some models.

config ipv4-exclude-range

Parameter	Description	Type	Size	Default
end-ip	End of IPv4 exclusive range.	ipv4-address	Not Specified	0.0.0.0
id	ID.	integer	Minimum value: 0 Maximum value: 4294967295	0
start-ip	Start of IPv4 exclusive range.	ipv4-address	Not Specified	0.0.0.0

config ipv6-exclude-range

Parameter	Description	Type	Size	Default
end-ip	End of IPv6 exclusive range.	ipv6-address	Not Specified	::
id	ID.	integer	Minimum value: 0 Maximum value: 4294967295	0

Parameter	Description	Type	Size	Default
start-ip	Start of IPv6 exclusive range.	ipv6-address	Not Specified	::

config vpn ipsec phase2

Configure VPN autokey tunnel.

```
config vpn ipsec phase2
  Description: Configure VPN autokey tunnel.
  edit <name>
    set add-route [phase1|enable|...]
    set auto-negotiate [enable|disable]
    set comments {var-string}
    set dhcp-ipsec [enable|disable]
    set dhgrp {option1}, {option2}, ...
    set diffserv [enable|disable]
    set diffservcode {user}
    set dst-addr-type [subnet|range|...]
    set dst-end-ip {ipv4-address-any}
    set dst-end-ip6 {ipv6-address}
    set dst-name {string}
    set dst-name6 {string}
    set dst-port {integer}
    set dst-start-ip {ipv4-address-any}
    set dst-start-ip6 {ipv6-address}
    set dst-subnet {ipv4-classnet-any}
    set dst-subnet6 {ipv6-prefix}
    set encapsulation [tunnel-mode|transport-mode]
    set inbound-dscp-copy [phase1|enable|...]
    set initiator-ts-narrow [enable|disable]
    set ipv4-df [enable|disable]
    set keepalive [enable|disable]
    set keylife-type [seconds|kbs|...]
    set keylifekbs {integer}
    set keylifeseconds {integer}
    set l2tp [enable|disable]
    set pfs [enable|disable]
    set phase1name {string}
    set proposal {option1}, {option2}, ...
    set protocol {integer}
    set replay [enable|disable]
    set route-overlap [use-old|use-new|...]
    set selector-match [exact|subset|...]
    set single-source [enable|disable]
    set src-addr-type [subnet|range|...]
    set src-end-ip {ipv4-address-any}
    set src-end-ip6 {ipv6-address}
    set src-name {string}
```

```

set src-name6 {string}
set src-port {integer}
set src-start-ip {ipv4-address-any}
set src-start-ip6 {ipv6-address}
set src-subnet {ipv4-classnet-any}
set src-subnet6 {ipv6-prefix}
set use-natip [enable|disable]
next
end

```

config vpn ipsec phase2

Parameter	Description	Type	Size	Default								
add-route	Enable/disable automatic route addition.	option	-	phase1								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>phase1</i></td><td>Add route according to phase1 add-route setting.</td></tr><tr><td><i>enable</i></td><td>Add route for remote proxy ID.</td></tr><tr><td><i>disable</i></td><td>Do not add route for remote proxy ID.</td></tr></table>	Option	Description	<i>phase1</i>	Add route according to phase1 add-route setting.	<i>enable</i>	Add route for remote proxy ID.	<i>disable</i>	Do not add route for remote proxy ID.			
Option	Description											
<i>phase1</i>	Add route according to phase1 add-route setting.											
<i>enable</i>	Add route for remote proxy ID.											
<i>disable</i>	Do not add route for remote proxy ID.											
auto-negotiate	Enable/disable IPsec SA auto-negotiation.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable setting.</td></tr><tr><td><i>disable</i></td><td>Disable setting.</td></tr></table>	Option	Description	<i>enable</i>	Enable setting.	<i>disable</i>	Disable setting.					
Option	Description											
<i>enable</i>	Enable setting.											
<i>disable</i>	Disable setting.											
comments	Comment.	var-string	Maximum length: 255									
dhcp-ipsec	Enable/disable DHCP-IPsec.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable setting.</td></tr><tr><td><i>disable</i></td><td>Disable setting.</td></tr></table>	Option	Description	<i>enable</i>	Enable setting.	<i>disable</i>	Disable setting.					
Option	Description											
<i>enable</i>	Enable setting.											
<i>disable</i>	Disable setting.											
dhgrp	Phase2 DH group.	option	-	14								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>1</i></td><td>DH Group 1.</td></tr><tr><td><i>2</i></td><td>DH Group 2.</td></tr><tr><td><i>5</i></td><td>DH Group 5.</td></tr></table>	Option	Description	<i>1</i>	DH Group 1.	<i>2</i>	DH Group 2.	<i>5</i>	DH Group 5.			
Option	Description											
<i>1</i>	DH Group 1.											
<i>2</i>	DH Group 2.											
<i>5</i>	DH Group 5.											

Parameter	Description	Type	Size	Default																														
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>14</td><td>DH Group 14.</td></tr><tr><td>15</td><td>DH Group 15.</td></tr><tr><td>16</td><td>DH Group 16.</td></tr><tr><td>17</td><td>DH Group 17.</td></tr><tr><td>18</td><td>DH Group 18.</td></tr><tr><td>19</td><td>DH Group 19.</td></tr><tr><td>20</td><td>DH Group 20.</td></tr><tr><td>21</td><td>DH Group 21.</td></tr><tr><td>27</td><td>DH Group 27.</td></tr><tr><td>28</td><td>DH Group 28.</td></tr><tr><td>29</td><td>DH Group 29.</td></tr><tr><td>30</td><td>DH Group 30.</td></tr><tr><td>31</td><td>DH Group 31.</td></tr><tr><td>32</td><td>DH Group 32.</td></tr></table>	Option	Description	14	DH Group 14.	15	DH Group 15.	16	DH Group 16.	17	DH Group 17.	18	DH Group 18.	19	DH Group 19.	20	DH Group 20.	21	DH Group 21.	27	DH Group 27.	28	DH Group 28.	29	DH Group 29.	30	DH Group 30.	31	DH Group 31.	32	DH Group 32.			
	Option	Description																																
	14	DH Group 14.																																
	15	DH Group 15.																																
	16	DH Group 16.																																
	17	DH Group 17.																																
	18	DH Group 18.																																
	19	DH Group 19.																																
	20	DH Group 20.																																
	21	DH Group 21.																																
	27	DH Group 27.																																
	28	DH Group 28.																																
	29	DH Group 29.																																
	30	DH Group 30.																																
	31	DH Group 31.																																
32	DH Group 32.																																	
diffserv	Enable/disable applying DSCP value to the IPsec tunnel outer IP header.	option	-	disable																														
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable setting.</td></tr><tr><td>disable</td><td>Disable setting.</td></tr></table>	Option	Description	enable	Enable setting.	disable	Disable setting.																											
	Option	Description																																
	enable	Enable setting.																																
disable	Disable setting.																																	
diffservcode	DSCP value to be applied to the IPsec tunnel outer IP header.	user	Not Specified																															
dst-addr-type	Remote proxy ID type.	option	-	subnet																														
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>subnet</td><td>IPv4 subnet.</td></tr><tr><td>range</td><td>IPv4 range.</td></tr><tr><td>ip</td><td>IPv4 IP.</td></tr><tr><td>name</td><td>IPv4 firewall address or group name.</td></tr></table>	Option	Description	subnet	IPv4 subnet.	range	IPv4 range.	ip	IPv4 IP.	name	IPv4 firewall address or group name.																							
	Option	Description																																
	subnet	IPv4 subnet.																																
	range	IPv4 range.																																
	ip	IPv4 IP.																																
name	IPv4 firewall address or group name.																																	

Parameter	Description	Type	Size	Default								
dst-end-ip	Remote proxy ID IPv4 end.	ipv4-address-any	Not Specified	0.0.0.0								
dst-end-ip6	Remote proxy ID IPv6 end.	ipv6-address	Not Specified	::								
dst-name	Remote proxy ID name.	string	Maximum length: 79									
dst-name6	Remote proxy ID name.	string	Maximum length: 79									
dst-port	Quick mode destination port (1 - 65535 or 0 for all).	integer	Minimum value: 0 Maximum value: 65535	0								
dst-start-ip	Remote proxy ID IPv4 start.	ipv4-address-any	Not Specified	0.0.0.0								
dst-start-ip6	Remote proxy ID IPv6 start.	ipv6-address	Not Specified	::								
dst-subnet	Remote proxy ID IPv4 subnet.	ipv4-classnet-any	Not Specified	0.0.0.0 0.0.0.0								
dst-subnet6	Remote proxy ID IPv6 subnet.	ipv6-prefix	Not Specified	::/0								
encapsulation	ESP encapsulation mode.	option	-	tunnel-mode								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>tunnel-mode</td><td>Use tunnel mode encapsulation.</td></tr><tr><td>transport-mode</td><td>Use transport mode encapsulation.</td></tr></table>				Option	Description	tunnel-mode	Use tunnel mode encapsulation.	transport-mode	Use transport mode encapsulation.		
Option	Description											
tunnel-mode	Use tunnel mode encapsulation.											
transport-mode	Use transport mode encapsulation.											
inbound-dscp-copy	Enable/disable copying of the DSCP in the ESP header to the inner IP header.	option	-	phase1								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>phase1</td><td>copy the DCSP in the ESP header to the inner IP Header according to the phase1 inbound_dscp_copy setting.</td></tr><tr><td>enable</td><td>Enable copying of the DSCP in the ESP header to the inner IP header.</td></tr><tr><td>disable</td><td>Disable copying of the DSCP in the ESP header to the inner IP header.</td></tr></table>				Option	Description	phase1	copy the DCSP in the ESP header to the inner IP Header according to the phase1 inbound_dscp_copy setting.	enable	Enable copying of the DSCP in the ESP header to the inner IP header.	disable	Disable copying of the DSCP in the ESP header to the inner IP header.
Option	Description											
phase1	copy the DCSP in the ESP header to the inner IP Header according to the phase1 inbound_dscp_copy setting.											
enable	Enable copying of the DSCP in the ESP header to the inner IP header.											
disable	Disable copying of the DSCP in the ESP header to the inner IP header.											

Parameter	Description	Type	Size	Default								
initiator-ts-narrow	Enable/disable traffic selector narrowing for IKEv2 initiator.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable setting.</td></tr><tr><td><i>disable</i></td><td>Disable setting.</td></tr></table>	Option	Description	<i>enable</i>	Enable setting.	<i>disable</i>	Disable setting.					
Option	Description											
<i>enable</i>	Enable setting.											
<i>disable</i>	Disable setting.											
ipv4-df	Enable/disable setting and resetting of IPv4 'Don't Fragment' bit.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Set IPv4 DF the same as original packet.</td></tr><tr><td><i>disable</i></td><td>Reset IPv4 DF.</td></tr></table>	Option	Description	<i>enable</i>	Set IPv4 DF the same as original packet.	<i>disable</i>	Reset IPv4 DF.					
Option	Description											
<i>enable</i>	Set IPv4 DF the same as original packet.											
<i>disable</i>	Reset IPv4 DF.											
keepalive	Enable/disable keep alive.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable setting.</td></tr><tr><td><i>disable</i></td><td>Disable setting.</td></tr></table>	Option	Description	<i>enable</i>	Enable setting.	<i>disable</i>	Disable setting.					
Option	Description											
<i>enable</i>	Enable setting.											
<i>disable</i>	Disable setting.											
keylife-type	Keylife type.	option	-	seconds								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>seconds</i></td><td>Key life in seconds.</td></tr><tr><td><i>kbs</i></td><td>Key life in kilobytes.</td></tr><tr><td><i>both</i></td><td>Key life both.</td></tr></table>	Option	Description	<i>seconds</i>	Key life in seconds.	<i>kbs</i>	Key life in kilobytes.	<i>both</i>	Key life both.			
Option	Description											
<i>seconds</i>	Key life in seconds.											
<i>kbs</i>	Key life in kilobytes.											
<i>both</i>	Key life both.											
keylifekbs	Phase2 key life in number of kilobytes of traffic (5120 - 4294967295).	integer	Minimum value: 5120 Maximum value: 4294967295									
keylifeseconds	Phase2 key life in time in seconds (120 - 172800).	integer	Minimum value: 120 Maximum value: 172800									
l2tp	Enable/disable L2TP over IPsec.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable L2TP over IPsec.</td></tr><tr><td><i>disable</i></td><td>Disable L2TP over IPsec.</td></tr></table>	Option	Description	<i>enable</i>	Enable L2TP over IPsec.	<i>disable</i>	Disable L2TP over IPsec.					
Option	Description											
<i>enable</i>	Enable L2TP over IPsec.											
<i>disable</i>	Disable L2TP over IPsec.											

Parameter	Description	Type	Size	Default																																										
name	IPsec tunnel name.	string	Maximum length: 35																																											
pfs	Enable/disable PFS feature.	option	-	enable																																										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable setting.</td></tr><tr><td><i>disable</i></td><td>Disable setting.</td></tr></table>				Option	Description	<i>enable</i>	Enable setting.	<i>disable</i>	Disable setting.																																				
	Option	Description																																												
	<i>enable</i>	Enable setting.																																												
<i>disable</i>	Disable setting.																																													
phase1name	Phase 1 determines the options required for phase 2.	string	Maximum length: 35																																											
proposal	Phase2 proposal.	option	-																																											
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>null-md5</i></td><td>null-md5</td></tr><tr><td><i>null-sha1</i></td><td>null-sha1</td></tr><tr><td><i>null-sha256</i></td><td>null-sha256</td></tr><tr><td><i>null-sha384</i></td><td>null-sha384</td></tr><tr><td><i>null-sha512</i></td><td>null-sha512</td></tr><tr><td><i>des-null</i></td><td>des-null</td></tr><tr><td><i>des-md5</i></td><td>des-md5</td></tr><tr><td><i>des-sha1</i></td><td>des-sha1</td></tr><tr><td><i>des-sha256</i></td><td>des-sha256</td></tr><tr><td><i>des-sha384</i></td><td>des-sha384</td></tr><tr><td><i>des-sha512</i></td><td>des-sha512</td></tr><tr><td><i>3des-null</i></td><td>3des-null</td></tr><tr><td><i>3des-md5</i></td><td>3des-md5</td></tr><tr><td><i>3des-sha1</i></td><td>3des-sha1</td></tr><tr><td><i>3des-sha256</i></td><td>3des-sha256</td></tr><tr><td><i>3des-sha384</i></td><td>3des-sha384</td></tr><tr><td><i>3des-sha512</i></td><td>3des-sha512</td></tr><tr><td><i>aes128-null</i></td><td>aes128-null</td></tr><tr><td><i>aes128-md5</i></td><td>aes128-md5</td></tr><tr><td><i>aes128-sha1</i></td><td>aes128-sha1</td></tr></table>				Option	Description	<i>null-md5</i>	null-md5	<i>null-sha1</i>	null-sha1	<i>null-sha256</i>	null-sha256	<i>null-sha384</i>	null-sha384	<i>null-sha512</i>	null-sha512	<i>des-null</i>	des-null	<i>des-md5</i>	des-md5	<i>des-sha1</i>	des-sha1	<i>des-sha256</i>	des-sha256	<i>des-sha384</i>	des-sha384	<i>des-sha512</i>	des-sha512	<i>3des-null</i>	3des-null	<i>3des-md5</i>	3des-md5	<i>3des-sha1</i>	3des-sha1	<i>3des-sha256</i>	3des-sha256	<i>3des-sha384</i>	3des-sha384	<i>3des-sha512</i>	3des-sha512	<i>aes128-null</i>	aes128-null	<i>aes128-md5</i>	aes128-md5	<i>aes128-sha1</i>	aes128-sha1
	Option	Description																																												
	<i>null-md5</i>	null-md5																																												
	<i>null-sha1</i>	null-sha1																																												
	<i>null-sha256</i>	null-sha256																																												
	<i>null-sha384</i>	null-sha384																																												
	<i>null-sha512</i>	null-sha512																																												
	<i>des-null</i>	des-null																																												
	<i>des-md5</i>	des-md5																																												
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	<i>des-sha512</i>	des-sha512																																												
	<i>3des-null</i>	3des-null																																												
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	<i>3des-sha1</i>	3des-sha1																																												
	<i>3des-sha256</i>	3des-sha256																																												
	<i>3des-sha384</i>	3des-sha384																																												
	<i>3des-sha512</i>	3des-sha512																																												
	<i>aes128-null</i>	aes128-null																																												
<i>aes128-md5</i>	aes128-md5																																													
<i>aes128-sha1</i>	aes128-sha1																																													

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>aes128-sha256</i>	aes128-sha256		
	<i>aes128-sha384</i>	aes128-sha384		
	<i>aes128-sha512</i>	aes128-sha512		
	<i>aes128gcm</i>	aes128gcm		
	<i>aes192-null</i>	aes192-null		
	<i>aes192-md5</i>	aes192-md5		
	<i>aes192-sha1</i>	aes192-sha1		
	<i>aes192-sha256</i>	aes192-sha256		
	<i>aes192-sha384</i>	aes192-sha384		
	<i>aes192-sha512</i>	aes192-sha512		
	<i>aes256-null</i>	aes256-null		
	<i>aes256-md5</i>	aes256-md5		
	<i>aes256-sha1</i>	aes256-sha1		
	<i>aes256-sha256</i>	aes256-sha256		
	<i>aes256-sha384</i>	aes256-sha384		
	<i>aes256-sha512</i>	aes256-sha512		
	<i>aes256gcm</i>	aes256gcm		
	<i>chacha20poly1305</i>	chacha20poly1305		
	<i>aria128-null</i>	aria128-null		
	<i>aria128-md5</i>	aria128-md5		
	<i>aria128-sha1</i>	aria128-sha1		
	<i>aria128-sha256</i>	aria128-sha256		
	<i>aria128-sha384</i>	aria128-sha384		
	<i>aria128-sha512</i>	aria128-sha512		
	<i>aria192-null</i>	aria192-null		
	<i>aria192-md5</i>	aria192-md5		
	<i>aria192-sha1</i>	aria192-sha1		
	<i>aria192-sha256</i>	aria192-sha256		
	<i>aria192-sha384</i>	aria192-sha384		

Parameter	Description	Type	Size	Default																												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>aria192-sha512</i></td><td>aria192-sha512</td></tr><tr><td><i>aria256-null</i></td><td>aria256-null</td></tr><tr><td><i>aria256-md5</i></td><td>aria256-md5</td></tr><tr><td><i>aria256-sha1</i></td><td>aria256-sha1</td></tr><tr><td><i>aria256-sha256</i></td><td>aria256-sha256</td></tr><tr><td><i>aria256-sha384</i></td><td>aria256-sha384</td></tr><tr><td><i>aria256-sha512</i></td><td>aria256-sha512</td></tr><tr><td><i>seed-null</i></td><td>seed-null</td></tr><tr><td><i>seed-md5</i></td><td>seed-md5</td></tr><tr><td><i>seed-sha1</i></td><td>seed-sha1</td></tr><tr><td><i>seed-sha256</i></td><td>seed-sha256</td></tr><tr><td><i>seed-sha384</i></td><td>seed-sha384</td></tr><tr><td><i>seed-sha512</i></td><td>seed-sha512</td></tr></table>	Option	Description	<i>aria192-sha512</i>	aria192-sha512	<i>aria256-null</i>	aria256-null	<i>aria256-md5</i>	aria256-md5	<i>aria256-sha1</i>	aria256-sha1	<i>aria256-sha256</i>	aria256-sha256	<i>aria256-sha384</i>	aria256-sha384	<i>aria256-sha512</i>	aria256-sha512	<i>seed-null</i>	seed-null	<i>seed-md5</i>	seed-md5	<i>seed-sha1</i>	seed-sha1	<i>seed-sha256</i>	seed-sha256	<i>seed-sha384</i>	seed-sha384	<i>seed-sha512</i>	seed-sha512			
	Option	Description																														
	<i>aria192-sha512</i>	aria192-sha512																														
	<i>aria256-null</i>	aria256-null																														
	<i>aria256-md5</i>	aria256-md5																														
	<i>aria256-sha1</i>	aria256-sha1																														
	<i>aria256-sha256</i>	aria256-sha256																														
	<i>aria256-sha384</i>	aria256-sha384																														
	<i>aria256-sha512</i>	aria256-sha512																														
	<i>seed-null</i>	seed-null																														
	<i>seed-md5</i>	seed-md5																														
	<i>seed-sha1</i>	seed-sha1																														
	<i>seed-sha256</i>	seed-sha256																														
	<i>seed-sha384</i>	seed-sha384																														
<i>seed-sha512</i>	seed-sha512																															
protocol	Quick mode protocol selector (1 - 255 or 0 for all).	integer	Minimum value: 0 Maximum value: 255	0																												
replay	Enable/disable replay detection.	option	-	enable																												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable setting.</td></tr><tr><td><i>disable</i></td><td>Disable setting.</td></tr></table>	Option	Description	<i>enable</i>	Enable setting.	<i>disable</i>	Disable setting.																									
	Option	Description																														
	<i>enable</i>	Enable setting.																														
<i>disable</i>	Disable setting.																															
route-overlap	Action for overlapping routes.	option	-	use-new																												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>use-old</i></td><td>Use the old route and do not add the new route.</td></tr><tr><td><i>use-new</i></td><td>Delete the old route and add the new route.</td></tr><tr><td><i>allow</i></td><td>Allow overlapping routes.</td></tr></table>	Option	Description	<i>use-old</i>	Use the old route and do not add the new route.	<i>use-new</i>	Delete the old route and add the new route.	<i>allow</i>	Allow overlapping routes.																							
	Option	Description																														
	<i>use-old</i>	Use the old route and do not add the new route.																														
	<i>use-new</i>	Delete the old route and add the new route.																														
<i>allow</i>	Allow overlapping routes.																															
selector-match	Match type to use when comparing selectors.	option	-	auto																												

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>exact</i>	Match selectors exactly.		
	<i>subset</i>	Match selectors by subset.		
	<i>auto</i>	Use subset or exact match depending on selector address type.		
single-source	Enable/disable single source IP restriction.	option	-	disable
	Option	Description		
	<i>enable</i>	Only single source IP will be accepted.		
	<i>disable</i>	Source IP range will be accepted.		
src-addr-type	Local proxy ID type.	option	-	subnet
	Option	Description		
	<i>subnet</i>	IPv4 subnet.		
	<i>range</i>	IPv4 range.		
	<i>ip</i>	IPv4 IP.		
	<i>name</i>	IPv4 firewall address or group name.		
src-end-ip	Local proxy ID end.	ipv4-address-any	Not Specified	0.0.0.0
src-end-ip6	Local proxy ID IPv6 end.	ipv6-address	Not Specified	::
src-name	Local proxy ID name.	string	Maximum length: 79	
src-name6	Local proxy ID name.	string	Maximum length: 79	
src-port	Quick mode source port (1 - 65535 or 0 for all).	integer	Minimum value: 0 0 Maximum value: 65535	0
src-start-ip	Local proxy ID start.	ipv4-address-any	Not Specified	0.0.0.0
src-start-ip6	Local proxy ID IPv6 start.	ipv6-address	Not Specified	::

Parameter	Description	Type	Size	Default
src-subnet	Local proxy ID subnet.	ipv4-classnet-any	Not Specified	0.0.0.0 0.0.0.0
src-subnet6	Local proxy ID IPv6 subnet.	ipv6-prefix	Not Specified	::/0
use-natip	Enable to use the FortiGate public IP as the source selector when outbound NAT is used.	option	-	enable

Option	Description
<i>enable</i>	Replace source selector with interface IP when using outbound NAT.
<i>disable</i>	Do not modify source selector when using outbound NAT.

config vpn ipsec phase2-interface

Configure VPN autokey tunnel.

```

config vpn ipsec phase2-interface
    Description: Configure VPN autokey tunnel.
    edit <name>
        set add-route [phase1|enable|...]
        set auto-discovery-forwarder [phase1|enable|...]
        set auto-discovery-sender [phase1|enable|...]
        set auto-negotiate [enable|disable]
        set comments {var-string}
        set dhcp-ipsec [enable|disable]
        set dhgrp {option1}, {option2}, ...
        set diffserv [enable|disable]
        set diffservcode {user}
        set dst-addr-type [subnet|range|...]
        set dst-end-ip {ipv4-address-any}
        set dst-end-ip6 {ipv6-address}
        set dst-name {string}
        set dst-name6 {string}
        set dst-port {integer}
        set dst-start-ip {ipv4-address-any}
        set dst-start-ip6 {ipv6-address}
        set dst-subnet {ipv4-classnet-any}
        set dst-subnet6 {ipv6-prefix}
        set encapsulation [tunnel-mode|transport-mode]
        set inbound-dscp-copy [phase1|enable|...]
        set initiator-ts-narrow [enable|disable]
        set ipv4-df [enable|disable]
        set keepalive [enable|disable]
        set keylife-type [seconds|kbs|...]
        set keylifekbs {integer}
    
```

```

set keylifeseconds {integer}
set l2tp [enable|disable]
set pfs [enable|disable]
set phase1name {string}
set proposal {option1}, {option2}, ...
set protocol {integer}
set replay [enable|disable]
set route-overlap [use-old|use-new|...]
set single-source [enable|disable]
set src-addr-type [subnet|range|...]
set src-end-ip {ipv4-address-any}
set src-end-ip6 {ipv6-address}
set src-name {string}
set src-name6 {string}
set src-port {integer}
set src-start-ip {ipv4-address-any}
set src-start-ip6 {ipv6-address}
set src-subnet {ipv4-classnet-any}
set src-subnet6 {ipv6-prefix}
next
end

```

config vpn ipsec phase2-interface

Parameter	Description	Type	Size	Default
add-route	Enable/disable automatic route addition.	option	-	phase1
	Option	Description		
	<i>phase1</i>	Add route according to phase1 add-route setting.		
	<i>enable</i>	Add route for remote proxy ID.		
	<i>disable</i>	Do not add route for remote proxy ID.		
auto-discovery-forwarder	Enable/disable forwarding short-cut messages.	option	-	phase1
	Option	Description		
	<i>phase1</i>	Forward short-cut messages according to the phase1 auto-discovery-forwarder setting.		
	<i>enable</i>	Enable forwarding auto-discovery short-cut messages.		
	<i>disable</i>	Disable forwarding auto-discovery short-cut messages.		
auto-discovery-sender	Enable/disable sending short-cut messages.	option	-	phase1

Parameter	Description	Type	Size	Default
	Option	Description		
	phase1	Send short-cut messages according to the phase1 auto-discovery-sender setting.		
	enable	Enable sending auto-discovery short-cut messages.		
	disable	Disable sending auto-discovery short-cut messages.		
auto-negotiate	Enable/disable IPsec SA auto-negotiation.	option	-	disable
	Option	Description		
	enable	Enable setting.		
	disable	Disable setting.		
comments	Comment.	var-string	Maximum length: 255	
dhcp-ipsec	Enable/disable DHCP-IPsec.	option	-	disable
	Option	Description		
	enable	Enable setting.		
	disable	Disable setting.		
dhgrp	Phase2 DH group.	option	-	14
	Option	Description		
	1	DH Group 1.		
	2	DH Group 2.		
	5	DH Group 5.		
	14	DH Group 14.		
	15	DH Group 15.		
	16	DH Group 16.		
	17	DH Group 17.		
	18	DH Group 18.		
	19	DH Group 19.		
	20	DH Group 20.		
	21	DH Group 21.		
	27	DH Group 27.		

Parameter	Description	Type	Size	Default																		
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>28</td><td>DH Group 28.</td></tr><tr><td>29</td><td>DH Group 29.</td></tr><tr><td>30</td><td>DH Group 30.</td></tr><tr><td>31</td><td>DH Group 31.</td></tr><tr><td>32</td><td>DH Group 32.</td></tr></table>	Option	Description	28	DH Group 28.	29	DH Group 29.	30	DH Group 30.	31	DH Group 31.	32	DH Group 32.									
	Option	Description																				
	28	DH Group 28.																				
	29	DH Group 29.																				
	30	DH Group 30.																				
	31	DH Group 31.																				
32	DH Group 32.																					
diffserv	Enable/disable applying DSCP value to the IPsec tunnel outer IP header.	option	-	disable																		
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable setting.</td></tr><tr><td>disable</td><td>Disable setting.</td></tr></table>	Option	Description	enable	Enable setting.	disable	Disable setting.															
	Option	Description																				
	enable	Enable setting.																				
disable	Disable setting.																					
diffservcode	DSCP value to be applied to the IPsec tunnel outer IP header.	user	Not Specified																			
dst-addr-type	Remote proxy ID type.	option	-	subnet																		
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>subnet</td><td>IPv4 subnet.</td></tr><tr><td>range</td><td>IPv4 range.</td></tr><tr><td>ip</td><td>IPv4 IP.</td></tr><tr><td>name</td><td>IPv4 firewall address or group name.</td></tr><tr><td>subnet6</td><td>IPv6 subnet.</td></tr><tr><td>range6</td><td>IPv6 range.</td></tr><tr><td>ip6</td><td>IPv6 IP.</td></tr><tr><td>name6</td><td>IPv6 firewall address or group name.</td></tr></table>	Option	Description	subnet	IPv4 subnet.	range	IPv4 range.	ip	IPv4 IP.	name	IPv4 firewall address or group name.	subnet6	IPv6 subnet.	range6	IPv6 range.	ip6	IPv6 IP.	name6	IPv6 firewall address or group name.			
	Option	Description																				
	subnet	IPv4 subnet.																				
	range	IPv4 range.																				
	ip	IPv4 IP.																				
	name	IPv4 firewall address or group name.																				
	subnet6	IPv6 subnet.																				
	range6	IPv6 range.																				
	ip6	IPv6 IP.																				
name6	IPv6 firewall address or group name.																					
dst-end-ip	Remote proxy ID IPv4 end.	ipv4-address-any	Not Specified	0.0.0.0																		
dst-end-ip6	Remote proxy ID IPv6 end.	ipv6-address	Not Specified	::																		
dst-name	Remote proxy ID name.	string	Maximum length: 79																			

Parameter	Description	Type	Size	Default
dst-name6	Remote proxy ID name.	string	Maximum length: 79	
dst-port	Quick mode destination port (1 - 65535 or 0 for all).	integer	Minimum value: 0 0 Maximum value: 65535	0
dst-start-ip	Remote proxy ID IPv4 start.	ipv4-address-any	Not Specified	0.0.0.0
dst-start-ip6	Remote proxy ID IPv6 start.	ipv6-address	Not Specified	::
dst-subnet	Remote proxy ID IPv4 subnet.	ipv4-classnet-any	Not Specified	0.0.0.0 0.0.0.0
dst-subnet6	Remote proxy ID IPv6 subnet.	ipv6-prefix	Not Specified	::/0
encapsulation	ESP encapsulation mode.	option	-	tunnel-mode
	Option Description			
	<i>tunnel-mode</i>	Use tunnel mode encapsulation.		
	<i>transport-mode</i>	Use transport mode encapsulation.		
inbound-dscp-copy	Enable/disable copying of the DSCP in the ESP header to the inner IP header.	option	-	phase1
	Option Description			
	<i>phase1</i>	copy the DCSP in the ESP header to the inner IP Header according to the phase1 inbound_dscp_copy setting.		
	<i>enable</i>	Enable copying of the DSCP in the ESP header to the inner IP header.		
	<i>disable</i>	Disable copying of the DSCP in the ESP header to the inner IP header.		
initiator-ts-narrow	Enable/disable traffic selector narrowing for IKEv2 initiator.	option	-	disable
	Option Description			
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		
ipv4-df	Enable/disable setting and resetting of IPv4 'Don't Fragment' bit.	option	-	disable

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>enable</i>	Set IPv4 DF the same as original packet.		
	<i>disable</i>	Reset IPv4 DF.		
keepalive	Enable/disable keep alive.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		
keylife-type	Keylife type.	option	-	seconds
	Option	Description		
	<i>seconds</i>	Key life in seconds.		
	<i>kbs</i>	Key life in kilobytes.		
	<i>both</i>	Key life both.		
keylifekbs	Phase2 key life in number of kilobytes of traffic (5120 - 4294967295).	integer	Minimum value: 5120 Maximum value: 4294967295	5120
keylifeseconds	Phase2 key life in time in seconds (120 - 172800).	integer	Minimum value: 120 Maximum value: 172800	43200
l2tp	Enable/disable L2TP over IPsec.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable L2TP over IPsec.		
	<i>disable</i>	Disable L2TP over IPsec.		
name	IPsec tunnel name.	string	Maximum length: 35	
pfs	Enable/disable PFS feature.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		

Parameter	Description	Type	Size	Default																																																							
phase1name	Phase 1 determines the options required for phase 2.	string	Maximum length: 15																																																								
proposal	Phase2 proposal.	option	-																																																								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>null-md5</i></td><td>null-md5</td></tr><tr><td><i>null-sha1</i></td><td>null-sha1</td></tr><tr><td><i>null-sha256</i></td><td>null-sha256</td></tr><tr><td><i>null-sha384</i></td><td>null-sha384</td></tr><tr><td><i>null-sha512</i></td><td>null-sha512</td></tr><tr><td><i>des-null</i></td><td>des-null</td></tr><tr><td><i>des-md5</i></td><td>des-md5</td></tr><tr><td><i>des-sha1</i></td><td>des-sha1</td></tr><tr><td><i>des-sha256</i></td><td>des-sha256</td></tr><tr><td><i>des-sha384</i></td><td>des-sha384</td></tr><tr><td><i>des-sha512</i></td><td>des-sha512</td></tr><tr><td><i>3des-null</i></td><td>3des-null</td></tr><tr><td><i>3des-md5</i></td><td>3des-md5</td></tr><tr><td><i>3des-sha1</i></td><td>3des-sha1</td></tr><tr><td><i>3des-sha256</i></td><td>3des-sha256</td></tr><tr><td><i>3des-sha384</i></td><td>3des-sha384</td></tr><tr><td><i>3des-sha512</i></td><td>3des-sha512</td></tr><tr><td><i>aes128-null</i></td><td>aes128-null</td></tr><tr><td><i>aes128-md5</i></td><td>aes128-md5</td></tr><tr><td><i>aes128-sha1</i></td><td>aes128-sha1</td></tr><tr><td><i>aes128-sha256</i></td><td>aes128-sha256</td></tr><tr><td><i>aes128-sha384</i></td><td>aes128-sha384</td></tr><tr><td><i>aes128-sha512</i></td><td>aes128-sha512</td></tr><tr><td><i>aes128gcm</i></td><td>aes128gcm</td></tr><tr><td><i>aes192-null</i></td><td>aes192-null</td></tr><tr><td><i>aes192-md5</i></td><td>aes192-md5</td></tr></table>		Option	Description	<i>null-md5</i>	null-md5	<i>null-sha1</i>	null-sha1	<i>null-sha256</i>	null-sha256	<i>null-sha384</i>	null-sha384	<i>null-sha512</i>	null-sha512	<i>des-null</i>	des-null	<i>des-md5</i>	des-md5	<i>des-sha1</i>	des-sha1	<i>des-sha256</i>	des-sha256	<i>des-sha384</i>	des-sha384	<i>des-sha512</i>	des-sha512	<i>3des-null</i>	3des-null	<i>3des-md5</i>	3des-md5	<i>3des-sha1</i>	3des-sha1	<i>3des-sha256</i>	3des-sha256	<i>3des-sha384</i>	3des-sha384	<i>3des-sha512</i>	3des-sha512	<i>aes128-null</i>	aes128-null	<i>aes128-md5</i>	aes128-md5	<i>aes128-sha1</i>	aes128-sha1	<i>aes128-sha256</i>	aes128-sha256	<i>aes128-sha384</i>	aes128-sha384	<i>aes128-sha512</i>	aes128-sha512	<i>aes128gcm</i>	aes128gcm	<i>aes192-null</i>	aes192-null	<i>aes192-md5</i>	aes192-md5			
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	<i>null-md5</i>	null-md5																																																									
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	<i>3des-md5</i>	3des-md5																																																									
	<i>3des-sha1</i>	3des-sha1																																																									
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	<i>aes128-null</i>	aes128-null																																																									
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	<i>aes128-sha512</i>	aes128-sha512																																																									
	<i>aes128gcm</i>	aes128gcm																																																									
	<i>aes192-null</i>	aes192-null																																																									
<i>aes192-md5</i>	aes192-md5																																																										

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>aes192-sha1</i>	aes192-sha1		
	<i>aes192-sha256</i>	aes192-sha256		
	<i>aes192-sha384</i>	aes192-sha384		
	<i>aes192-sha512</i>	aes192-sha512		
	<i>aes256-null</i>	aes256-null		
	<i>aes256-md5</i>	aes256-md5		
	<i>aes256-sha1</i>	aes256-sha1		
	<i>aes256-sha256</i>	aes256-sha256		
	<i>aes256-sha384</i>	aes256-sha384		
	<i>aes256-sha512</i>	aes256-sha512		
	<i>aes256gcm</i>	aes256gcm		
	<i>chacha20poly1305</i>	chacha20poly1305		
	<i>aria128-null</i>	aria128-null		
	<i>aria128-md5</i>	aria128-md5		
	<i>aria128-sha1</i>	aria128-sha1		
	<i>aria128-sha256</i>	aria128-sha256		
	<i>aria128-sha384</i>	aria128-sha384		
	<i>aria128-sha512</i>	aria128-sha512		
	<i>aria192-null</i>	aria192-null		
	<i>aria192-md5</i>	aria192-md5		
	<i>aria192-sha1</i>	aria192-sha1		
	<i>aria192-sha256</i>	aria192-sha256		
	<i>aria192-sha384</i>	aria192-sha384		
	<i>aria192-sha512</i>	aria192-sha512		
	<i>aria256-null</i>	aria256-null		
	<i>aria256-md5</i>	aria256-md5		
	<i>aria256-sha1</i>	aria256-sha1		
	<i>aria256-sha256</i>	aria256-sha256		
	<i>aria256-sha384</i>	aria256-sha384		

Parameter	Description	Type	Size	Default																
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>aria256-sha512</i></td><td>aria256-sha512</td></tr><tr><td><i>seed-null</i></td><td>seed-null</td></tr><tr><td><i>seed-md5</i></td><td>seed-md5</td></tr><tr><td><i>seed-sha1</i></td><td>seed-sha1</td></tr><tr><td><i>seed-sha256</i></td><td>seed-sha256</td></tr><tr><td><i>seed-sha384</i></td><td>seed-sha384</td></tr><tr><td><i>seed-sha512</i></td><td>seed-sha512</td></tr></table>	Option	Description	<i>aria256-sha512</i>	aria256-sha512	<i>seed-null</i>	seed-null	<i>seed-md5</i>	seed-md5	<i>seed-sha1</i>	seed-sha1	<i>seed-sha256</i>	seed-sha256	<i>seed-sha384</i>	seed-sha384	<i>seed-sha512</i>	seed-sha512			
	Option	Description																		
	<i>aria256-sha512</i>	aria256-sha512																		
	<i>seed-null</i>	seed-null																		
	<i>seed-md5</i>	seed-md5																		
	<i>seed-sha1</i>	seed-sha1																		
	<i>seed-sha256</i>	seed-sha256																		
	<i>seed-sha384</i>	seed-sha384																		
<i>seed-sha512</i>	seed-sha512																			
protocol	Quick mode protocol selector (1 - 255 or 0 for all).	integer	Minimum value: 0 0 Maximum value: 255	0																
replay	Enable/disable replay detection.	option	-	enable																
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable setting.</td></tr><tr><td><i>disable</i></td><td>Disable setting.</td></tr></table>	Option	Description	<i>enable</i>	Enable setting.	<i>disable</i>	Disable setting.													
	Option	Description																		
	<i>enable</i>	Enable setting.																		
<i>disable</i>	Disable setting.																			
route-overlap	Action for overlapping routes.	option	-	use-new																
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>use-old</i></td><td>Use the old route and do not add the new route.</td></tr><tr><td><i>use-new</i></td><td>Delete the old route and add the new route.</td></tr><tr><td><i>allow</i></td><td>Allow overlapping routes.</td></tr></table>	Option	Description	<i>use-old</i>	Use the old route and do not add the new route.	<i>use-new</i>	Delete the old route and add the new route.	<i>allow</i>	Allow overlapping routes.											
	Option	Description																		
	<i>use-old</i>	Use the old route and do not add the new route.																		
	<i>use-new</i>	Delete the old route and add the new route.																		
<i>allow</i>	Allow overlapping routes.																			
single-source	Enable/disable single source IP restriction.	option	-	disable																
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Only single source IP will be accepted.</td></tr><tr><td><i>disable</i></td><td>Source IP range will be accepted.</td></tr></table>	Option	Description	<i>enable</i>	Only single source IP will be accepted.	<i>disable</i>	Source IP range will be accepted.													
	Option	Description																		
	<i>enable</i>	Only single source IP will be accepted.																		
<i>disable</i>	Source IP range will be accepted.																			
src-addr-type	Local proxy ID type.	option	-	subnet																
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>subnet</i></td><td>IPv4 subnet.</td></tr><tr><td><i>range</i></td><td>IPv4 range.</td></tr></table>	Option	Description	<i>subnet</i>	IPv4 subnet.	<i>range</i>	IPv4 range.													
	Option	Description																		
	<i>subnet</i>	IPv4 subnet.																		
<i>range</i>	IPv4 range.																			

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>ip</i>	IPv4 IP.		
	<i>name</i>	IPv4 firewall address or group name.		
	<i>subnet6</i>	IPv6 subnet.		
	<i>range6</i>	IPv6 range.		
	<i>ip6</i>	IPv6 IP.		
	<i>name6</i>	IPv6 firewall address or group name.		
src-end-ip	Local proxy ID end.	ipv4-address-any	Not Specified	0.0.0.0
src-end-ip6	Local proxy ID IPv6 end.	ipv6-address	Not Specified	::
src-name	Local proxy ID name.	string	Maximum length: 79	
src-name6	Local proxy ID name.	string	Maximum length: 79	
src-port	Quick mode source port (1 - 65535 or 0 for all).	integer	Minimum value: 0 0 Maximum value: 65535	0
src-start-ip	Local proxy ID start.	ipv4-address-any	Not Specified	0.0.0.0
src-start-ip6	Local proxy ID IPv6 start.	ipv6-address	Not Specified	::
src-subnet	Local proxy ID subnet.	ipv4-classnet-any	Not Specified	0.0.0.0 0.0.0.0
src-subnet6	Local proxy ID IPv6 subnet.	ipv6-prefix	Not Specified	::/0

config vpn l2tp

Configure L2TP.

```
config vpn l2tp
  Description: Configure L2TP.
  set compress [enable|disable]
  set eip {ipv4-address}
```

```

set enforce-ipsec [enable|disable]
set hello-interval {integer}
set lcp-echo-interval {integer}
set lcp-max-echo-fails {integer}
set sip {ipv4-address}
set status [enable|disable]
set usrgrp {string}
end

```

config vpn l2tp

Parameter	Description	Type	Size	Default						
compress	Enable/disable data compression.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable compress</td></tr><tr><td><i>disable</i></td><td>Disable compress</td></tr></table>				Option	Description	<i>enable</i>	Enable compress	<i>disable</i>	Disable compress
	Option	Description								
	<i>enable</i>	Enable compress								
<i>disable</i>	Disable compress									
eip	End IP.	ipv4-address	Not Specified	0.0.0.0						
enforce-ipsec	Enable/disable IPsec enforcement.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable enforce-ipsec</td></tr><tr><td><i>disable</i></td><td>Disable enforce-ipsec</td></tr></table>				Option	Description	<i>enable</i>	Enable enforce-ipsec	<i>disable</i>	Disable enforce-ipsec
	Option	Description								
	<i>enable</i>	Enable enforce-ipsec								
<i>disable</i>	Disable enforce-ipsec									
hello-interval	L2TP hello message interval in seconds (0 - 3600 sec, default = 60).	integer	Minimum value: 0 Maximum value: 3600	60						
lcp-echo-interval	Time in seconds between PPPoE Link Control Protocol (LCP) echo requests.	integer	Minimum value: 0 Maximum value: 32767	5						
lcp-max-echo-fails	Maximum number of missed LCP echo messages before disconnect.	integer	Minimum value: 0 Maximum value: 32767	3						
sip	Start IP.	ipv4-address	Not Specified	0.0.0.0						

Parameter	Description	Type	Size	Default
status	Enable/disable FortiGate as a L2TP gateway.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		
usrgrp	User group.	string	Maximum length: 35	

config vpn ocvpn

Configure Overlay Controller VPN settings.

```

config vpn ocvpn
    Description: Configure Overlay Controller VPN settings.
    set auto-discovery [enable|disable]
    set auto-discovery-shortcut-mode [independent|dependent]
    set eap [enable|disable]
    set eap-users {string}
    config forticlient-access
        Description: Configure FortiClient settings.
        config auth-groups
            Description: FortiClient user authentication groups.
            edit <name>
                set auth-group {string}
                set overlays <overlay-name1>, <overlay-name2>, ...
            next
        end
        set psksecret {password-3}
        set status [enable|disable]
    end
    set ip-allocation-block {ipv4-classnet-any}
    set multipath [enable|disable]
    set nat [enable|disable]
    config overlays
        Description: Network overlays to register with Overlay Controller VPN service.
        edit <overlay-name>
            set inter-overlay [allow|deny]
            config subnets
                Description: Internal subnets to register with OCVPN service.
                edit <id>
                    set interface {string}
                    set subnet {ipv4-classnet-any}
                    set type [subnet|interface]
                next
            end
        next
    end
end

```



```

end
set poll-interval {integer}
set role [spoke|primary-hub|...]
set sdwan [enable|disable]
set sdwan-zone {string}
set status [enable|disable]
set wan-interface <name1>, <name2>, ...
end

```

config vpn ocvpn

Parameter	Description	Type	Size	Default						
auto-discovery	Enable/disable auto-discovery shortcuts.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable ADVPN auto-discovery shortcuts.</td></tr><tr><td><i>disable</i></td><td>Disable ADVPN auto-discovery shortcuts.</td></tr></table>	Option	Description	<i>enable</i>	Enable ADVPN auto-discovery shortcuts.	<i>disable</i>	Disable ADVPN auto-discovery shortcuts.			
Option	Description									
<i>enable</i>	Enable ADVPN auto-discovery shortcuts.									
<i>disable</i>	Disable ADVPN auto-discovery shortcuts.									
auto-discovery-shortcut-mode	Control deletion of child short-cut tunnels when the parent tunnel goes down.	option	-	independent						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>independent</i></td><td>Short-cut tunnels remain up if the parent tunnel goes down.</td></tr><tr><td><i>dependent</i></td><td>Short-cut tunnels are brought down if the parent tunnel goes down.</td></tr></table>	Option	Description	<i>independent</i>	Short-cut tunnels remain up if the parent tunnel goes down.	<i>dependent</i>	Short-cut tunnels are brought down if the parent tunnel goes down.			
Option	Description									
<i>independent</i>	Short-cut tunnels remain up if the parent tunnel goes down.									
<i>dependent</i>	Short-cut tunnels are brought down if the parent tunnel goes down.									
eap	Enable/disable EAP client authentication.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable EAP client authentication.</td></tr><tr><td><i>disable</i></td><td>Disable EAP client authentication.</td></tr></table>	Option	Description	<i>enable</i>	Enable EAP client authentication.	<i>disable</i>	Disable EAP client authentication.			
Option	Description									
<i>enable</i>	Enable EAP client authentication.									
<i>disable</i>	Disable EAP client authentication.									
eap-users	EAP authentication user group.	string	Maximum length: 35							
ip-allocation-block	Class B subnet reserved for private IP address assignment.	ipv4-classnet-any	Not Specified	10.254.0.0 255.255.0.0						
multipath	Enable/disable multipath redundancy.	option	-	enable						

Parameter	Description	Type	Size	Default								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable multipath redundancy.</td></tr><tr><td><i>disable</i></td><td>Disable multipath redundancy.</td></tr></table>	Option	Description	<i>enable</i>	Enable multipath redundancy.	<i>disable</i>	Disable multipath redundancy.					
	Option	Description										
	<i>enable</i>	Enable multipath redundancy.										
<i>disable</i>	Disable multipath redundancy.											
nat	Enable/disable NAT support.	option	-	enable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable NAT support.</td></tr><tr><td><i>disable</i></td><td>Disable NAT support.</td></tr></table>	Option	Description	<i>enable</i>	Enable NAT support.	<i>disable</i>	Disable NAT support.					
	Option	Description										
	<i>enable</i>	Enable NAT support.										
<i>disable</i>	Disable NAT support.											
poll-interval	Overlay Controller VPN polling interval.	integer	Minimum value: 30 Maximum value: 120	30								
role	Set device role.	option	-	spoke								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>spoke</i></td><td>Register device as static spoke.</td></tr><tr><td><i>primary-hub</i></td><td>Register device as primary hub.</td></tr><tr><td><i>secondary-hub</i></td><td>Register device as secondary hub.</td></tr></table>	Option	Description	<i>spoke</i>	Register device as static spoke.	<i>primary-hub</i>	Register device as primary hub.	<i>secondary-hub</i>	Register device as secondary hub.			
	Option	Description										
	<i>spoke</i>	Register device as static spoke.										
	<i>primary-hub</i>	Register device as primary hub.										
<i>secondary-hub</i>	Register device as secondary hub.											
sdwan	Enable/disable adding OCVPN tunnels to SD-WAN.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable adding OCVPN tunnels to SD-WAN.</td></tr><tr><td><i>disable</i></td><td>Disable adding OCVPN tunnels to SD-WAN.</td></tr></table>	Option	Description	<i>enable</i>	Enable adding OCVPN tunnels to SD-WAN.	<i>disable</i>	Disable adding OCVPN tunnels to SD-WAN.					
	Option	Description										
	<i>enable</i>	Enable adding OCVPN tunnels to SD-WAN.										
<i>disable</i>	Disable adding OCVPN tunnels to SD-WAN.											
sdwan-zone	Set SD-WAN zone.	string	Maximum length: 35	virtual-wan-link								
status	Enable/disable Overlay Controller cloud assisted VPN.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable Overlay Controller VPN.</td></tr><tr><td><i>disable</i></td><td>Disable Overlay Controller VPN.</td></tr></table>	Option	Description	<i>enable</i>	Enable Overlay Controller VPN.	<i>disable</i>	Disable Overlay Controller VPN.					
	Option	Description										
	<i>enable</i>	Enable Overlay Controller VPN.										
<i>disable</i>	Disable Overlay Controller VPN.											
wan-interface <name>	FortiGate WAN interfaces to use with OCVPN. Interface name.	string	Maximum length: 79									

config forticlient-access

Parameter	Description	Type	Size	Default
psksecret	Pre-shared secret for FortiClient PSK authentication (ASCII string or hexadecimal encoded with a leading 0x).	password-3	Not Specified	
status	Enable/disable FortiClient to access OCVPN networks.	option	-	disable
	Option		Description	
	<i>enable</i>		Enable FortiClient access to OCVPN overlays.	
	<i>disable</i>		Disable FortiClient access to OCVPN overlays.	

config auth-groups

Parameter	Description	Type	Size	Default
auth-group	Authentication user group for FortiClient access.	string	Maximum length: 35	
name	Group name.	string	Maximum length: 35	
overlays <overlay-name>	OCVPN overlays to allow access to. Overlay name.	string	Maximum length: 79	

config overlays

Parameter	Description	Type	Size	Default
inter-overlay	Allow or deny traffic from other overlays.	option	-	deny
	Option		Description	
	<i>allow</i>		Allow traffic from other overlays.	
	<i>deny</i>		Deny traffic from other overlays.	
overlay-name	Overlay name.	string	Maximum length: 63	

config subnets

Parameter	Description	Type	Size	Default
id	ID.	integer	Minimum value: 0 Maximum value: 4294967295	0
interface	LAN interface.	string	Maximum length: 15	
subnet	IPv4 address and subnet mask.	ipv4-classnet-any	Not Specified	0.0.0.0 0.0.0.0
type	Subnet type.	option	-	subnet
		Option	Description	
		subnet	Configure participating subnet IP and mask.	
		interface	Configure participating LAN interface.	

config vpn pptp

Configure PPTP.

```
config vpn pptp
  Description: Configure PPTP.
  set eip {ipv4-address}
  set ip-mode [range|usrgrp]
  set local-ip {ipv4-address}
  set sip {ipv4-address}
  set status [enable|disable]
  set usrgrp {string}
end
```

config vpn pptp

Parameter	Description	Type	Size	Default
eip	End IP.	ipv4-address	Not Specified	0.0.0.0
ip-mode	IP assignment mode for PPTP client.	option	-	range

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>range</i>	PPTP client IP from manual config (range from sip to eip).		
	<i>usrgrp</i>	PPTP client IP from user-group defined server.		
local-ip	Local IP to be used for peer's remote IP.	ipv4-address	Not Specified	0.0.0.0
sip	Start IP.	ipv4-address	Not Specified	0.0.0.0
status	Enable/disable FortiGate as a PPTP gateway.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		
usrgrp	User group.	string	Maximum length: 35	

config vpn ssl client

Client.

```

config vpn ssl client
  Description: Client.
  edit <name>
    set certificate {string}
    set class-id {integer}
    set comment {var-string}
    set distance {integer}
    set interface {string}
    set ipv4-subnets {string}
    set ipv6-subnets {string}
    set peer {string}
    set port {integer}
    set priority {integer}
    set psk {password-3}
    set realm {string}
    set server {string}
    set source-ip {string}
    set status [enable|disable]
    set user {string}
  next
end

```

config vpn ssl client

Parameter	Description	Type	Size	Default
certificate	Certificate to offer to SSL-VPN server if it requests one.	string	Maximum length: 35	
class-id	Traffic class ID.	integer	Minimum value: 0 Maximum value: 4294967295	
comment	Comment.	var-string	Maximum length: 255	
distance	Distance for routes added by SSL-VPN (1 - 255).	integer	Minimum value: 1 Maximum value: 255	10
interface	SSL interface to send/receive traffic over.	string	Maximum length: 15	
ipv4-subnets	IPv4 subnets that the client is protecting.	string	Maximum length: 79	
ipv6-subnets	IPv6 subnets that the client is protecting.	string	Maximum length: 79	
name	SSL-VPN tunnel name.	string	Maximum length: 35	
peer	Authenticate peer's certificate with the peer/peergrp.	string	Maximum length: 35	
port	SSL-VPN server port.	integer	Minimum value: 443 Maximum value: 65535	
priority	Priority for routes added by SSL-VPN (1 - 65535).	integer	Minimum value: 1 Maximum value: 65535	
psk	Pre-shared secret to authenticate with the server (ASCII string or hexadecimal encoded with a leading 0x).	password-3	Not Specified	
realm	Realm name configured on SSL-VPN server.	string	Maximum length: 35	
server	IPv4, IPv6 or DNS address of the SSL-VPN server.	string	Maximum length: 63	
source-ip	IPv4 or IPv6 address to use as a source for the SSL-VPN connection to the server.	string	Maximum length: 63	

Parameter	Description	Type	Size	Default
status	Enable/disable this SSL-VPN client configuration.	option	-	enable
	Option	Description		
	enable	Enable the SSL-VPN configuration.		
	disable	Disable the SSL-VPN configuration.		
user	Username to offer to the peer to authenticate the client.	string	Maximum length: 35	

config vpn ssl settings

Configure SSL-VPN.

```

config vpn ssl settings
  Description: Configure SSL-VPN.
  set algorithm [high|medium|...]
  set auth-session-check-source-ip [enable|disable]
  set auth-timeout {integer}
  config authentication-rule
    Description: Authentication rule for SSL-VPN.
    edit <id>
      set auth [any|local|...]
      set cipher [any|high|...]
      set client-cert [enable|disable]
      set groups <name1>, <name2>, ...
      set portal {string}
      set realm {string}
      set source-address <name1>, <name2>, ...
      set source-address-negate [enable|disable]
      set source-address6 <name1>, <name2>, ...
      set source-address6-negate [enable|disable]
      set source-interface <name1>, <name2>, ...
      set user-peer {string}
      set users <name1>, <name2>, ...
    next
  end
  set auto-tunnel-static-route [enable|disable]
  set banned-cipher {option1}, {option2}, ...
  set browser-language-detection [enable|disable]
  set check-referer [enable|disable]
  set ciphersuite {option1}, {option2}, ...
  set client-sigalgs [no-rsa-pss|all]
  set default-portal {string}
  set deflate-compression-level {integer}
  set deflate-min-data-size {integer}
  set dns-server1 {ipv4-address}

```

```

set dns-server2 {ipv4-address}
set dns-suffix {var-string}
set dtls-hello-timeout {integer}
set dtls-max-proto-ver [dtls1-0|dtls1-2]
set dtls-min-proto-ver [dtls1-0|dtls1-2]
set dtls-tunnel [enable|disable]
set dual-stack-mode [enable|disable]
set encode-2f-sequence [enable|disable]
set encrypt-and-store-password [enable|disable]
set force-two-factor-auth [enable|disable]
set header-x-forwarded-for [pass|add|...]
set hsts-include-subdomains [enable|disable]
set http-compression [enable|disable]
set http-only-cookie [enable|disable]
set http-request-body-timeout {integer}
set http-request-header-timeout {integer}
set https-redirect [enable|disable]
set idle-timeout {integer}
set ipv6-dns-server1 {ipv6-address}
set ipv6-dns-server2 {ipv6-address}
set ipv6-wins-server1 {ipv6-address}
set ipv6-wins-server2 {ipv6-address}
set login-attempt-limit {integer}
set login-block-time {integer}
set login-timeout {integer}
set port {integer}
set port-precedence [enable|disable]
set reqclientcert [enable|disable]
set saml-redirect-port {integer}
set server-hostname {string}
set servercert {string}
set source-address <name1>, <name2>, ...
set source-address-negate [enable|disable]
set source-address6 <name1>, <name2>, ...
set source-address6-negate [enable|disable]
set source-interface <name1>, <name2>, ...
set ssl-client-renegotiation [disable|enable]
set ssl-insert-empty-fragment [enable|disable]
set ssl-max-proto-ver [tls1-0|tls1-1|...]
set ssl-min-proto-ver [tls1-0|tls1-1|...]
set status [enable|disable]
set transform-backward-slashes [enable|disable]
set tunnel-addr-assigned-method [first-available|round-robin]
set tunnel-connect-without-reauth [enable|disable]
set tunnel-ip-pools <name1>, <name2>, ...
set tunnel-ipv6-pools <name1>, <name2>, ...
set tunnel-user-session-timeout {integer}
set unsafe-legacy-renegotiation [enable|disable]
set url-obscuration [enable|disable]
set user-peer {string}
set wins-server1 {ipv4-address}
set wins-server2 {ipv4-address}

```



```

set x-content-type-options [enable|disable]
set ztna-trusted-client [enable|disable]
end

```

config vpn ssl settings

Parameter	Description	Type	Size	Default										
algorithm	Force the SSL-VPN security level. High allows only high. Medium allows medium and high. Low allows any.	option	-	high										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>high</td><td>High algorithms.</td></tr><tr><td>medium</td><td>High and medium algorithms.</td></tr><tr><td>default</td><td>default</td></tr><tr><td>low</td><td>All algorithms.</td></tr></table>	Option	Description	high	High algorithms.	medium	High and medium algorithms.	default	default	low	All algorithms.			
Option	Description													
high	High algorithms.													
medium	High and medium algorithms.													
default	default													
low	All algorithms.													
auth-session-check-source-ip	Enable/disable checking of source IP for authentication session.	option	-	enable										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable checking of source IP for authentication session.</td></tr><tr><td>disable</td><td>Disable checking of source IP for authentication session.</td></tr></table>	Option	Description	enable	Enable checking of source IP for authentication session.	disable	Disable checking of source IP for authentication session.							
Option	Description													
enable	Enable checking of source IP for authentication session.													
disable	Disable checking of source IP for authentication session.													
auth-timeout	SSL-VPN authentication timeout (1 - 259200 sec (3 days), 0 for no timeout).	integer	Minimum value: 0 Maximum value: 259200	28800										
auto-tunnel-static-route	Enable/disable to auto-create static routes for the SSL-VPN tunnel IP addresses.	option	-	enable										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable setting.</td></tr><tr><td>disable</td><td>Disable setting.</td></tr></table>	Option	Description	enable	Enable setting.	disable	Disable setting.							
Option	Description													
enable	Enable setting.													
disable	Disable setting.													
banned-cipher	Select one or more cipher technologies that cannot be used in SSL-VPN negotiations. Only applies to TLS 1.2 and below.	option	-											

Parameter	Description	Type	Size	Default																																			
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>RSA</i></td><td>Ban the use of cipher suites using RSA key.</td></tr><tr><td><i>DHE</i></td><td>Ban the use of cipher suites using authenticated ephemeral DH key agreement.</td></tr><tr><td><i>ECDHE</i></td><td>Ban the use of cipher suites using authenticated ephemeral ECDH key agreement.</td></tr><tr><td><i>DSS</i></td><td>Ban the use of cipher suites using DSS authentication.</td></tr><tr><td><i>ECDSA</i></td><td>Ban the use of cipher suites using ECDSA authentication.</td></tr><tr><td><i>AES</i></td><td>Ban the use of cipher suites using either 128 or 256 bit AES.</td></tr><tr><td><i>AESGCM</i></td><td>Ban the use of cipher suites AES in Galois Counter Mode (GCM).</td></tr><tr><td><i>CAMELLIA</i></td><td>Ban the use of cipher suites using either 128 or 256 bit CAMELLIA.</td></tr><tr><td><i>3DES</i></td><td>Ban the use of cipher suites using triple DES</td></tr><tr><td><i>SHA1</i></td><td>Ban the use of cipher suites using HMAC-SHA1.</td></tr><tr><td><i>SHA256</i></td><td>Ban the use of cipher suites using HMAC-SHA256.</td></tr><tr><td><i>SHA384</i></td><td>Ban the use of cipher suites using HMAC-SHA384.</td></tr><tr><td><i>STATIC</i></td><td>Ban the use of cipher suites using static keys.</td></tr><tr><td><i>CHACHA20</i></td><td>Ban the use of cipher suites using ChaCha20.</td></tr><tr><td><i>ARIA</i></td><td>Ban the use of cipher suites using ARIA.</td></tr><tr><td><i>AESCCM</i></td><td>Ban the use of cipher suites using AESCCM.</td></tr></table>	Option	Description	<i>RSA</i>	Ban the use of cipher suites using RSA key.	<i>DHE</i>	Ban the use of cipher suites using authenticated ephemeral DH key agreement.	<i>ECDHE</i>	Ban the use of cipher suites using authenticated ephemeral ECDH key agreement.	<i>DSS</i>	Ban the use of cipher suites using DSS authentication.	<i>ECDSA</i>	Ban the use of cipher suites using ECDSA authentication.	<i>AES</i>	Ban the use of cipher suites using either 128 or 256 bit AES.	<i>AESGCM</i>	Ban the use of cipher suites AES in Galois Counter Mode (GCM).	<i>CAMELLIA</i>	Ban the use of cipher suites using either 128 or 256 bit CAMELLIA.	<i>3DES</i>	Ban the use of cipher suites using triple DES	<i>SHA1</i>	Ban the use of cipher suites using HMAC-SHA1.	<i>SHA256</i>	Ban the use of cipher suites using HMAC-SHA256.	<i>SHA384</i>	Ban the use of cipher suites using HMAC-SHA384.	<i>STATIC</i>	Ban the use of cipher suites using static keys.	<i>CHACHA20</i>	Ban the use of cipher suites using ChaCha20.	<i>ARIA</i>	Ban the use of cipher suites using ARIA.	<i>AESCCM</i>	Ban the use of cipher suites using AESCCM.				
	Option	Description																																					
	<i>RSA</i>	Ban the use of cipher suites using RSA key.																																					
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<i>ARIA</i>	Ban the use of cipher suites using ARIA.																																						
<i>AESCCM</i>	Ban the use of cipher suites using AESCCM.																																						
browser-language-detection	Enable/disable overriding the configured system language based on the preferred language of the browser.	option	-	enable																																			
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable setting.</td></tr><tr><td><i>disable</i></td><td>Disable setting.</td></tr></table>	Option	Description	<i>enable</i>	Enable setting.	<i>disable</i>	Disable setting.																																
	Option	Description																																					
	<i>enable</i>	Enable setting.																																					
<i>disable</i>	Disable setting.																																						
check-referer	Enable/disable verification of referer field in HTTP request header.	option	-	disable																																			
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable verification of referer field in HTTP request header.</td></tr><tr><td><i>disable</i></td><td>Disable verification of referer field in HTTP request header.</td></tr></table>	Option	Description	<i>enable</i>	Enable verification of referer field in HTTP request header.	<i>disable</i>	Disable verification of referer field in HTTP request header.																																
	Option	Description																																					
	<i>enable</i>	Enable verification of referer field in HTTP request header.																																					
<i>disable</i>	Disable verification of referer field in HTTP request header.																																						

Parameter	Description	Type	Size	Default												
ciphersuite	Select one or more TLS 1.3 ciphersuites to enable. Does not affect ciphers in TLS 1.2 and below. At least one must be enabled. To disable all, set ssl-max-proto-ver to tls1-2 or below.	option	-	TLS-AES-128-GCM-SHA256 TLS-AES-256-GCM-SHA384 TLS-CHACHA20-POLY1305-SHA256												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>TLS-AES-128-GCM-SHA256</td><td>Enable TLS-AES-128-GCM-SHA256 in TLS 1.3.</td></tr><tr><td>TLS-AES-256-GCM-SHA384</td><td>Enable TLS-AES-256-GCM-SHA384 in TLS 1.3.</td></tr><tr><td>TLS-CHACHA20-POLY1305-SHA256</td><td>Enable TLS-CHACHA20-POLY1305-SHA256 in TLS 1.3.</td></tr><tr><td>TLS-AES-128-CCM-SHA256</td><td>Enable TLS-AES-128-CCM-SHA256 in TLS 1.3.</td></tr><tr><td>TLS-AES-128-CCM-8-SHA256</td><td>Enable TLS-AES-128-CCM-8-SHA256 in TLS 1.3.</td></tr></table>	Option	Description	TLS-AES-128-GCM-SHA256	Enable TLS-AES-128-GCM-SHA256 in TLS 1.3.	TLS-AES-256-GCM-SHA384	Enable TLS-AES-256-GCM-SHA384 in TLS 1.3.	TLS-CHACHA20-POLY1305-SHA256	Enable TLS-CHACHA20-POLY1305-SHA256 in TLS 1.3.	TLS-AES-128-CCM-SHA256	Enable TLS-AES-128-CCM-SHA256 in TLS 1.3.	TLS-AES-128-CCM-8-SHA256	Enable TLS-AES-128-CCM-8-SHA256 in TLS 1.3.			
Option	Description															
TLS-AES-128-GCM-SHA256	Enable TLS-AES-128-GCM-SHA256 in TLS 1.3.															
TLS-AES-256-GCM-SHA384	Enable TLS-AES-256-GCM-SHA384 in TLS 1.3.															
TLS-CHACHA20-POLY1305-SHA256	Enable TLS-CHACHA20-POLY1305-SHA256 in TLS 1.3.															
TLS-AES-128-CCM-SHA256	Enable TLS-AES-128-CCM-SHA256 in TLS 1.3.															
TLS-AES-128-CCM-8-SHA256	Enable TLS-AES-128-CCM-8-SHA256 in TLS 1.3.															
client-sigalgs	Set signature algorithms related to client authentication. Affects TLS version <= 1.2 only.	option	-	all												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>no-rsa-pss</td><td>Disable RSA-PSS signature algorithms for client authentication.</td></tr><tr><td>all</td><td>Enable all supported signature algorithms for client authentication.</td></tr></table>	Option	Description	no-rsa-pss	Disable RSA-PSS signature algorithms for client authentication.	all	Enable all supported signature algorithms for client authentication.									
Option	Description															
no-rsa-pss	Disable RSA-PSS signature algorithms for client authentication.															
all	Enable all supported signature algorithms for client authentication.															
default-portal	Default SSL-VPN portal.	string	Maximum length: 35													
deflate-compression-level	Compression level (0~9).	integer	Minimum value: 6 0 Maximum value: 9													
deflate-min-data-size	Minimum amount of data that triggers compression (200 - 65535 bytes).	integer	Minimum value: 200 Maximum value: 65535	300												

Parameter	Description	Type	Size	Default						
dns-server1	DNS server 1.	ipv4-address	Not Specified	0.0.0.0						
dns-server2	DNS server 2.	ipv4-address	Not Specified	0.0.0.0						
dns-suffix	DNS suffix used for SSL-VPN clients.	var-string	Maximum length: 253							
dtls-hello-timeout	SSLVPN maximum DTLS hello timeout (10 - 60 sec, default = 10).	integer	Minimum value: 10 Maximum value: 60	10						
dtls-max-protocol-ver	DTLS maximum protocol version.	option	-	dtls1-2						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>dtls1-0</td><td>DTLS version 1.0.</td></tr><tr><td>dtls1-2</td><td>DTLS version 1.2.</td></tr></table>				Option	Description	dtls1-0	DTLS version 1.0.	dtls1-2	DTLS version 1.2.
Option	Description									
dtls1-0	DTLS version 1.0.									
dtls1-2	DTLS version 1.2.									
dtls-min-protocol-ver	DTLS minimum protocol version.	option	-	dtls1-0						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>dtls1-0</td><td>DTLS version 1.0.</td></tr><tr><td>dtls1-2</td><td>DTLS version 1.2.</td></tr></table>				Option	Description	dtls1-0	DTLS version 1.0.	dtls1-2	DTLS version 1.2.
Option	Description									
dtls1-0	DTLS version 1.0.									
dtls1-2	DTLS version 1.2.									
dtls-tunnel	Enable/disable DTLS to prevent eavesdropping, tampering, or message forgery.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable setting.</td></tr><tr><td>disable</td><td>Disable setting.</td></tr></table>				Option	Description	enable	Enable setting.	disable	Disable setting.
Option	Description									
enable	Enable setting.									
disable	Disable setting.									
dual-stack-mode	Tunnel mode: enable parallel IPv4 and IPv6 tunnel. Web mode: support IPv4 and IPv6 bookmarks in the portal.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable setting.</td></tr><tr><td>disable</td><td>Disable setting.</td></tr></table>				Option	Description	enable	Enable setting.	disable	Disable setting.
Option	Description									
enable	Enable setting.									
disable	Disable setting.									
encode-2f-sequence	Encode \2F sequence to forward slash in URLs.	option	-	disable						

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		
encrypt-and-store-password	Encrypt and store user passwords for SSL-VPN web sessions.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		
force-two-factor-auth	Enable/disable only PKI users with two-factor authentication for SSL-VPNs.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		
header-x-forwarded-for	Forward the same, add, or remove HTTP header.	option	-	add
	Option	Description		
	<i>pass</i>	Forward the same HTTP header.		
	<i>add</i>	Add the HTTP header.		
	<i>remove</i>	Remove the HTTP header.		
hsts-include-subdomains	Add HSTS includeSubDomains response header.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		
http-compression	Enable/disable to allow HTTP compression over SSL-VPN tunnels.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		

Parameter	Description	Type	Size	Default						
http-only-cookie	Enable/disable SSL-VPN support for HttpOnly cookies.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable setting.</td></tr><tr><td>disable</td><td>Disable setting.</td></tr></table>				Option	Description	enable	Enable setting.	disable	Disable setting.
	Option	Description								
	enable	Enable setting.								
disable	Disable setting.									
http-request-body-timeout	SSL-VPN session is disconnected if an HTTP request body is not received within this time (1 - 60 sec, default = 20).	integer	Minimum value: 30 0 Maximum value: 4294967295							
http-request-header-timeout	SSL-VPN session is disconnected if an HTTP request header is not received within this time (1 - 60 sec, default = 20).	integer	Minimum value: 20 0 Maximum value: 4294967295							
https-redirect	Enable/disable redirect of port 80 to SSL-VPN port.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable setting.</td></tr><tr><td>disable</td><td>Disable setting.</td></tr></table>				Option	Description	enable	Enable setting.	disable	Disable setting.
	Option	Description								
	enable	Enable setting.								
disable	Disable setting.									
idle-timeout	SSL-VPN disconnects if idle for specified time in seconds.	integer	Minimum value: 300 0 Maximum value: 259200							
ipv6-dns-server1	IPv6 DNS server 1.	ipv6-address	Not Specified	::						
ipv6-dns-server2	IPv6 DNS server 2.	ipv6-address	Not Specified	::						
ipv6-wins-server1	IPv6 WINS server 1.	ipv6-address	Not Specified	::						
ipv6-wins-server2	IPv6 WINS server 2.	ipv6-address	Not Specified	::						
login-attempt-limit	SSL-VPN maximum login attempt times before block (0 - 10, default = 2, 0 = no limit).	integer	Minimum value: 2 0 Maximum value: 4294967295							

Parameter	Description	Type	Size	Default
login-block-time	Time for which a user is blocked from logging in after too many failed login attempts (0 - 86400 sec, default = 60).	integer	Minimum value: 0 Maximum value: 4294967295	60
login-timeout	SSLVPN maximum login timeout (10 - 180 sec, default = 30).	integer	Minimum value: 10 Maximum value: 180	30
port	SSL-VPN access port (1 - 65535).	integer	Minimum value: 1 Maximum value: 65535	10443
port-precedence	Enable/disable, Enable means that if SSL-VPN connections are allowed on an interface admin GUI connections are blocked on that interface.	option	-	enable
	Option		Description	
	enable		Enable setting.	
	disable		Disable setting.	
reqclientcert	Enable/disable to require client certificates for all SSL-VPN users.	option	-	disable
	Option		Description	
	enable		Enable setting.	
	disable		Disable setting.	
saml-redirect-port	SAML local redirect port in the machine running FortiClient (0 - 65535). 0 is to disable redirection on FGT side.	integer	Minimum value: 0 Maximum value: 65535	8020
server-hostname	Server hostname for HTTPS. When set, will be used for SSL VPN web proxy host header for any redirection.	string	Maximum length: 255	
servercert	Name of the server certificate to be used for SSL-VPNs.	string	Maximum length: 35	
source-address <name>	Source address of incoming traffic. Address name.	string	Maximum length: 79	
source-address-negate	Enable/disable negated source address match.	option	-	disable

Parameter	Description	Type	Size	Default
	Option Description			
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		
source-address6 <name>	IPv6 source address of incoming traffic. IPv6 address name.	string	Maximum length: 79	
source-address6-negate	Enable/disable negated source IPv6 address match.	option	-	disable
	Option Description			
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		
source-interface <name>	SSL-VPN source interface of incoming traffic. Interface name.	string	Maximum length: 35	
ssl-client-renegotiation	Enable/disable to allow client renegotiation by the server if the tunnel goes down.	option	-	disable
	Option Description			
	<i>disable</i>	Abort any SSL connection that attempts to renegotiate.		
	<i>enable</i>	Allow a SSL client to renegotiate.		
ssl-insert-empty-fragment	Enable/disable insertion of empty fragment.	option	-	enable
	Option Description			
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		
ssl-max-protocol-ver	SSL maximum protocol version.	option	-	tls1-3
	Option Description			
	<i>tls1-0</i>	TLS version 1.0.		

Parameter	Description	Type	Size	Default										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>tls1-1</i></td><td>TLS version 1.1.</td></tr><tr><td><i>tls1-2</i></td><td>TLS version 1.2.</td></tr><tr><td><i>tls1-3</i></td><td>TLS version 1.3.</td></tr></table>	Option	Description	<i>tls1-1</i>	TLS version 1.1.	<i>tls1-2</i>	TLS version 1.2.	<i>tls1-3</i>	TLS version 1.3.					
	Option	Description												
	<i>tls1-1</i>	TLS version 1.1.												
	<i>tls1-2</i>	TLS version 1.2.												
	<i>tls1-3</i>	TLS version 1.3.												
ssl-min-protocol	SSL minimum protocol version.	option	-	tls1-2										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>tls1-0</i></td><td>TLS version 1.0.</td></tr><tr><td><i>tls1-1</i></td><td>TLS version 1.1.</td></tr><tr><td><i>tls1-2</i></td><td>TLS version 1.2.</td></tr><tr><td><i>tls1-3</i></td><td>TLS version 1.3.</td></tr></table>	Option	Description	<i>tls1-0</i>	TLS version 1.0.	<i>tls1-1</i>	TLS version 1.1.	<i>tls1-2</i>	TLS version 1.2.	<i>tls1-3</i>	TLS version 1.3.			
	Option	Description												
	<i>tls1-0</i>	TLS version 1.0.												
	<i>tls1-1</i>	TLS version 1.1.												
	<i>tls1-2</i>	TLS version 1.2.												
<i>tls1-3</i>	TLS version 1.3.													
status	Enable/disable SSL-VPN.	option	-	enable										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable SSL-VPN.</td></tr><tr><td><i>disable</i></td><td>Disable SSL-VPN.</td></tr></table>	Option	Description	<i>enable</i>	Enable SSL-VPN.	<i>disable</i>	Disable SSL-VPN.							
	Option	Description												
	<i>enable</i>	Enable SSL-VPN.												
<i>disable</i>	Disable SSL-VPN.													
transform-backward-slashes	Transform backward slashes to forward slashes in URLs.	option	-	disable										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable setting.</td></tr><tr><td><i>disable</i></td><td>Disable setting.</td></tr></table>	Option	Description	<i>enable</i>	Enable setting.	<i>disable</i>	Disable setting.							
	Option	Description												
	<i>enable</i>	Enable setting.												
<i>disable</i>	Disable setting.													
tunnel-addr-assigned-method	Method used for assigning address for tunnel.	option	-	first-available										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>first-available</i></td><td>Assign the first available address from the pools.</td></tr><tr><td><i>round-robin</i></td><td>Assign the available address from the pool with a round robin fashion.</td></tr></table>	Option	Description	<i>first-available</i>	Assign the first available address from the pools.	<i>round-robin</i>	Assign the available address from the pool with a round robin fashion.							
	Option	Description												
	<i>first-available</i>	Assign the first available address from the pools.												
<i>round-robin</i>	Assign the available address from the pool with a round robin fashion.													
tunnel-connect-without-reauth	Enable/disable tunnel connection without re-authorization if previous connection dropped.	option	-	disable										

Parameter	Description	Type	Size	Default						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable tunnel connection without re-authorization.</td></tr><tr><td><i>disable</i></td><td>Disable tunnel connection without re-authorization.</td></tr></table>	Option	Description	<i>enable</i>	Enable tunnel connection without re-authorization.	<i>disable</i>	Disable tunnel connection without re-authorization.			
	Option	Description								
	<i>enable</i>	Enable tunnel connection without re-authorization.								
<i>disable</i>	Disable tunnel connection without re-authorization.									
tunnel-ip-pools <name>	Names of the IPv4 IP Pool firewall objects that define the IP addresses reserved for remote clients. Address name.	string	Maximum length: 79							
tunnel-ipv6-pools <name>	Names of the IPv6 IP Pool firewall objects that define the IP addresses reserved for remote clients. Address name.	string	Maximum length: 79							
tunnel-user-session-timeout	Time out value to clean up user session after tunnel connection is dropped (1 - 255 sec, default=30).	integer	Minimum value: 30 1 Maximum value: 255							
unsafe-legacy-renegotiation	Enable/disable unsafe legacy re-negotiation.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable setting.</td></tr><tr><td><i>disable</i></td><td>Disable setting.</td></tr></table>	Option	Description	<i>enable</i>	Enable setting.	<i>disable</i>	Disable setting.			
	Option	Description								
	<i>enable</i>	Enable setting.								
<i>disable</i>	Disable setting.									
url-obscuration	Enable/disable to obscure the host name of the URL of the web browser display.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable setting.</td></tr><tr><td><i>disable</i></td><td>Disable setting.</td></tr></table>	Option	Description	<i>enable</i>	Enable setting.	<i>disable</i>	Disable setting.			
	Option	Description								
	<i>enable</i>	Enable setting.								
<i>disable</i>	Disable setting.									
user-peer	Name of user peer.	string	Maximum length: 35							
wins-server1	WINS server 1.	ipv4-address	Not Specified	0.0.0.0						
wins-server2	WINS server 2.	ipv4-address	Not Specified	0.0.0.0						
x-content-type-options	Add HTTP X-Content-Type-Options header.	option	-	enable						

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		
ztna-trusted-client	Enable/disable verification of device certificate for SSLVPN ZTNA session.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable verification of device certificate for SSLVPN ZTNA session.		
	<i>disable</i>	Disable verification of device certificate for SSLVPN ZTNA session.		

config authentication-rule

Parameter	Description	Type	Size	Default														
auth	SSL-VPN authentication method restriction.	option	-	any														
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>any</i></td><td>Any</td></tr><tr><td><i>local</i></td><td>Local</td></tr><tr><td><i>radius</i></td><td>RADIUS</td></tr><tr><td><i>tacacs+</i></td><td>TACACS+</td></tr><tr><td><i>ldap</i></td><td>LDAP</td></tr><tr><td><i>peer</i></td><td>PEER</td></tr></table>	Option	Description	<i>any</i>	Any	<i>local</i>	Local	<i>radius</i>	RADIUS	<i>tacacs+</i>	TACACS+	<i>ldap</i>	LDAP	<i>peer</i>	PEER			
Option	Description																	
<i>any</i>	Any																	
<i>local</i>	Local																	
<i>radius</i>	RADIUS																	
<i>tacacs+</i>	TACACS+																	
<i>ldap</i>	LDAP																	
<i>peer</i>	PEER																	
cipher	SSL-VPN cipher strength.	option	-	high														
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>any</i></td><td>Any cipher strength.</td></tr><tr><td><i>high</i></td><td>High cipher strength (>= 168 bits).</td></tr><tr><td><i>medium</i></td><td>Medium cipher strength (>= 128 bits).</td></tr></table>	Option	Description	<i>any</i>	Any cipher strength.	<i>high</i>	High cipher strength (>= 168 bits).	<i>medium</i>	Medium cipher strength (>= 128 bits).									
Option	Description																	
<i>any</i>	Any cipher strength.																	
<i>high</i>	High cipher strength (>= 168 bits).																	
<i>medium</i>	Medium cipher strength (>= 128 bits).																	
client-cert	Enable/disable SSL-VPN client certificate restrictive.	option	-	disable														
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable setting.</td></tr><tr><td><i>disable</i></td><td>Disable setting.</td></tr></table>	Option	Description	<i>enable</i>	Enable setting.	<i>disable</i>	Disable setting.											
Option	Description																	
<i>enable</i>	Enable setting.																	
<i>disable</i>	Disable setting.																	

Parameter	Description	Type	Size	Default						
groups <name>	User groups. Group name.	string	Maximum length: 79							
id	ID (0 - 4294967295).	integer	Minimum value: 0 Maximum value: 4294967295							
portal	SSL-VPN portal.	string	Maximum length: 35							
realm	SSL-VPN realm.	string	Maximum length: 35							
source- address <name>	Source address of incoming traffic. Address name.	string	Maximum length: 79							
source- address- negate	Enable/disable negated source address match.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable setting.</td></tr><tr><td>disable</td><td>Disable setting.</td></tr></table>				Option	Description	enable	Enable setting.	disable	Disable setting.
Option	Description									
enable	Enable setting.									
disable	Disable setting.									
source- address6 <name>	IPv6 source address of incoming traffic. IPv6 address name.	string	Maximum length: 79							
source- address6- negate	Enable/disable negated source IPv6 address match.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable setting.</td></tr><tr><td>disable</td><td>Disable setting.</td></tr></table>				Option	Description	enable	Enable setting.	disable	Disable setting.
Option	Description									
enable	Enable setting.									
disable	Disable setting.									
source- interface <name>	SSL-VPN source interface of incoming traffic. Interface name.	string	Maximum length: 35							
user-peer	Name of user peer.	string	Maximum length: 35							
users <name>	User name. User name.	string	Maximum length: 79							

config vpn ssl web host-check-software

SSL-VPN host check software.

```
config vpn ssl web host-check-software
  Description: SSL-VPN host check software.
  edit <name>
    config check-item-list
      Description: Check item list.
      edit <id>
        set action [require|deny]
        set md5s <id1>, <id2>, ...
        set target {string}
        set type [file|registry|...]
        set version {string}
      next
    end
    set guid {user}
    set os-type [windows|macos]
    set type [av|fw]
    set version {string}
  next
end
```

config vpn ssl web host-check-software

Parameter	Description	Type	Size	Default
guid	Globally unique ID.	user	Not Specified	
name	Name.	string	Maximum length: 63	
os-type	OS type.	option	-	windows
	Option	Description		
	windows	Microsoft Windows operating system.		
	macos	Apple MacOS operating system.		
type	Type.	option	-	av
	Option	Description		
	av	AntiVirus.		
	fw	Firewall.		
version	Version.	string	Maximum length: 35	

config check-item-list

Parameter	Description	Type	Size	Default
action	Action.	option	-	require
	Option	Description		
	<i>require</i>	Require.		
	<i>deny</i>	Deny.		
id	ID (0 - 4294967295).	integer	Minimum value: 0 Maximum value: 65535	0
md5s <id>	MD5 checksum. Hex string of MD5 checksum.	string	Maximum length: 32	
target	Target.	string	Maximum length: 255	
type	Type.	option	-	file
	Option	Description		
	<i>file</i>	File.		
	<i>registry</i>	Registry.		
	<i>process</i>	Process.		
version	Version.	string	Maximum length: 35	

config vpn ssl web portal

Portal.

```
config vpn ssl web portal
  Description: Portal.
  edit <name>
    set allow-user-access {option1}, {option2}, ...
    set auto-connect [enable|disable]
    config bookmark-group
      Description: Portal bookmark group.
      edit <name>
        config bookmarks
          Description: Bookmark table.
          edit <name>
```

```

        set additional-params {var-string}
        set apptype [ftp|rdp|...]
        set color-depth [32|16|...]
        set description {var-string}
        set domain {var-string}
        set folder {var-string}
        config form-data
            Description: Form data.
            edit <name>
                set value {var-string}
            next
        end
        set height {integer}
        set host {var-string}
        set keyboard-layout [ar-101|ar-102|...]
        set load-balancing-info {var-string}
        set logon-password {password}
        set logon-user {var-string}
        set port {integer}
        set preconnection-blob {var-string}
        set preconnection-id {integer}
        set restricted-admin [enable|disable]
        set security [any|rdp|...]
        set send-preconnection-id [enable|disable]
        set sso [disable|static|...]
        set sso-credential [sslvpn-login|alternative]
        set sso-credential-sent-once [enable|disable]
        set sso-password {password}
        set sso-username {var-string}
        set url {var-string}
        set vnc-keyboard-layout [default|da|...]
        set width {integer}
    next
end
next
end
set client-src-range [enable|disable]
set clipboard [enable|disable]
set custom-lang {string}
set customize-forticlient-download-url [enable|disable]
set default-window-height {integer}
set default-window-width {integer}
set dhcp-ip-overlap [use-new|use-old]
set dhcp-ra-giaddr {ipv4-address}
set dhcp6-ra-linkaddr {ipv6-address}
set display-bookmark [enable|disable]
set display-connection-tools [enable|disable]
set display-history [enable|disable]
set display-status [enable|disable]
set dns-server1 {ipv4-address}
set dns-server2 {ipv4-address}
set dns-suffix {var-string}

```

```

set exclusive-routing [enable|disable]
set forticlient-download [enable|disable]
set forticlient-download-method [direct|ssl-vpn]
set heading {string}
set hide-sso-credential [enable|disable]
set host-check [none|av|...]
set host-check-interval {integer}
set host-check-policy <name1>, <name2>, ...
set ip-mode [range|user-group|...]
set ip-pools <name1>, <name2>, ...
set ipv6-dns-server1 {ipv6-address}
set ipv6-dns-server2 {ipv6-address}
set ipv6-exclusive-routing [enable|disable]
set ipv6-pools <name1>, <name2>, ...
set ipv6-service-restriction [enable|disable]
set ipv6-split-tunneling [enable|disable]
set ipv6-split-tunneling-routing-address <name1>, <name2>, ...
set ipv6-split-tunneling-routing-negate [enable|disable]
set ipv6-tunnel-mode [enable|disable]
set ipv6-wins-server1 {ipv6-address}
set ipv6-wins-server2 {ipv6-address}
set keep-alive [enable|disable]
set limit-user-logins [enable|disable]
set mac-addr-action [allow|deny]
set mac-addr-check [enable|disable]
config mac-addr-check-rule
    Description: Client MAC address check rule.
    edit <name>
        set mac-addr-list <addr1>, <addr2>, ...
        set mac-addr-mask {integer}
    next
end
set macos-forticlient-download-url {var-string}
set os-check [enable|disable]
config os-check-list
    Description: SSL-VPN OS checks. Read-only.
    edit <name>
        set action [deny|allow|...]
        set latest-patch-level {user}
        set minor-version {integer}
        set tolerance {integer}
    next
end
set prefer-ipv6-dns [enable|disable]
set redir-url {var-string}
set rewrite-ip-uri-ui [enable|disable]
set save-password [enable|disable]
set service-restriction [enable|disable]
set skip-check-for-browser [enable|disable]
set skip-check-for-unsupported-os [enable|disable]
set smb-max-version [smbv1|smbv2|...]
set smb-min-version [smbv1|smbv2|...]

```



```

set smb-ntlmv1-auth [enable|disable]
set smbv1 [enable|disable]
config split-dns
    Description: Split DNS for SSL-VPN.
    edit <id>
        set dns-server1 {ipv4-address}
        set dns-server2 {ipv4-address}
        set domains {var-string}
        set ipv6-dns-server1 {ipv6-address}
        set ipv6-dns-server2 {ipv6-address}
    next
end
set split-tunneling [enable|disable]
set split-tunneling-routing-address <name1>, <name2>, ...
set split-tunneling-routing-negate [enable|disable]
set theme [jade|neutrino|...]
set tunnel-mode [enable|disable]
set use-sdwan [enable|disable]
set user-bookmark [enable|disable]
set user-group-bookmark [enable|disable]
set web-mode [enable|disable]
set windows-forticlient-download-url {var-string}
set wins-server1 {ipv4-address}
set wins-server2 {ipv4-address}
next
end

```

config vpn ssl web portal

Parameter	Description	Type	Size	Default														
allow-user-access	Allow user access to SSL-VPN applications.	option	-	web ftp smb sftp telnet ssh vnc rdp ping														
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>web</td><td>HTTP/HTTPS access.</td></tr><tr><td>ftp</td><td>FTP access.</td></tr><tr><td>smb</td><td>SMB/CIFS access.</td></tr><tr><td>sftp</td><td>SFTP access.</td></tr><tr><td>telnet</td><td>TELNET access.</td></tr><tr><td>ssh</td><td>SSH access.</td></tr></table>				Option	Description	web	HTTP/HTTPS access.	ftp	FTP access.	smb	SMB/CIFS access.	sftp	SFTP access.	telnet	TELNET access.	ssh	SSH access.
Option	Description																	
web	HTTP/HTTPS access.																	
ftp	FTP access.																	
smb	SMB/CIFS access.																	
sftp	SFTP access.																	
telnet	TELNET access.																	
ssh	SSH access.																	

Parameter	Description	Type	Size	Default								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>vnc</i></td><td>VNC access.</td></tr><tr><td><i>rdp</i></td><td>RDP access.</td></tr><tr><td><i>ping</i></td><td>PING access.</td></tr></table>	Option	Description	<i>vnc</i>	VNC access.	<i>rdp</i>	RDP access.	<i>ping</i>	PING access.			
	Option	Description										
	<i>vnc</i>	VNC access.										
	<i>rdp</i>	RDP access.										
<i>ping</i>	PING access.											
auto-connect	Enable/disable automatic connect by client when system is up.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable setting.</td></tr><tr><td><i>disable</i></td><td>Disable setting.</td></tr></table>	Option	Description	<i>enable</i>	Enable setting.	<i>disable</i>	Disable setting.					
	Option	Description										
	<i>enable</i>	Enable setting.										
<i>disable</i>	Disable setting.											
client-src-range	Allow client to add source range for the tunnel traffic.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable setting.</td></tr><tr><td><i>disable</i></td><td>Disable setting.</td></tr></table>	Option	Description	<i>enable</i>	Enable setting.	<i>disable</i>	Disable setting.					
	Option	Description										
	<i>enable</i>	Enable setting.										
<i>disable</i>	Disable setting.											
clipboard	Enable to support RDP/VPC clipboard functionality.	option	-	enable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable support of RDP/VNC clipboard.</td></tr><tr><td><i>disable</i></td><td>Disable support of RDP/VNC clipboard.</td></tr></table>	Option	Description	<i>enable</i>	Enable support of RDP/VNC clipboard.	<i>disable</i>	Disable support of RDP/VNC clipboard.					
	Option	Description										
	<i>enable</i>	Enable support of RDP/VNC clipboard.										
<i>disable</i>	Disable support of RDP/VNC clipboard.											
custom-lang	Change the web portal display language. Overrides config system global set language. You can use config system custom-language and execute system custom-language to add custom language files.	string	Maximum length: 35									
customize-forticlient-download-url	Enable support of customized download URL for FortiClient.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable setting.</td></tr><tr><td><i>disable</i></td><td>Disable setting.</td></tr></table>	Option	Description	<i>enable</i>	Enable setting.	<i>disable</i>	Disable setting.					
	Option	Description										
	<i>enable</i>	Enable setting.										
<i>disable</i>	Disable setting.											

Parameter	Description	Type	Size	Default						
default-window-height	Screen height (range from 0 - 65535, default = 768).	integer	Minimum value: 0 Maximum value: 65535	768						
default-window-width	Screen width (range from 0 - 65535, default = 1024).	integer	Minimum value: 0 Maximum value: 65535	1024						
dhcp-ip-overlap	Configure overlapping DHCP IP allocation assignment.	option	-	use-new						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>use-new</td><td>Assign DHCP lease to new client and remove old client lease.</td></tr><tr><td>use-old</td><td>Preserve previous client IP allocation and disconnect new client.</td></tr></table>				Option	Description	use-new	Assign DHCP lease to new client and remove old client lease.	use-old	Preserve previous client IP allocation and disconnect new client.
Option	Description									
use-new	Assign DHCP lease to new client and remove old client lease.									
use-old	Preserve previous client IP allocation and disconnect new client.									
dhcp-ra-giaddr	Relay agent gateway IP address to use in the giaddr field of DHCP requests.	ipv4-address	Not Specified	0.0.0.0						
dhcp6-ra-linkaddr	Relay agent IPv6 link address to use in DHCP6 requests.	ipv6-address	Not Specified	::						
display-bookmark	Enable to display the web portal bookmark widget.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable setting.</td></tr><tr><td>disable</td><td>Disable setting.</td></tr></table>				Option	Description	enable	Enable setting.	disable	Disable setting.
Option	Description									
enable	Enable setting.									
disable	Disable setting.									
display-connection-tools	Enable to display the web portal connection tools widget.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable setting.</td></tr><tr><td>disable</td><td>Disable setting.</td></tr></table>				Option	Description	enable	Enable setting.	disable	Disable setting.
Option	Description									
enable	Enable setting.									
disable	Disable setting.									
display-history	Enable to display the web portal user login history widget.	option	-	enable						

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		
display-status	Enable to display the web portal status widget.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		
dns-server1	IPv4 DNS server 1.	ipv4-address	Not Specified	0.0.0.0
dns-server2	IPv4 DNS server 2.	ipv4-address	Not Specified	0.0.0.0
dns-suffix	DNS suffix.	var-string	Maximum length: 253	
exclusive-routing	Enable/disable all traffic go through tunnel only.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		
forticlient-download	Enable/disable download option for FortiClient.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		
forticlient-download-method	FortiClient download method.	option	-	direct
	Option	Description		
	<i>direct</i>	Download via direct link.		
	<i>ssl-vpn</i>	Download via SSL-VPN.		
heading	Web portal heading message.	string	Maximum length: 31	SSL-VPN Portal

Parameter	Description	Type	Size	Default												
hide-sso-credential	Enable to prevent SSO credential being sent to client.	option	-	enable												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable setting.</td></tr><tr><td><i>disable</i></td><td>Disable setting.</td></tr></table>	Option	Description	<i>enable</i>	Enable setting.	<i>disable</i>	Disable setting.									
Option	Description															
<i>enable</i>	Enable setting.															
<i>disable</i>	Disable setting.															
host-check	Type of host checking performed on endpoints.	option	-	none												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>none</i></td><td>No host checking.</td></tr><tr><td><i>av</i></td><td>AntiVirus software recognized by the Windows Security Center.</td></tr><tr><td><i>fw</i></td><td>Firewall software recognized by the Windows Security Center.</td></tr><tr><td><i>av-fw</i></td><td>AntiVirus and firewall software recognized by the Windows Security Center.</td></tr><tr><td><i>custom</i></td><td>Custom.</td></tr></table>	Option	Description	<i>none</i>	No host checking.	<i>av</i>	AntiVirus software recognized by the Windows Security Center.	<i>fw</i>	Firewall software recognized by the Windows Security Center.	<i>av-fw</i>	AntiVirus and firewall software recognized by the Windows Security Center.	<i>custom</i>	Custom.			
Option	Description															
<i>none</i>	No host checking.															
<i>av</i>	AntiVirus software recognized by the Windows Security Center.															
<i>fw</i>	Firewall software recognized by the Windows Security Center.															
<i>av-fw</i>	AntiVirus and firewall software recognized by the Windows Security Center.															
<i>custom</i>	Custom.															
host-check-interval	Periodic host check interval. Value of 0 means disabled and host checking only happens when the endpoint connects.	integer	Minimum value: 120 Maximum value: 259200	0												
host-check-policy <name>	One or more policies to require the endpoint to have specific security software. Host check software list name.	string	Maximum length: 79													
ip-mode	Method by which users of this SSL-VPN tunnel obtain IP addresses.	option	-	range												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>range</i></td><td>Use the IP addresses available for all SSL-VPN users as defined by the SSL settings command.</td></tr><tr><td><i>user-group</i></td><td>Use the IP addresses associated with individual users or user groups (usually from external auth servers).</td></tr><tr><td><i>dhcp</i></td><td>Use IP addresses obtained from external DHCP server.</td></tr><tr><td><i>no-ip</i></td><td>Do not assign IP address.</td></tr></table>	Option	Description	<i>range</i>	Use the IP addresses available for all SSL-VPN users as defined by the SSL settings command.	<i>user-group</i>	Use the IP addresses associated with individual users or user groups (usually from external auth servers).	<i>dhcp</i>	Use IP addresses obtained from external DHCP server.	<i>no-ip</i>	Do not assign IP address.					
Option	Description															
<i>range</i>	Use the IP addresses available for all SSL-VPN users as defined by the SSL settings command.															
<i>user-group</i>	Use the IP addresses associated with individual users or user groups (usually from external auth servers).															
<i>dhcp</i>	Use IP addresses obtained from external DHCP server.															
<i>no-ip</i>	Do not assign IP address.															
ip-pools <name>	IPv4 firewall source address objects reserved for SSL-VPN tunnel mode clients. Address name.	string	Maximum length: 79													

Parameter	Description	Type	Size	Default						
ipv6-dns-server1	IPv6 DNS server 1.	ipv6-address	Not Specified	::						
ipv6-dns-server2	IPv6 DNS server 2.	ipv6-address	Not Specified	::						
ipv6-exclusive-routing	Enable/disable all IPv6 traffic go through tunnel only.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable setting.</td></tr><tr><td>disable</td><td>Disable setting.</td></tr></table>	Option	Description	enable	Enable setting.	disable	Disable setting.			
Option	Description									
enable	Enable setting.									
disable	Disable setting.									
ipv6-pools <name>	IPv6 firewall source address objects reserved for SSL-VPN tunnel mode clients. Address name.	string	Maximum length: 79							
ipv6-service-restriction	Enable/disable IPv6 tunnel service restriction.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable setting.</td></tr><tr><td>disable</td><td>Disable setting.</td></tr></table>	Option	Description	enable	Enable setting.	disable	Disable setting.			
Option	Description									
enable	Enable setting.									
disable	Disable setting.									
ipv6-split-tunneling	Enable/disable IPv6 split tunneling.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable setting.</td></tr><tr><td>disable</td><td>Disable setting.</td></tr></table>	Option	Description	enable	Enable setting.	disable	Disable setting.			
Option	Description									
enable	Enable setting.									
disable	Disable setting.									
ipv6-split-tunneling-routing-address <name>	IPv6 SSL-VPN tunnel mode firewall address objects that override firewall policy destination addresses to control split-tunneling access. Address name.	string	Maximum length: 79							
ipv6-split-tunneling-routing-negate	Enable to negate IPv6 split tunneling routing address.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable setting.</td></tr><tr><td>disable</td><td>Disable setting.</td></tr></table>	Option	Description	enable	Enable setting.	disable	Disable setting.			
Option	Description									
enable	Enable setting.									
disable	Disable setting.									

Parameter	Description	Type	Size	Default						
ipv6-tunnel-mode	Enable/disable IPv6 SSL-VPN tunnel mode.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable setting.</td></tr><tr><td>disable</td><td>Disable setting.</td></tr></table>	Option	Description	enable	Enable setting.	disable	Disable setting.			
Option	Description									
enable	Enable setting.									
disable	Disable setting.									
ipv6-wins-server1	IPv6 WINS server 1.	ipv6-address	Not Specified	::						
ipv6-wins-server2	IPv6 WINS server 2.	ipv6-address	Not Specified	::						
keep-alive	Enable/disable automatic reconnect for FortiClient connections.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable setting.</td></tr><tr><td>disable</td><td>Disable setting.</td></tr></table>	Option	Description	enable	Enable setting.	disable	Disable setting.			
Option	Description									
enable	Enable setting.									
disable	Disable setting.									
limit-user-logins	Enable to limit each user to one SSL-VPN session at a time.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable setting.</td></tr><tr><td>disable</td><td>Disable setting.</td></tr></table>	Option	Description	enable	Enable setting.	disable	Disable setting.			
Option	Description									
enable	Enable setting.									
disable	Disable setting.									
mac-addr-action	Client MAC address action.	option	-	allow						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>allow</td><td>Allow connection when client MAC address is matched.</td></tr><tr><td>deny</td><td>Deny connection when client MAC address is matched.</td></tr></table>	Option	Description	allow	Allow connection when client MAC address is matched.	deny	Deny connection when client MAC address is matched.			
Option	Description									
allow	Allow connection when client MAC address is matched.									
deny	Deny connection when client MAC address is matched.									
mac-addr-check	Enable/disable MAC address host checking.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable setting.</td></tr><tr><td>disable</td><td>Disable setting.</td></tr></table>	Option	Description	enable	Enable setting.	disable	Disable setting.			
Option	Description									
enable	Enable setting.									
disable	Disable setting.									

Parameter	Description	Type	Size	Default						
macos-forticlient-download-url	Download URL for Mac FortiClient.	var-string	Maximum length: 1023							
name	Portal name.	string	Maximum length: 35							
os-check	Enable to let the FortiGate decide action based on client OS.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable setting.</td></tr><tr><td>disable</td><td>Disable setting.</td></tr></table>	Option	Description	enable	Enable setting.	disable	Disable setting.			
	Option	Description								
	enable	Enable setting.								
disable	Disable setting.									
prefer-ipv6-dns	Prefer to query IPv6 DNS server first if enabled.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable setting.</td></tr><tr><td>disable</td><td>Disable setting.</td></tr></table>	Option	Description	enable	Enable setting.	disable	Disable setting.			
	Option	Description								
	enable	Enable setting.								
disable	Disable setting.									
redir-url	Client login redirect URL.	var-string	Maximum length: 255							
rewrite-ip-uri-ui	Rewrite contents for URI contains IP and /ui/ (default = disable).	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable contents rewrite for URI contains "IP-address/ui/".</td></tr><tr><td>disable</td><td>Disable contents rewrite for URI contains "IP-address/ui/".</td></tr></table>	Option	Description	enable	Enable contents rewrite for URI contains "IP-address/ui/".	disable	Disable contents rewrite for URI contains "IP-address/ui/".			
	Option	Description								
	enable	Enable contents rewrite for URI contains "IP-address/ui/".								
disable	Disable contents rewrite for URI contains "IP-address/ui/".									
save-password	Enable/disable FortiClient saving the user's password.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable setting.</td></tr><tr><td>disable</td><td>Disable setting.</td></tr></table>	Option	Description	enable	Enable setting.	disable	Disable setting.			
	Option	Description								
	enable	Enable setting.								
disable	Disable setting.									
service-restriction	Enable/disable tunnel service restriction.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable setting.</td></tr><tr><td>disable</td><td>Disable setting.</td></tr></table>	Option	Description	enable	Enable setting.	disable	Disable setting.			
	Option	Description								
	enable	Enable setting.								
disable	Disable setting.									

Parameter	Description	Type	Size	Default								
skip-check-for-browser	Enable to skip host check for browser support.	option	-	enable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable setting.</td></tr><tr><td>disable</td><td>Disable setting.</td></tr></table>	Option	Description	enable	Enable setting.	disable	Disable setting.					
	Option	Description										
	enable	Enable setting.										
disable	Disable setting.											
skip-check-for-unsupported-os	Enable to skip host check if client OS does not support it.	option	-	enable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable setting.</td></tr><tr><td>disable</td><td>Disable setting.</td></tr></table>	Option	Description	enable	Enable setting.	disable	Disable setting.					
	Option	Description										
	enable	Enable setting.										
disable	Disable setting.											
smb-max-version	SMB maximum client protocol version.	option	-	smbv3								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>smbv1</td><td>SMB version 1.</td></tr><tr><td>smbv2</td><td>SMB version 2.</td></tr><tr><td>smbv3</td><td>SMB version 3.</td></tr></table>	Option	Description	smbv1	SMB version 1.	smbv2	SMB version 2.	smbv3	SMB version 3.			
	Option	Description										
	smbv1	SMB version 1.										
	smbv2	SMB version 2.										
smbv3	SMB version 3.											
smb-min-version	SMB minimum client protocol version.	option	-	smbv2								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>smbv1</td><td>SMB version 1.</td></tr><tr><td>smbv2</td><td>SMB version 2.</td></tr><tr><td>smbv3</td><td>SMB version 3.</td></tr></table>	Option	Description	smbv1	SMB version 1.	smbv2	SMB version 2.	smbv3	SMB version 3.			
	Option	Description										
	smbv1	SMB version 1.										
	smbv2	SMB version 2.										
smbv3	SMB version 3.											
smb-ntlmv1-auth	Enable support of NTLMv1 for Samba authentication.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable setting.</td></tr><tr><td>disable</td><td>Disable setting.</td></tr></table>	Option	Description	enable	Enable setting.	disable	Disable setting.					
	Option	Description										
	enable	Enable setting.										
disable	Disable setting.											
smbv1	SMB version 1.	option	-	disable								

Parameter	Description	Type	Size	Default
	Option Description			
	<i>enable</i>	enable		
	<i>disable</i>	disable		
split-tunneling	Enable/disable IPv4 split tunneling.	option	-	enable
	Option Description			
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		
split-tunneling-routing-address <name>	IPv4 SSL-VPN tunnel mode firewall address objects that override firewall policy destination addresses to control split-tunneling access. Address name.	string	Maximum length: 79	
split-tunneling-routing-negate	Enable to negate split tunneling routing address.	option	-	disable
	Option Description			
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		
theme	Web portal color scheme.	option	-	neutrino
	Option Description			
	<i>jade</i>	Jade theme.		
	<i>neutrino</i>	Neutrino theme.		
	<i>mariner</i>	Mariner theme.		
	<i>graphite</i>	Graphite theme.		
	<i>melongene</i>	Melongene theme.		
	<i>dark-matter</i>	Dark Matter theme.		
	<i>onyx</i>	Onyx theme.		
	<i>eclipse</i>	Eclipse theme.		
tunnel-mode	Enable/disable IPv4 SSL-VPN tunnel mode.	option	-	disable
	Option Description			
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		

Parameter	Description	Type	Size	Default
use-sdwan	Use SD-WAN rules to get output interface.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		
user-bookmark	Enable to allow web portal users to create their own bookmarks.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		
user-group-bookmark	Enable to allow web portal users to create bookmarks for all users in the same user group.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		
web-mode	Enable/disable SSL-VPN web mode.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		
windows-forticlient-download-url	Download URL for Windows FortiClient.	var-string	Maximum length: 1023	
wins-server1	IPv4 WINS server 1.	ipv4-address	Not Specified	0.0.0.0
wins-server2	IPv4 WINS server 1.	ipv4-address	Not Specified	0.0.0.0

config bookmark-group

Parameter	Description	Type	Size	Default
name	Bookmark group name.	string	Maximum length: 35	

config bookmarks

Parameter	Description	Type	Size	Default																		
additional-params	Additional parameters.	var-string	Maximum length: 128																			
apptype	Application type.	option	-	web																		
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>ftp</td><td>FTP.</td></tr><tr><td>rdp</td><td>RDP.</td></tr><tr><td>sftp</td><td>SFTP.</td></tr><tr><td>smb</td><td>SMB/CIFS.</td></tr><tr><td>ssh</td><td>SSH.</td></tr><tr><td>telnet</td><td>Telnet.</td></tr><tr><td>vnc</td><td>VNC.</td></tr><tr><td>web</td><td>HTTP/HTTPS.</td></tr></table>	Option	Description	ftp	FTP.	rdp	RDP.	sftp	SFTP.	smb	SMB/CIFS.	ssh	SSH.	telnet	Telnet.	vnc	VNC.	web	HTTP/HTTPS.			
	Option	Description																				
	ftp	FTP.																				
	rdp	RDP.																				
	sftp	SFTP.																				
	smb	SMB/CIFS.																				
	ssh	SSH.																				
	telnet	Telnet.																				
	vnc	VNC.																				
web	HTTP/HTTPS.																					
color-depth	Color depth per pixel.	option	-	16																		
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>32</td><td>32bits per pixel.</td></tr><tr><td>16</td><td>16bits per pixel.</td></tr><tr><td>8</td><td>8bits per pixel.</td></tr></table>	Option	Description	32	32bits per pixel.	16	16bits per pixel.	8	8bits per pixel.													
	Option	Description																				
	32	32bits per pixel.																				
	16	16bits per pixel.																				
8	8bits per pixel.																					
description	Description.	var-string	Maximum length: 128																			
domain	Login domain.	var-string	Maximum length: 128																			
folder	Network shared file folder parameter.	var-string	Maximum length: 128																			
height	Screen height (range from 0 - 65535, default = 0).	integer	Minimum value: 0 0 Maximum value: 65535																			
host	Host name/IP parameter.	var-string	Maximum length: 128																			
keyboard-layout	Keyboard layout.	option	-	en-us																		

Parameter	Description	Type	Size	Default

Option	Description
<i>ar-101</i>	Arabic (101).
<i>ar-102</i>	Arabic (102).
<i>ar-102-azerty</i>	Arabic (102) AZERTY.
<i>can-mul</i>	Canadian Multilingual Standard.
<i>cz</i>	Czech.
<i>cz-qwerty</i>	Czech (QWERTY).
<i>cz-pr</i>	Czech Programmers.
<i>da</i>	Danish.
<i>nl</i>	Dutch.
<i>de</i>	German.
<i>de-ch</i>	German, Switzerland.
<i>de-ibm</i>	German (IBM).
<i>en-uk</i>	English, United Kingdom.
<i>en-uk-ext</i>	English, United Kingdom Extended.
<i>en-us</i>	English, United States.
<i>en-us-dvorak</i>	English, United States-Dvorak.
<i>es</i>	Spanish.
<i>es-var</i>	Spanish Variation.
<i>fi</i>	Finnish.
<i>fi-sami</i>	Finnish with Sami.
<i>fr</i>	French.
<i>fr-apple</i>	French, Apple.
<i>fr-ca</i>	French, Canada.
<i>fr-ch</i>	French, Switzerland.
<i>fr-be</i>	French, Belgium.
<i>hr</i>	Croatian.
<i>hu</i>	Hungarian.
<i>hu-101</i>	Hungarian 101-Key.
<i>it</i>	Italian.

Parameter	Description	Type	Size	Default

Option	Description
<i>it-142</i>	Italian (142).
<i>ja</i>	Japanese.
<i>ko</i>	Korean.
<i>la-am</i>	Latin American.
<i>lt</i>	Lithuanian.
<i>lt-ibm</i>	Lithuanian IBM.
<i>lt-std</i>	Lithuanian Standard.
<i>lav-std</i>	Latvian (Standard).
<i>lav-leg</i>	Latvian (Legacy).
<i>mk</i>	Macedonian (FYROM).
<i>mk-std</i>	Macedonia (FYROM) - Standard.
<i>no</i>	Norwegian.
<i>no-sami</i>	Norwegian with Sami.
<i>pol-214</i>	Polish (214).
<i>pol-pr</i>	Polish (Programmers).
<i>pt</i>	Portuguese.
<i>pt-br</i>	Portuguese (Brazilian ABNT).
<i>pt-br-abnt2</i>	Portuguese (Brazilian ABNT2).
<i>ru</i>	Russian.
<i>ru-mne</i>	Russian - Mnemonic.
<i>ru-t</i>	Russian (Typewriter).
<i>sl</i>	Slovenian.
<i>sv</i>	Swedish.
<i>sv-sami</i>	Swedish with Sami.
<i>tuk</i>	Turkmen.
<i>tur-f</i>	Turkish F.
<i>tur-q</i>	Turkish Q.
<i>zh-sym-sg-us</i>	Chinese (Simplified, Singapore) - US keyboard.
<i>zh-sym-us</i>	Chinese (Simplified) - US Keyboard.

Parameter	Description	Type	Size	Default										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>zh-tr-hk</td><td>Chinese (Traditional, Hong Kong S.A.R.).</td></tr><tr><td>zh-tr-mo</td><td>Chinese (Traditional Macao S.A.R.) - US Keyboard.</td></tr><tr><td>zh-tr-us</td><td>Chinese (Traditional) - US keyboard.</td></tr></table>	Option	Description	zh-tr-hk	Chinese (Traditional, Hong Kong S.A.R.).	zh-tr-mo	Chinese (Traditional Macao S.A.R.) - US Keyboard.	zh-tr-us	Chinese (Traditional) - US keyboard.					
	Option	Description												
	zh-tr-hk	Chinese (Traditional, Hong Kong S.A.R.).												
	zh-tr-mo	Chinese (Traditional Macao S.A.R.) - US Keyboard.												
zh-tr-us	Chinese (Traditional) - US keyboard.													
load-balancing-info	The load balancing information or cookie which should be provided to the connection broker.	var-string	Maximum length: 511											
logon-password	Logon password.	password	Not Specified											
logon-user	Logon user.	var-string	Maximum length: 35											
name	Bookmark name.	string	Maximum length: 35											
port	Remote port.	integer	Minimum value: 0 Maximum value: 65535											
preconnection-blob	An arbitrary string which identifies the RDP source.	var-string	Maximum length: 511											
preconnection-id	The numeric ID of the RDP source (0-4294967295).	integer	Minimum value: 0 Maximum value: 4294967295											
restricted-admin	Enable/disable restricted admin mode for RDP.	option	-	disable										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable restricted admin mode for RDP.</td></tr><tr><td>disable</td><td>Disable restricted admin mode for RDP.</td></tr></table>	Option	Description	enable	Enable restricted admin mode for RDP.	disable	Disable restricted admin mode for RDP.							
	Option	Description												
	enable	Enable restricted admin mode for RDP.												
disable	Disable restricted admin mode for RDP.													
security	Security mode for RDP connection.	option	-	rdp										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>any</td><td>Allow the server to choose the type of security.</td></tr><tr><td>rdp</td><td>Standard RDP encryption.</td></tr><tr><td>nla</td><td>Network Level Authentication.</td></tr><tr><td>tls</td><td>TLS encryption.</td></tr></table>	Option	Description	any	Allow the server to choose the type of security.	rdp	Standard RDP encryption.	nla	Network Level Authentication.	tls	TLS encryption.			
	Option	Description												
	any	Allow the server to choose the type of security.												
	rdp	Standard RDP encryption.												
	nla	Network Level Authentication.												
tls	TLS encryption.													
send-preconnection-id	Enable/disable sending of preconnection ID.	option	-	disable										

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>enable</i>	Enable sending of preconnection ID.		
	<i>disable</i>	Disable sending of preconnection ID.		
sso	Single Sign-On.	option	-	disable
	Option	Description		
	<i>disable</i>	Disable SSO.		
	<i>static</i>	Static SSO.		
	<i>auto</i>	Auto SSO.		
sso-credential	Single sign-on credentials.	option	-	sslvpn-login
	Option	Description		
	<i>sslvpn-login</i>	SSL-VPN login.		
	<i>alternative</i>	Alternative.		
sso-credential-sent-once	Single sign-on credentials are only sent once to remote server.	option	-	disable
	Option	Description		
	<i>enable</i>	Single sign-on credentials are only sent once to remote server.		
	<i>disable</i>	Single sign-on credentials are sent to remote server for every HTTP request.		
sso-password	SSO password.	password	Not Specified	
sso-username	SSO user name.	var-string	Maximum length: 35	
url	URL parameter.	var-string	Maximum length: 128	
vnc-keyboard-layout	Keyboard layout.	option	-	default
	Option	Description		
	<i>default</i>	Default.		
	<i>da</i>	Danish.		
	<i>nl</i>	Dutch.		

Parameter	Description	Type	Size	Default																																				
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>en-uk</i></td><td>English, United Kingdom.</td></tr><tr><td><i>en-uk-ext</i></td><td>English, United Kingdom Extended.</td></tr><tr><td><i>fi</i></td><td>Finnish.</td></tr><tr><td><i>fr</i></td><td>French.</td></tr><tr><td><i>fr-be</i></td><td>French, Belgium.</td></tr><tr><td><i>fr-ca-mul</i></td><td>French, Canadian Multilingual Std.</td></tr><tr><td><i>de</i></td><td>German.</td></tr><tr><td><i>de-ch</i></td><td>German, Switzerland.</td></tr><tr><td><i>it</i></td><td>Italian.</td></tr><tr><td><i>it-142</i></td><td>Italian (142).</td></tr><tr><td><i>pt</i></td><td>Portuguese.</td></tr><tr><td><i>pt-br-abnt2</i></td><td>Portuguese (Brazilian ABNT2).</td></tr><tr><td><i>no</i></td><td>Norwegian.</td></tr><tr><td><i>gd</i></td><td>Scottish Gaelic.</td></tr><tr><td><i>es</i></td><td>Spanish.</td></tr><tr><td><i>sv</i></td><td>Swedish.</td></tr><tr><td><i>us-intl</i></td><td>United States-International.</td></tr></table>	Option	Description	<i>en-uk</i>	English, United Kingdom.	<i>en-uk-ext</i>	English, United Kingdom Extended.	<i>fi</i>	Finnish.	<i>fr</i>	French.	<i>fr-be</i>	French, Belgium.	<i>fr-ca-mul</i>	French, Canadian Multilingual Std.	<i>de</i>	German.	<i>de-ch</i>	German, Switzerland.	<i>it</i>	Italian.	<i>it-142</i>	Italian (142).	<i>pt</i>	Portuguese.	<i>pt-br-abnt2</i>	Portuguese (Brazilian ABNT2).	<i>no</i>	Norwegian.	<i>gd</i>	Scottish Gaelic.	<i>es</i>	Spanish.	<i>sv</i>	Swedish.	<i>us-intl</i>	United States-International.			
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	<i>sv</i>	Swedish.																																						
<i>us-intl</i>	United States-International.																																							
width	Screen width (range from 0 - 65535, default = 0).	integer	Minimum value: 0 0 Maximum value: 65535																																					

config form-data

Parameter	Description	Type	Size	Default
name	Name.	string	Maximum length: 35	
value	Value.	var-string	Maximum length: 63	

config mac-addr-check-rule

Parameter	Description	Type	Size	Default
mac-addr-list <addr>	Client MAC address list. Client MAC address.	mac- address	Not Specified	
mac-addr- mask	Client MAC address mask.	integer	Minimum value: 1 Maximum value: 48	48
name	Client MAC address check rule name.	string	Maximum length: 35	

config os-check-list

Parameter	Description	Type	Size	Default								
action	OS check options.	option	-	allow								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>deny</td><td>Deny all OS versions.</td></tr><tr><td>allow</td><td>Allow any OS version.</td></tr><tr><td>check-up-to-date</td><td>Verify OS is up-to-date.</td></tr></table>	Option	Description	deny	Deny all OS versions.	allow	Allow any OS version.	check-up-to-date	Verify OS is up-to-date.			
	Option	Description										
	deny	Deny all OS versions.										
	allow	Allow any OS version.										
check-up-to-date	Verify OS is up-to-date.											
latest-patch-level	Latest OS patch level.	user	Not Specified	0								
minor-version	Minor version number.	integer	Minimum value: 0 Maximum value: 65535	0								
name	Name.	string	Maximum length: 35									
tolerance	OS patch level tolerance.	integer	Minimum value: 0 Maximum value: 65535	0								

config split-dns

Parameter	Description	Type	Size	Default
dns-server1	DNS server 1.	ipv4-address	Not Specified	0.0.0.0
dns-server2	DNS server 2.	ipv4-address	Not Specified	0.0.0.0
domains	Split DNS domains used for SSL-VPN clients separated by comma.	var-string	Maximum length: 1024	
id	ID.	integer	Minimum value: 0 Maximum value: 4294967294	
ipv6-dns-server1	IPv6 DNS server 1.	ipv6-address	Not Specified	::
ipv6-dns-server2	IPv6 DNS server 2.	ipv6-address	Not Specified	::

config vpn ssl web realm

Realm.

```
config vpn ssl web realm
  Description: Realm.
  edit <url-path>
    set login-page {var-string}
    set max-concurrent-user {integer}
    set nas-ip {ipv4-address}
    set radius-port {integer}
    set radius-server {string}
    set virtual-host {var-string}
    set virtual-host-only [enable|disable]
    set virtual-host-server-cert {string}
  next
end
```

config vpn ssl web realm

Parameter	Description	Type	Size	Default
login-page	Replacement HTML for SSL-VPN login page.	var-string	Maximum length: 32768	

Parameter	Description	Type	Size	Default						
max-concurrent-user	Maximum concurrent users (0 - 65535, 0 means unlimited).	integer	Minimum value: 0 Maximum value: 65535	0						
nas-ip	IP address used as a NAS-IP to communicate with the RADIUS server.	ipv4-address	Not Specified	0.0.0.0						
radius-port	RADIUS service port number (0 - 65535, 0 means user.radius.radius-port).	integer	Minimum value: 0 Maximum value: 65535	0						
radius-server	RADIUS server associated with realm.	string	Maximum length: 35							
url-path	URL path to access SSL-VPN login page.	string	Maximum length: 35							
virtual-host	Virtual host name for realm.	var-string	Maximum length: 255							
virtual-host-only	Enable/disable enforcement of virtual host method for SSL-VPN client access.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable setting.</td></tr><tr><td>disable</td><td>Disable setting.</td></tr></table>				Option	Description	enable	Enable setting.	disable	Disable setting.
	Option	Description								
enable	Enable setting.									
disable	Disable setting.									
virtual-host-server-cert	Name of the server certificate to used for this realm.	string	Maximum length: 35							

config vpn ssl web user-bookmark

Configure SSL-VPN user bookmark.

```

config vpn ssl web user-bookmark
  Description: Configure SSL-VPN user bookmark.
  edit <name>
    config bookmarks
      Description: Bookmark table.
      edit <name>
        set additional-params {var-string}
        set apptype [ftp|rdp|...]
        set color-depth [32|16|...]
        set description {var-string}

```

```

        set domain {var-string}
        set folder {var-string}
        config form-data
            Description: Form data.
            edit <name>
                set value {var-string}
            next
        end
        set height {integer}
        set host {var-string}
        set keyboard-layout [ar-101|ar-102|...]
        set load-balancing-info {var-string}
        set logon-password {password}
        set logon-user {var-string}
        set port {integer}
        set preconnection-blob {var-string}
        set preconnection-id {integer}
        set restricted-admin [enable|disable]
        set security [any|rdp|...]
        set send-preconnection-id [enable|disable]
        set sso [disable|static|...]
        set sso-credential [sslvpn-login|alternative]
        set sso-credential-sent-once [enable|disable]
        set sso-password {password}
        set sso-username {var-string}
        set url {var-string}
        set vnc-keyboard-layout [default|da|...]
        set width {integer}
    next
end
    set custom-lang {string}
next
end

```

config vpn ssl web user-bookmark

Parameter	Description	Type	Size	Default
custom-lang	Personal language.	string	Maximum length: 35	
name	User and group name.	string	Maximum length: 101	

config bookmarks

Parameter	Description	Type	Size	Default																		
additional-params	Additional parameters.	var-string	Maximum length: 128																			
apptype	Application type.	option	-	web																		
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>ftp</td><td>FTP.</td></tr><tr><td>rdp</td><td>RDP.</td></tr><tr><td>sftp</td><td>SFTP.</td></tr><tr><td>smb</td><td>SMB/CIFS.</td></tr><tr><td>ssh</td><td>SSH.</td></tr><tr><td>telnet</td><td>Telnet.</td></tr><tr><td>vnc</td><td>VNC.</td></tr><tr><td>web</td><td>HTTP/HTTPS.</td></tr></table>	Option	Description	ftp	FTP.	rdp	RDP.	sftp	SFTP.	smb	SMB/CIFS.	ssh	SSH.	telnet	Telnet.	vnc	VNC.	web	HTTP/HTTPS.			
	Option	Description																				
	ftp	FTP.																				
	rdp	RDP.																				
	sftp	SFTP.																				
	smb	SMB/CIFS.																				
	ssh	SSH.																				
	telnet	Telnet.																				
	vnc	VNC.																				
web	HTTP/HTTPS.																					
color-depth	Color depth per pixel.	option	-	16																		
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>32</td><td>32bits per pixel.</td></tr><tr><td>16</td><td>16bits per pixel.</td></tr><tr><td>8</td><td>8bits per pixel.</td></tr></table>	Option	Description	32	32bits per pixel.	16	16bits per pixel.	8	8bits per pixel.													
	Option	Description																				
	32	32bits per pixel.																				
	16	16bits per pixel.																				
	8	8bits per pixel.																				
description	Description.	var-string	Maximum length: 128																			
domain	Login domain.	var-string	Maximum length: 128																			
folder	Network shared file folder parameter.	var-string	Maximum length: 128																			
height	Screen height (range from 0 - 65535, default = 0).	integer	Minimum value: 0 0 Maximum value: 65535																			
host	Host name/IP parameter.	var-string	Maximum length: 128																			
keyboard-layout	Keyboard layout.	option	-	en-us																		

Parameter	Description	Type	Size	Default

Option	Description
<i>ar-101</i>	Arabic (101).
<i>ar-102</i>	Arabic (102).
<i>ar-102-azerty</i>	Arabic (102) AZERTY.
<i>can-mul</i>	Canadian Multilingual Standard.
<i>cz</i>	Czech.
<i>cz-qwerty</i>	Czech (QWERTY).
<i>cz-pr</i>	Czech Programmers.
<i>da</i>	Danish.
<i>nl</i>	Dutch.
<i>de</i>	German.
<i>de-ch</i>	German, Switzerland.
<i>de-ibm</i>	German (IBM).
<i>en-uk</i>	English, United Kingdom.
<i>en-uk-ext</i>	English, United Kingdom Extended.
<i>en-us</i>	English, United States.
<i>en-us-dvorak</i>	English, United States-Dvorak.
<i>es</i>	Spanish.
<i>es-var</i>	Spanish Variation.
<i>fi</i>	Finnish.
<i>fi-sami</i>	Finnish with Sami.
<i>fr</i>	French.
<i>fr-apple</i>	French, Apple.
<i>fr-ca</i>	French, Canada.
<i>fr-ch</i>	French, Switzerland.
<i>fr-be</i>	French, Belgium.
<i>hr</i>	Croatian.
<i>hu</i>	Hungarian.
<i>hu-101</i>	Hungarian 101-Key.
<i>it</i>	Italian.

Parameter	Description	Type	Size	Default

Option	Description
<i>it-142</i>	Italian (142).
<i>ja</i>	Japanese.
<i>ko</i>	Korean.
<i>la-am</i>	Latin American.
<i>lt</i>	Lithuanian.
<i>lt-ibm</i>	Lithuanian IBM.
<i>lt-std</i>	Lithuanian Standard.
<i>lav-std</i>	Latvian (Standard).
<i>lav-leg</i>	Latvian (Legacy).
<i>mk</i>	Macedonian (FYROM).
<i>mk-std</i>	Macedonia (FYROM) - Standard.
<i>no</i>	Norwegian.
<i>no-sami</i>	Norwegian with Sami.
<i>pol-214</i>	Polish (214).
<i>pol-pr</i>	Polish (Programmers).
<i>pt</i>	Portuguese.
<i>pt-br</i>	Portuguese (Brazilian ABNT).
<i>pt-br-abnt2</i>	Portuguese (Brazilian ABNT2).
<i>ru</i>	Russian.
<i>ru-mne</i>	Russian - Mnemonic.
<i>ru-t</i>	Russian (Typewriter).
<i>sl</i>	Slovenian.
<i>sv</i>	Swedish.
<i>sv-sami</i>	Swedish with Sami.
<i>tuk</i>	Turkmen.
<i>tur-f</i>	Turkish F.
<i>tur-q</i>	Turkish Q.
<i>zh-sym-sg-us</i>	Chinese (Simplified, Singapore) - US keyboard.
<i>zh-sym-us</i>	Chinese (Simplified) - US Keyboard.

Parameter	Description	Type	Size	Default										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>zh-tr-hk</td><td>Chinese (Traditional, Hong Kong S.A.R.).</td></tr><tr><td>zh-tr-mo</td><td>Chinese (Traditional Macao S.A.R.) - US Keyboard.</td></tr><tr><td>zh-tr-us</td><td>Chinese (Traditional) - US keyboard.</td></tr></table>	Option	Description	zh-tr-hk	Chinese (Traditional, Hong Kong S.A.R.).	zh-tr-mo	Chinese (Traditional Macao S.A.R.) - US Keyboard.	zh-tr-us	Chinese (Traditional) - US keyboard.					
	Option	Description												
	zh-tr-hk	Chinese (Traditional, Hong Kong S.A.R.).												
	zh-tr-mo	Chinese (Traditional Macao S.A.R.) - US Keyboard.												
zh-tr-us	Chinese (Traditional) - US keyboard.													
load-balancing-info	The load balancing information or cookie which should be provided to the connection broker.	var-string	Maximum length: 511											
logon-password	Logon password.	password	Not Specified											
logon-user	Logon user.	var-string	Maximum length: 35											
name	Bookmark name.	string	Maximum length: 35											
port	Remote port.	integer	Minimum value: 0 Maximum value: 65535											
preconnection-blob	An arbitrary string which identifies the RDP source.	var-string	Maximum length: 511											
preconnection-id	The numeric ID of the RDP source (0-4294967295).	integer	Minimum value: 0 Maximum value: 4294967295											
restricted-admin	Enable/disable restricted admin mode for RDP.	option	-	disable										
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	any	Allow the server to choose the type of security.												
	rdp	Standard RDP encryption.												
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tls	TLS encryption.													
send-preconnection-id	Enable/disable sending of preconnection ID.	option	-	disable										

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>enable</i>	Enable sending of preconnection ID.		
	<i>disable</i>	Disable sending of preconnection ID.		
sso	Single Sign-On.	option	-	disable
	Option	Description		
	<i>disable</i>	Disable SSO.		
	<i>static</i>	Static SSO.		
	<i>auto</i>	Auto SSO.		
sso-credential	Single sign-on credentials.	option	-	sslvpn-login
	Option	Description		
	<i>sslvpn-login</i>	SSL-VPN login.		
	<i>alternative</i>	Alternative.		
sso-credential-sent-once	Single sign-on credentials are only sent once to remote server.	option	-	disable
	Option	Description		
	<i>enable</i>	Single sign-on credentials are only sent once to remote server.		
	<i>disable</i>	Single sign-on credentials are sent to remote server for every HTTP request.		
sso-password	SSO password.	password	Not Specified	
sso-username	SSO user name.	var-string	Maximum length: 35	
url	URL parameter.	var-string	Maximum length: 128	
vnc-keyboard-layout	Keyboard layout.	option	-	default
	Option	Description		
	<i>default</i>	Default.		
	<i>da</i>	Danish.		
	<i>nl</i>	Dutch.		

Parameter	Description	Type	Size	Default																																				
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	<i>gd</i>	Scottish Gaelic.																																						
	<i>es</i>	Spanish.																																						
	<i>sv</i>	Swedish.																																						
<i>us-intl</i>	United States-International.																																							
width	Screen width (range from 0 - 65535, default = 0).	integer	Minimum value: 0 0 Maximum value: 65535																																					

config form-data

Parameter	Description	Type	Size	Default
name	Name.	string	Maximum length: 35	
value	Value.	var-string	Maximum length: 63	

config vpn ssl web user-group-bookmark

Configure SSL-VPN user group bookmark.

```

config vpn ssl web user-group-bookmark
    Description: Configure SSL-VPN user group bookmark.
    edit <name>
        config bookmarks
            Description: Bookmark table.
            edit <name>
                set additional-params {var-string}
                set apptype [ftp|rdp|...]
                set color-depth [32|16|...]
                set description {var-string}
                set domain {var-string}
                set folder {var-string}
                config form-data
                    Description: Form data.
                    edit <name>
                        set value {var-string}
                    next
                end
                set height {integer}
                set host {var-string}
                set keyboard-layout [ar-101|ar-102|...]
                set load-balancing-info {var-string}
                set logon-password {password}
                set logon-user {var-string}
                set port {integer}
                set preconnection-blob {var-string}
                set preconnection-id {integer}
                set restricted-admin [enable|disable]
                set security [any|rdp|...]
                set send-preconnection-id [enable|disable]
                set sso [disable|static|...]
                set sso-credential [sslvpn-login|alternative]
                set sso-credential-sent-once [enable|disable]
                set sso-password {password}
                set sso-username {var-string}
                set url {var-string}
                set vnc-keyboard-layout [default|da|...]
                set width {integer}
            next
        end
    next
end

```

config vpn ssl web user-group-bookmark

Parameter	Description	Type	Size	Default
name	Group name.	string	Maximum length: 64	

config bookmarks

Parameter	Description	Type	Size	Default																		
additional-params	Additional parameters.	var-string	Maximum length: 128																			
apptype	Application type.	option	-	web																		
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>ftp</td><td>FTP.</td></tr><tr><td>rdp</td><td>RDP.</td></tr><tr><td>sftp</td><td>SFTP.</td></tr><tr><td>smb</td><td>SMB/CIFS.</td></tr><tr><td>ssh</td><td>SSH.</td></tr><tr><td>telnet</td><td>Telnet.</td></tr><tr><td>vnc</td><td>VNC.</td></tr><tr><td>web</td><td>HTTP/HTTPS.</td></tr></table>	Option	Description	ftp	FTP.	rdp	RDP.	sftp	SFTP.	smb	SMB/CIFS.	ssh	SSH.	telnet	Telnet.	vnc	VNC.	web	HTTP/HTTPS.			
	Option	Description																				
	ftp	FTP.																				
	rdp	RDP.																				
	sftp	SFTP.																				
	smb	SMB/CIFS.																				
	ssh	SSH.																				
	telnet	Telnet.																				
	vnc	VNC.																				
web	HTTP/HTTPS.																					
color-depth	Color depth per pixel.	option	-	16																		
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>32</td><td>32bits per pixel.</td></tr><tr><td>16</td><td>16bits per pixel.</td></tr><tr><td>8</td><td>8bits per pixel.</td></tr></table>	Option	Description	32	32bits per pixel.	16	16bits per pixel.	8	8bits per pixel.													
	Option	Description																				
	32	32bits per pixel.																				
	16	16bits per pixel.																				
8	8bits per pixel.																					
description	Description.	var-string	Maximum length: 128																			
domain	Login domain.	var-string	Maximum length: 128																			
folder	Network shared file folder parameter.	var-string	Maximum length: 128																			
height	Screen height (range from 0 - 65535, default = 0).	integer	Minimum value: 0 0 Maximum value: 65535																			
host	Host name/IP parameter.	var-string	Maximum length: 128																			
keyboard-layout	Keyboard layout.	option	-	en-us																		

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>ar-101</i>	Arabic (101).		
	<i>ar-102</i>	Arabic (102).		
	<i>ar-102-azerty</i>	Arabic (102) AZERTY.		
	<i>can-mul</i>	Canadian Multilingual Standard.		
	<i>cz</i>	Czech.		
	<i>cz-qwerty</i>	Czech (QWERTY).		
	<i>cz-pr</i>	Czech Programmers.		
	<i>da</i>	Danish.		
	<i>nl</i>	Dutch.		
	<i>de</i>	German.		
	<i>de-ch</i>	German, Switzerland.		
	<i>de-ibm</i>	German (IBM).		
	<i>en-uk</i>	English, United Kingdom.		
	<i>en-uk-ext</i>	English, United Kingdom Extended.		
	<i>en-us</i>	English, United States.		
	<i>en-us-dvorak</i>	English, United States-Dvorak.		
	<i>es</i>	Spanish.		
	<i>es-var</i>	Spanish Variation.		
	<i>fi</i>	Finnish.		
	<i>fi-sami</i>	Finnish with Sami.		
	<i>fr</i>	French.		
	<i>fr-apple</i>	French, Apple.		
	<i>fr-ca</i>	French, Canada.		
	<i>fr-ch</i>	French, Switzerland.		
	<i>fr-be</i>	French, Belgium.		
	<i>hr</i>	Croatian.		
	<i>hu</i>	Hungarian.		
	<i>hu-101</i>	Hungarian 101-Key.		
	<i>it</i>	Italian.		

Parameter	Description	Type	Size	Default

Option	Description
<i>it-142</i>	Italian (142).
<i>ja</i>	Japanese.
<i>ko</i>	Korean.
<i>la-am</i>	Latin American.
<i>lt</i>	Lithuanian.
<i>lt-ibm</i>	Lithuanian IBM.
<i>lt-std</i>	Lithuanian Standard.
<i>lav-std</i>	Latvian (Standard).
<i>lav-leg</i>	Latvian (Legacy).
<i>mk</i>	Macedonian (FYROM).
<i>mk-std</i>	Macedonia (FYROM) - Standard.
<i>no</i>	Norwegian.
<i>no-sami</i>	Norwegian with Sami.
<i>pol-214</i>	Polish (214).
<i>pol-pr</i>	Polish (Programmers).
<i>pt</i>	Portuguese.
<i>pt-br</i>	Portuguese (Brazilian ABNT).
<i>pt-br-abnt2</i>	Portuguese (Brazilian ABNT2).
<i>ru</i>	Russian.
<i>ru-mne</i>	Russian - Mnemonic.
<i>ru-t</i>	Russian (Typewriter).
<i>sl</i>	Slovenian.
<i>sv</i>	Swedish.
<i>sv-sami</i>	Swedish with Sami.
<i>tuk</i>	Turkmen.
<i>tur-f</i>	Turkish F.
<i>tur-q</i>	Turkish Q.
<i>zh-sym-sg-us</i>	Chinese (Simplified, Singapore) - US keyboard.
<i>zh-sym-us</i>	Chinese (Simplified) - US Keyboard.

Parameter	Description	Type	Size	Default										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>zh-tr-hk</td><td>Chinese (Traditional, Hong Kong S.A.R.).</td></tr><tr><td>zh-tr-mo</td><td>Chinese (Traditional Macao S.A.R.) - US Keyboard.</td></tr><tr><td>zh-tr-us</td><td>Chinese (Traditional) - US keyboard.</td></tr></table>	Option	Description	zh-tr-hk	Chinese (Traditional, Hong Kong S.A.R.).	zh-tr-mo	Chinese (Traditional Macao S.A.R.) - US Keyboard.	zh-tr-us	Chinese (Traditional) - US keyboard.					
	Option	Description												
	zh-tr-hk	Chinese (Traditional, Hong Kong S.A.R.).												
	zh-tr-mo	Chinese (Traditional Macao S.A.R.) - US Keyboard.												
zh-tr-us	Chinese (Traditional) - US keyboard.													
load-balancing-info	The load balancing information or cookie which should be provided to the connection broker.	var-string	Maximum length: 511											
logon-password	Logon password.	password	Not Specified											
logon-user	Logon user.	var-string	Maximum length: 35											
name	Bookmark name.	string	Maximum length: 35											
port	Remote port.	integer	Minimum value: 0 Maximum value: 65535											
preconnection-blob	An arbitrary string which identifies the RDP source.	var-string	Maximum length: 511											
preconnection-id	The numeric ID of the RDP source (0-4294967295).	integer	Minimum value: 0 Maximum value: 4294967295											
restricted-admin	Enable/disable restricted admin mode for RDP.	option	-	disable										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable restricted admin mode for RDP.</td></tr><tr><td>disable</td><td>Disable restricted admin mode for RDP.</td></tr></table>	Option	Description	enable	Enable restricted admin mode for RDP.	disable	Disable restricted admin mode for RDP.							
	Option	Description												
	enable	Enable restricted admin mode for RDP.												
disable	Disable restricted admin mode for RDP.													
security	Security mode for RDP connection.	option	-	rdp										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>any</td><td>Allow the server to choose the type of security.</td></tr><tr><td>rdp</td><td>Standard RDP encryption.</td></tr><tr><td>nla</td><td>Network Level Authentication.</td></tr><tr><td>tls</td><td>TLS encryption.</td></tr></table>	Option	Description	any	Allow the server to choose the type of security.	rdp	Standard RDP encryption.	nla	Network Level Authentication.	tls	TLS encryption.			
	Option	Description												
	any	Allow the server to choose the type of security.												
	rdp	Standard RDP encryption.												
	nla	Network Level Authentication.												
tls	TLS encryption.													
send-preconnection-id	Enable/disable sending of preconnection ID.	option	-	disable										

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>enable</i>	Enable sending of preconnection ID.		
	<i>disable</i>	Disable sending of preconnection ID.		
sso	Single Sign-On.	option	-	disable
	Option	Description		
	<i>disable</i>	Disable SSO.		
	<i>static</i>	Static SSO.		
	<i>auto</i>	Auto SSO.		
sso-credential	Single sign-on credentials.	option	-	sslvpn-login
	Option	Description		
	<i>sslvpn-login</i>	SSL-VPN login.		
	<i>alternative</i>	Alternative.		
sso-credential-sent-once	Single sign-on credentials are only sent once to remote server.	option	-	disable
	Option	Description		
	<i>enable</i>	Single sign-on credentials are only sent once to remote server.		
	<i>disable</i>	Single sign-on credentials are sent to remote server for every HTTP request.		
sso-password	SSO password.	password	Not Specified	
sso-username	SSO user name.	var-string	Maximum length: 35	
url	URL parameter.	var-string	Maximum length: 128	
vnc-keyboard-layout	Keyboard layout.	option	-	default
	Option	Description		
	<i>default</i>	Default.		
	<i>da</i>	Danish.		
	<i>nl</i>	Dutch.		

Parameter	Description	Type	Size	Default																																				
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>en-uk</i></td><td>English, United Kingdom.</td></tr><tr><td><i>en-uk-ext</i></td><td>English, United Kingdom Extended.</td></tr><tr><td><i>fi</i></td><td>Finnish.</td></tr><tr><td><i>fr</i></td><td>French.</td></tr><tr><td><i>fr-be</i></td><td>French, Belgium.</td></tr><tr><td><i>fr-ca-mul</i></td><td>French, Canadian Multilingual Std.</td></tr><tr><td><i>de</i></td><td>German.</td></tr><tr><td><i>de-ch</i></td><td>German, Switzerland.</td></tr><tr><td><i>it</i></td><td>Italian.</td></tr><tr><td><i>it-142</i></td><td>Italian (142).</td></tr><tr><td><i>pt</i></td><td>Portuguese.</td></tr><tr><td><i>pt-br-abnt2</i></td><td>Portuguese (Brazilian ABNT2).</td></tr><tr><td><i>no</i></td><td>Norwegian.</td></tr><tr><td><i>gd</i></td><td>Scottish Gaelic.</td></tr><tr><td><i>es</i></td><td>Spanish.</td></tr><tr><td><i>sv</i></td><td>Swedish.</td></tr><tr><td><i>us-intl</i></td><td>United States-International.</td></tr></table>	Option	Description	<i>en-uk</i>	English, United Kingdom.	<i>en-uk-ext</i>	English, United Kingdom Extended.	<i>fi</i>	Finnish.	<i>fr</i>	French.	<i>fr-be</i>	French, Belgium.	<i>fr-ca-mul</i>	French, Canadian Multilingual Std.	<i>de</i>	German.	<i>de-ch</i>	German, Switzerland.	<i>it</i>	Italian.	<i>it-142</i>	Italian (142).	<i>pt</i>	Portuguese.	<i>pt-br-abnt2</i>	Portuguese (Brazilian ABNT2).	<i>no</i>	Norwegian.	<i>gd</i>	Scottish Gaelic.	<i>es</i>	Spanish.	<i>sv</i>	Swedish.	<i>us-intl</i>	United States-International.			
	Option	Description																																						
	<i>en-uk</i>	English, United Kingdom.																																						
	<i>en-uk-ext</i>	English, United Kingdom Extended.																																						
	<i>fi</i>	Finnish.																																						
	<i>fr</i>	French.																																						
	<i>fr-be</i>	French, Belgium.																																						
	<i>fr-ca-mul</i>	French, Canadian Multilingual Std.																																						
	<i>de</i>	German.																																						
	<i>de-ch</i>	German, Switzerland.																																						
	<i>it</i>	Italian.																																						
	<i>it-142</i>	Italian (142).																																						
	<i>pt</i>	Portuguese.																																						
	<i>pt-br-abnt2</i>	Portuguese (Brazilian ABNT2).																																						
	<i>no</i>	Norwegian.																																						
	<i>gd</i>	Scottish Gaelic.																																						
	<i>es</i>	Spanish.																																						
<i>sv</i>	Swedish.																																							
<i>us-intl</i>	United States-International.																																							
width	Screen width (range from 0 - 65535, default = 0).	integer	Minimum value: 0 0 Maximum value: 65535																																					

config form-data

Parameter	Description	Type	Size	Default
name	Name.	string	Maximum length: 35	
value	Value.	var-string	Maximum length: 63	

waf

This section includes syntax for the following commands:

- [config waf main-class on page 2004](#)
- [config waf profile on page 2004](#)
- [config waf signature on page 2029](#)
- [config waf sub-class on page 2029](#)

config waf main-class

Hidden table for datasource.

```
config waf main-class
  Description: Hidden table for datasource.
  edit <id>
    set name {string}
  next
end
```

config waf main-class

Parameter	Description	Type	Size	Default
id	Main signature class ID.	integer	Minimum value: 0 0 Maximum value: 4294967295	0
name	Main signature class name.	string	Maximum length: 127	

config waf profile

Configure Web application firewall configuration.

```
config waf profile
  Description: Configure Web application firewall configuration.
  edit <name>
    config address-list
      Description: Address block and allow lists.
      set blocked-address <name1>, <name2>, ...
```

```

    set blocked-log [enable|disable]
    set severity [high|medium|...]
    set status [enable|disable]
    set trusted-address <name1>, <name2>, ...
end
set comment {var-string}
config constraint
    Description: WAF HTTP protocol restrictions.
    config content-length
        Description: HTTP content length in request.
        set action [allow|block]
        set length {integer}
        set log [enable|disable]
        set severity [high|medium|...]
        set status [enable|disable]
    end
    config exception
        Description: HTTP constraint exception.
        edit <id>
            set address {string}
            set content-length [enable|disable]
            set header-length [enable|disable]
            set hostname [enable|disable]
            set line-length [enable|disable]
            set malformed [enable|disable]
            set max-cookie [enable|disable]
            set max-header-line [enable|disable]
            set max-range-segment [enable|disable]
            set max-url-param [enable|disable]
            set method [enable|disable]
            set param-length [enable|disable]
            set pattern {string}
            set regex [enable|disable]
            set url-param-length [enable|disable]
            set version [enable|disable]
        next
    end
    config header-length
        Description: HTTP header length in request.
        set action [allow|block]
        set length {integer}
        set log [enable|disable]
        set severity [high|medium|...]
        set status [enable|disable]
    end
    config hostname
        Description: Enable/disable hostname check.
        set action [allow|block]
        set log [enable|disable]
        set severity [high|medium|...]
        set status [enable|disable]
    end
end

```

```

config line-length
    Description: HTTP line length in request.
    set action [allow|block]
    set length {integer}
    set log [enable|disable]
    set severity [high|medium|...]
    set status [enable|disable]
end
config malformed
    Description: Enable/disable malformed HTTP request check.
    set action [allow|block]
    set log [enable|disable]
    set severity [high|medium|...]
    set status [enable|disable]
end
config max-cookie
    Description: Maximum number of cookies in HTTP request.
    set action [allow|block]
    set log [enable|disable]
    set max-cookie {integer}
    set severity [high|medium|...]
    set status [enable|disable]
end
config max-header-line
    Description: Maximum number of HTTP header line.
    set action [allow|block]
    set log [enable|disable]
    set max-header-line {integer}
    set severity [high|medium|...]
    set status [enable|disable]
end
config max-range-segment
    Description: Maximum number of range segments in HTTP range line.
    set action [allow|block]
    set log [enable|disable]
    set max-range-segment {integer}
    set severity [high|medium|...]
    set status [enable|disable]
end
config max-url-param
    Description: Maximum number of parameters in URL.
    set action [allow|block]
    set log [enable|disable]
    set max-url-param {integer}
    set severity [high|medium|...]
    set status [enable|disable]
end
config method
    Description: Enable/disable HTTP method check.
    set action [allow|block]
    set log [enable|disable]
    set severity [high|medium|...]

```

```

        set status [enable|disable]
    end
    config param-length
        Description: Maximum length of parameter in URL, HTTP POST request or HTTP body.
        set action [allow|block]
        set length {integer}
        set log [enable|disable]
        set severity [high|medium|...]
        set status [enable|disable]
    end
    config url-param-length
        Description: Maximum length of parameter in URL.
        set action [allow|block]
        set length {integer}
        set log [enable|disable]
        set severity [high|medium|...]
        set status [enable|disable]
    end
    config version
        Description: Enable/disable HTTP version check.
        set action [allow|block]
        set log [enable|disable]
        set severity [high|medium|...]
        set status [enable|disable]
    end
end
set extended-log [enable|disable]
set external [disable|enable]
config method
    Description: Method restriction.
    set default-allowed-methods {option1}, {option2}, ...
    set log [enable|disable]
    config method-policy
        Description: HTTP method policy.
        edit <id>
            set address {string}
            set allowed-methods {option1}, {option2}, ...
            set pattern {string}
            set regex [enable|disable]
        next
    end
    set severity [high|medium|...]
    set status [enable|disable]
end
config signature
    Description: WAF signatures.
    set credit-card-detection-threshold {integer}
    config custom-signature
        Description: Custom signature.
        edit <name>
            set action [allow|block|...]
            set case-sensitivity [disable|enable]
        end
    end
end

```

```

        set direction [request|response]
        set log [enable|disable]
        set pattern {string}
        set severity [high|medium|...]
        set status [enable|disable]
        set target {option1}, {option2}, ...
    next
end
set disabled-signature <id1>, <id2>, ...
set disabled-sub-class <id1>, <id2>, ...
config main-class
    Description: Main signature class. Read-only.
    edit <id>
        set action [allow|block|...]
        set log [enable|disable]
        set severity [high|medium|...]
        set status [enable|disable]
    next
end
end
config url-access
    Description: URL access list.
    edit <id>
        config access-pattern
            Description: URL access pattern.
            edit <id>
                set negate [enable|disable]
                set pattern {string}
                set regex [enable|disable]
                set srcaddr {string}
            next
        end
        set action [bypass|permit|...]
        set address {string}
        set log [enable|disable]
        set severity [high|medium|...]
    next
end
next
end
end

```

config waf profile

Parameter	Description	Type	Size	Default
comment	Comment.	var-string	Maximum length: 1023	
extended-log	Enable/disable extended logging.	option	-	disable

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		
external	Disable/Enable external HTTP Inspection.	option	-	disable
	Option	Description		
	<i>disable</i>	Disable external inspection.		
	<i>enable</i>	Enable external inspection.		
name	WAF Profile name.	string	Maximum length: 35	

config address-list

Parameter	Description	Type	Size	Default
blocked-address <name>	Blocked address. Address name.	string	Maximum length: 79	
blocked-log	Enable/disable logging on blocked addresses.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		
severity	Severity.	option	-	medium
	Option	Description		
	<i>high</i>	High severity.		
	<i>medium</i>	Medium severity.		
	<i>low</i>	Low severity.		
status	Status.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		
trusted-address <name>	Trusted address. Address name.	string	Maximum length: 79	

config content-length

Parameter	Description	Type	Size	Default
action	Action.	option	-	allow
	Option	Description		
	<i>allow</i>	Allow.		
	<i>block</i>	Block.		
length	Length of HTTP content in bytes (0 to 2147483647).	integer	Minimum value: 0 Maximum value: 2147483647	67108864
log	Enable/disable logging.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		
severity	Severity.	option	-	medium
	Option	Description		
	<i>high</i>	High severity.		
	<i>medium</i>	Medium severity.		
	<i>low</i>	Low severity.		
status	Enable/disable the constraint.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		

config exception

Parameter	Description	Type	Size	Default
address	Host address.	string	Maximum length: 79	
content-length	HTTP content length in request.	option	-	disable

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		
header-length	HTTP header length in request.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		
hostname	Enable/disable hostname check.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		
id	Exception ID.	integer	Minimum value: 0 0 Maximum value: 4294967295	
line-length	HTTP line length in request.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		
malformed	Enable/disable malformed HTTP request check.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		
max-cookie	Maximum number of cookies in HTTP request.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		

Parameter	Description	Type	Size	Default						
max-header-line	Maximum number of HTTP header line.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable setting.</td></tr><tr><td><i>disable</i></td><td>Disable setting.</td></tr></table>	Option	Description	<i>enable</i>	Enable setting.	<i>disable</i>	Disable setting.			
Option	Description									
<i>enable</i>	Enable setting.									
<i>disable</i>	Disable setting.									
max-range-segment	Maximum number of range segments in HTTP range line.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable setting.</td></tr><tr><td><i>disable</i></td><td>Disable setting.</td></tr></table>	Option	Description	<i>enable</i>	Enable setting.	<i>disable</i>	Disable setting.			
Option	Description									
<i>enable</i>	Enable setting.									
<i>disable</i>	Disable setting.									
max-url-param	Maximum number of parameters in URL.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable setting.</td></tr><tr><td><i>disable</i></td><td>Disable setting.</td></tr></table>	Option	Description	<i>enable</i>	Enable setting.	<i>disable</i>	Disable setting.			
Option	Description									
<i>enable</i>	Enable setting.									
<i>disable</i>	Disable setting.									
method	Enable/disable HTTP method check.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable setting.</td></tr><tr><td><i>disable</i></td><td>Disable setting.</td></tr></table>	Option	Description	<i>enable</i>	Enable setting.	<i>disable</i>	Disable setting.			
Option	Description									
<i>enable</i>	Enable setting.									
<i>disable</i>	Disable setting.									
param-length	Maximum length of parameter in URL, HTTP POST request or HTTP body.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable setting.</td></tr><tr><td><i>disable</i></td><td>Disable setting.</td></tr></table>	Option	Description	<i>enable</i>	Enable setting.	<i>disable</i>	Disable setting.			
Option	Description									
<i>enable</i>	Enable setting.									
<i>disable</i>	Disable setting.									
pattern	URL pattern.	string	Maximum length: 511							
regex	Enable/disable regular expression based pattern match.	option	-	disable						

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		
url-param-length	Maximum length of parameter in URL.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		
version	Enable/disable HTTP version check.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		

config header-length

Parameter	Description	Type	Size	Default
action	Action.	option	-	allow
	Option	Description		
	<i>allow</i>	Allow.		
	<i>block</i>	Block.		
length	Length of HTTP header in bytes (0 to 2147483647).	integer	Minimum value: 0 Maximum value: 2147483647	8192
log	Enable/disable logging.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		
severity	Severity.	option	-	medium

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>high</i>	High severity.		
	<i>medium</i>	Medium severity.		
	<i>low</i>	Low severity.		
status	Enable/disable the constraint.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		

config hostname

Parameter	Description	Type	Size	Default
action	Action.	option	-	allow
	Option	Description		
	<i>allow</i>	Allow.		
	<i>block</i>	Block.		
log	Enable/disable logging.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		
severity	Severity.	option	-	medium
	Option	Description		
	<i>high</i>	High severity.		
	<i>medium</i>	Medium severity.		
	<i>low</i>	Low severity.		
status	Enable/disable the constraint.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		

config line-length

Parameter	Description	Type	Size	Default
action	Action.	option	-	allow
	Option	Description		
	<i>allow</i>	Allow.		
	<i>block</i>	Block.		
length	Length of HTTP line in bytes (0 to 2147483647).	integer	Minimum value: 0 Maximum value: 2147483647	1024
log	Enable/disable logging.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		
severity	Severity.	option	-	medium
	Option	Description		
	<i>high</i>	High severity.		
	<i>medium</i>	Medium severity.		
	<i>low</i>	Low severity.		
status	Enable/disable the constraint.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		

config malformed

Parameter	Description	Type	Size	Default
action	Action.	option	-	allow
	Option	Description		
	<i>allow</i>	Allow.		
	<i>block</i>	Block.		

Parameter	Description	Type	Size	Default								
log	Enable/disable logging.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable setting.</td></tr><tr><td><i>disable</i></td><td>Disable setting.</td></tr></table>	Option	Description	<i>enable</i>	Enable setting.	<i>disable</i>	Disable setting.					
Option	Description											
<i>enable</i>	Enable setting.											
<i>disable</i>	Disable setting.											
severity	Severity.	option	-	medium								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>high</i></td><td>High severity.</td></tr><tr><td><i>medium</i></td><td>Medium severity.</td></tr><tr><td><i>low</i></td><td>Low severity.</td></tr></table>	Option	Description	<i>high</i>	High severity.	<i>medium</i>	Medium severity.	<i>low</i>	Low severity.			
Option	Description											
<i>high</i>	High severity.											
<i>medium</i>	Medium severity.											
<i>low</i>	Low severity.											
status	Enable/disable the constraint.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable setting.</td></tr><tr><td><i>disable</i></td><td>Disable setting.</td></tr></table>	Option	Description	<i>enable</i>	Enable setting.	<i>disable</i>	Disable setting.					
Option	Description											
<i>enable</i>	Enable setting.											
<i>disable</i>	Disable setting.											

config max-cookie

Parameter	Description	Type	Size	Default						
action	Action.	option	-	allow						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>allow</i></td><td>Allow.</td></tr><tr><td><i>block</i></td><td>Block.</td></tr></table>	Option	Description	<i>allow</i>	Allow.	<i>block</i>	Block.			
	Option	Description								
	<i>allow</i>	Allow.								
<i>block</i>	Block.									
log	Enable/disable logging.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable setting.</td></tr><tr><td><i>disable</i></td><td>Disable setting.</td></tr></table>	Option	Description	<i>enable</i>	Enable setting.	<i>disable</i>	Disable setting.			
	Option	Description								
	<i>enable</i>	Enable setting.								
<i>disable</i>	Disable setting.									
max-cookie	Maximum number of cookies in HTTP request (0 to 2147483647).	integer	Minimum value: 0 Maximum value: 2147483647	16						
severity	Severity.	option	-	medium						

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>high</i>	High severity.		
	<i>medium</i>	Medium severity.		
	<i>low</i>	Low severity.		
status	Enable/disable the constraint.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		

config max-header-line

Parameter	Description	Type	Size	Default
action	Action.	option	-	allow
	Option	Description		
	<i>allow</i>	Allow.		
	<i>block</i>	Block.		
log	Enable/disable logging.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		
max-header-line	Maximum number HTTP header lines (0 to 2147483647).	integer	Minimum value: 0 Maximum value: 2147483647	32
severity	Severity.	option	-	medium
	Option	Description		
	<i>high</i>	High severity.		
	<i>medium</i>	Medium severity.		
	<i>low</i>	Low severity.		
status	Enable/disable the constraint.	option	-	disable

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		

config max-range-segment

Parameter	Description	Type	Size	Default
action	Action.	option	-	allow
	Option	Description		
	<i>allow</i>	Allow.		
	<i>block</i>	Block.		
log	Enable/disable logging.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		
max-range-segment	Maximum number of range segments in HTTP range line (0 to 2147483647).	integer	Minimum value: 0 Maximum value: 2147483647	5
severity	Severity.	option	-	medium
	Option	Description		
	<i>high</i>	High severity.		
	<i>medium</i>	Medium severity.		
	<i>low</i>	Low severity.		
status	Enable/disable the constraint.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		

config max-url-param

Parameter	Description	Type	Size	Default								
action	Action.	option	-	allow								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>allow</i></td><td>Allow.</td></tr><tr><td><i>block</i></td><td>Block.</td></tr></table>	Option	Description	<i>allow</i>	Allow.	<i>block</i>	Block.					
Option	Description											
<i>allow</i>	Allow.											
<i>block</i>	Block.											
log	Enable/disable logging.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable setting.</td></tr><tr><td><i>disable</i></td><td>Disable setting.</td></tr></table>	Option	Description	<i>enable</i>	Enable setting.	<i>disable</i>	Disable setting.					
Option	Description											
<i>enable</i>	Enable setting.											
<i>disable</i>	Disable setting.											
max-url-param	Maximum number of parameters in URL (0 to 2147483647).	integer	Minimum value: 0 Maximum value: 2147483647	16								
severity	Severity.	option	-	medium								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>high</i></td><td>High severity.</td></tr><tr><td><i>medium</i></td><td>Medium severity.</td></tr><tr><td><i>low</i></td><td>Low severity.</td></tr></table>	Option	Description	<i>high</i>	High severity.	<i>medium</i>	Medium severity.	<i>low</i>	Low severity.			
Option	Description											
<i>high</i>	High severity.											
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status	Enable/disable the constraint.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable setting.</td></tr><tr><td><i>disable</i></td><td>Disable setting.</td></tr></table>	Option	Description	<i>enable</i>	Enable setting.	<i>disable</i>	Disable setting.					
Option	Description											
<i>enable</i>	Enable setting.											
<i>disable</i>	Disable setting.											

config method

Parameter	Description	Type	Size	Default
action	Action.	option	-	allow
	Option	Description		
	<i>allow</i>	Allow.		
	<i>block</i>	Block.		

Parameter	Description	Type	Size	Default								
log	Enable/disable logging.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable setting.</td></tr><tr><td><i>disable</i></td><td>Disable setting.</td></tr></table>	Option	Description	<i>enable</i>	Enable setting.	<i>disable</i>	Disable setting.					
Option	Description											
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<i>disable</i>	Disable setting.											
severity	Severity.	option	-	medium								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>high</i></td><td>High severity.</td></tr><tr><td><i>medium</i></td><td>Medium severity.</td></tr><tr><td><i>low</i></td><td>Low severity.</td></tr></table>	Option	Description	<i>high</i>	High severity.	<i>medium</i>	Medium severity.	<i>low</i>	Low severity.			
Option	Description											
<i>high</i>	High severity.											
<i>medium</i>	Medium severity.											
<i>low</i>	Low severity.											
status	Enable/disable the constraint.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable setting.</td></tr><tr><td><i>disable</i></td><td>Disable setting.</td></tr></table>	Option	Description	<i>enable</i>	Enable setting.	<i>disable</i>	Disable setting.					
Option	Description											
<i>enable</i>	Enable setting.											
<i>disable</i>	Disable setting.											

config param-length

Parameter	Description	Type	Size	Default						
action	Action.	option	-	allow						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>allow</i></td><td>Allow.</td></tr><tr><td><i>block</i></td><td>Block.</td></tr></table>				Option	Description	<i>allow</i>	Allow.	<i>block</i>	Block.
	Option	Description								
	<i>allow</i>	Allow.								
<i>block</i>	Block.									
length	Maximum length of parameter in URL, HTTP POST request or HTTP body in bytes (0 to 2147483647).	integer	Minimum value: 0 Maximum value: 2147483647	8192						
log	Enable/disable logging.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable setting.</td></tr><tr><td><i>disable</i></td><td>Disable setting.</td></tr></table>				Option	Description	<i>enable</i>	Enable setting.	<i>disable</i>	Disable setting.
	Option	Description								
	<i>enable</i>	Enable setting.								
<i>disable</i>	Disable setting.									
severity	Severity.	option	-	medium						

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>high</i>	High severity.		
	<i>medium</i>	Medium severity.		
	<i>low</i>	Low severity.		
status	Enable/disable the constraint.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		

config url-param-length

Parameter	Description	Type	Size	Default
action	Action.	option	-	allow
	Option	Description		
	<i>allow</i>	Allow.		
	<i>block</i>	Block.		
length	Maximum length of URL parameter in bytes (0 to 2147483647).	integer	Minimum value: 0 Maximum value: 2147483647	8192
log	Enable/disable logging.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		
severity	Severity.	option	-	medium
	Option	Description		
	<i>high</i>	High severity.		
	<i>medium</i>	Medium severity.		
	<i>low</i>	Low severity.		
status	Enable/disable the constraint.	option	-	disable

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		

config version

Parameter	Description	Type	Size	Default
action	Action.	option	-	allow
	Option	Description		
	<i>allow</i>	Allow.		
	<i>block</i>	Block.		
log	Enable/disable logging.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		
severity	Severity.	option	-	medium
	Option	Description		
	<i>high</i>	High severity.		
	<i>medium</i>	Medium severity.		
	<i>low</i>	Low severity.		
status	Enable/disable the constraint.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		

config method

Parameter	Description	Type	Size	Default
default-allowed-methods	Methods.	option	-	

Parameter	Description	Type	Size	Default																				
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>get</td><td>HTTP GET method.</td></tr><tr><td>post</td><td>HTTP POST method.</td></tr><tr><td>put</td><td>HTTP PUT method.</td></tr><tr><td>head</td><td>HTTP HEAD method.</td></tr><tr><td>connect</td><td>HTTP CONNECT method.</td></tr><tr><td>trace</td><td>HTTP TRACE method.</td></tr><tr><td>options</td><td>HTTP OPTIONS method.</td></tr><tr><td>delete</td><td>HTTP DELETE method.</td></tr><tr><td>others</td><td>Other HTTP methods.</td></tr></table>	Option	Description	get	HTTP GET method.	post	HTTP POST method.	put	HTTP PUT method.	head	HTTP HEAD method.	connect	HTTP CONNECT method.	trace	HTTP TRACE method.	options	HTTP OPTIONS method.	delete	HTTP DELETE method.	others	Other HTTP methods.			
	Option	Description																						
	get	HTTP GET method.																						
	post	HTTP POST method.																						
	put	HTTP PUT method.																						
	head	HTTP HEAD method.																						
	connect	HTTP CONNECT method.																						
	trace	HTTP TRACE method.																						
	options	HTTP OPTIONS method.																						
	delete	HTTP DELETE method.																						
others	Other HTTP methods.																							
log	Enable/disable logging.	option	-	disable																				
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable setting.</td></tr><tr><td>disable</td><td>Disable setting.</td></tr></table>	Option	Description	enable	Enable setting.	disable	Disable setting.																	
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disable	Disable setting.																							
severity	Severity.	option	-	medium																				
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>high</td><td>High severity</td></tr><tr><td>medium</td><td>medium severity</td></tr><tr><td>low</td><td>low severity</td></tr></table>	Option	Description	high	High severity	medium	medium severity	low	low severity															
	Option	Description																						
	high	High severity																						
	medium	medium severity																						
low	low severity																							
status	Status.	option	-	disable																				
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable setting.</td></tr><tr><td>disable</td><td>Disable setting.</td></tr></table>	Option	Description	enable	Enable setting.	disable	Disable setting.																	
	Option	Description																						
	enable	Enable setting.																						
disable	Disable setting.																							

config method-policy

Parameter	Description	Type	Size	Default
address	Host address.	string	Maximum length: 79	
allowed-methods	Allowed Methods.	option	-	

Parameter	Description	Type	Size	Default																				
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>get</i></td><td>HTTP GET method.</td></tr><tr><td><i>post</i></td><td>HTTP POST method.</td></tr><tr><td><i>put</i></td><td>HTTP PUT method.</td></tr><tr><td><i>head</i></td><td>HTTP HEAD method.</td></tr><tr><td><i>connect</i></td><td>HTTP CONNECT method.</td></tr><tr><td><i>trace</i></td><td>HTTP TRACE method.</td></tr><tr><td><i>options</i></td><td>HTTP OPTIONS method.</td></tr><tr><td><i>delete</i></td><td>HTTP DELETE method.</td></tr><tr><td><i>others</i></td><td>Other HTTP methods.</td></tr></table>	Option	Description	<i>get</i>	HTTP GET method.	<i>post</i>	HTTP POST method.	<i>put</i>	HTTP PUT method.	<i>head</i>	HTTP HEAD method.	<i>connect</i>	HTTP CONNECT method.	<i>trace</i>	HTTP TRACE method.	<i>options</i>	HTTP OPTIONS method.	<i>delete</i>	HTTP DELETE method.	<i>others</i>	Other HTTP methods.			
	Option	Description																						
	<i>get</i>	HTTP GET method.																						
	<i>post</i>	HTTP POST method.																						
	<i>put</i>	HTTP PUT method.																						
	<i>head</i>	HTTP HEAD method.																						
	<i>connect</i>	HTTP CONNECT method.																						
	<i>trace</i>	HTTP TRACE method.																						
	<i>options</i>	HTTP OPTIONS method.																						
	<i>delete</i>	HTTP DELETE method.																						
<i>others</i>	Other HTTP methods.																							
id	HTTP method policy ID.	integer	Minimum value: 0 0 Maximum value: 4294967295																					
pattern	URL pattern.	string	Maximum length: 511																					
regex	Enable/disable regular expression based pattern match.	option	-	disable																				
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable setting.</td></tr><tr><td><i>disable</i></td><td>Disable setting.</td></tr></table>	Option	Description	<i>enable</i>	Enable setting.	<i>disable</i>	Disable setting.																	
	Option	Description																						
	<i>enable</i>	Enable setting.																						
<i>disable</i>	Disable setting.																							

config signature

Parameter	Description	Type	Size	Default
credit-card-detection-threshold	The minimum number of Credit cards to detect violation.	integer	Minimum value: 0 0 Maximum value: 128	3
disabled-signature <id>	Disabled signatures. Signature ID.	integer	Minimum value: 0 0 Maximum value: 4294967295	
disabled-sub-class <id>	Disabled signature subclasses. Signature subclass ID.	integer	Minimum value: 0 0 Maximum value: 4294967295	

config custom-signature

Parameter	Description	Type	Size	Default
action	Action.	option	-	allow
	Option	Description		
	<i>allow</i>	Allow.		
	<i>block</i>	Block.		
	<i>erase</i>	Erase credit card numbers.		
case-sensitivity	Case sensitivity in pattern.	option	-	disable
	Option	Description		
	<i>disable</i>	Case insensitive in pattern.		
	<i>enable</i>	Case sensitive in pattern.		
direction	Traffic direction.	option	-	request
	Option	Description		
	<i>request</i>	Match HTTP request.		
	<i>response</i>	Match HTTP response.		
log	Enable/disable logging.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		
name	Signature name.	string	Maximum length: 35	
pattern	Match pattern.	string	Maximum length: 511	
severity	Severity.	option	-	medium
	Option	Description		
	<i>high</i>	High severity.		
	<i>medium</i>	Medium severity.		
	<i>low</i>	Low severity.		
status	Status.	option	-	disable

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		
target	Match HTTP target.	option	-	
	Option	Description		
	<i>arg</i>	HTTP arguments.		
	<i>arg-name</i>	Names of HTTP arguments.		
	<i>req-body</i>	HTTP request body.		
	<i>req-cookie</i>	HTTP request cookies.		
	<i>req-cookie-name</i>	HTTP request cookie names.		
	<i>req-filename</i>	HTTP request file name.		
	<i>req-header</i>	HTTP request headers.		
	<i>req-header-name</i>	HTTP request header names.		
	<i>req-raw-uri</i>	Raw URI of HTTP request.		
	<i>req-uri</i>	URI of HTTP request.		
	<i>resp-body</i>	HTTP response body.		
	<i>resp-hdr</i>	HTTP response headers.		
	<i>resp-status</i>	HTTP response status.		

config main-class

Parameter	Description	Type	Size	Default
action	Action.	option	-	allow
	Option	Description		
	<i>allow</i>	Allow.		
	<i>block</i>	Block.		
	<i>erase</i>	Erase credit card numbers.		

Parameter	Description	Type	Size	Default								
id	Main signature class ID.	integer	Minimum value: 0 0 Maximum value: 4294967295	0								
log	Enable/disable logging.	option	-	enable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable setting.</td></tr><tr><td>disable</td><td>Disable setting.</td></tr></table>				Option	Description	enable	Enable setting.	disable	Disable setting.		
	Option	Description										
	enable	Enable setting.										
disable	Disable setting.											
severity	Severity.	option	-	medium								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>high</td><td>High severity.</td></tr><tr><td>medium</td><td>Medium severity.</td></tr><tr><td>low</td><td>Low severity.</td></tr></table>				Option	Description	high	High severity.	medium	Medium severity.	low	Low severity.
	Option	Description										
	high	High severity.										
	medium	Medium severity.										
low	Low severity.											
status	Status.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable setting.</td></tr><tr><td>disable</td><td>Disable setting.</td></tr></table>				Option	Description	enable	Enable setting.	disable	Disable setting.		
	Option	Description										
	enable	Enable setting.										
disable	Disable setting.											

config url-access

Parameter	Description	Type	Size	Default
action	Action.	option	-	permit
	Option	Description		
	bypass	Allow the HTTP request, also bypass further WAF scanning.		
	permit	Allow the HTTP request, and continue further WAF scanning.		
	block	Block HTTP request.		
address	Host address.	string	Maximum length: 79	
id	URL access ID.	integer	Minimum value: 0 0 Maximum value: 4294967295	

Parameter	Description	Type	Size	Default
log	Enable/disable logging.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		
severity	Severity.	option	-	medium
	Option	Description		
	<i>high</i>	High severity.		
	<i>medium</i>	Medium severity.		
	<i>low</i>	Low severity.		

config access-pattern

Parameter	Description	Type	Size	Default
id	URL access pattern ID.	integer	Minimum value: 0 0 Maximum value: 4294967295	0
negate	Enable/disable match negation.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		
pattern	URL pattern.	string	Maximum length: 511	
regex	Enable/disable regular expression based pattern match.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		
srcaddr	Source address.	string	Maximum length: 79	

config waf signature

Hidden table for datasource.

```
config waf signature
  Description: Hidden table for datasource.
  edit <id>
    set desc {string}
  next
end
```

config waf signature

Parameter	Description	Type	Size	Default
desc	Signature description.	string	Maximum length: 511	
id	Signature ID.	integer	Minimum value: 0 Maximum value: 4294967295	0

config waf sub-class

Hidden table for datasource.

```
config waf sub-class
  Description: Hidden table for datasource.
  edit <id>
    set name {string}
  next
end
```

config waf sub-class

Parameter	Description	Type	Size	Default
id	Signature subclass ID.	integer	Minimum value: 0 Maximum value: 4294967295	0
name	Signature subclass name.	string	Maximum length: 127	

wanopt

This section includes syntax for the following commands:

- [config wanopt auth-group on page 2030](#)
- [config wanopt cache-service on page 2032](#)
- [config wanopt content-delivery-network-rule on page 2035](#)
- [config wanopt peer on page 2041](#)
- [config wanopt profile on page 2042](#)
- [config wanopt remote-storage on page 2051](#)
- [config wanopt settings on page 2052](#)
- [config wanopt webcache on page 2054](#)

config wanopt auth-group



This command is available for model(s): FortiGate 1000D, FortiGate 1001F, FortiGate 101F, FortiGate 1101E, FortiGate 1500DT, FortiGate 1500D, FortiGate 1801F, FortiGate 2000E, FortiGate 201E, FortiGate 201F, FortiGate 2201E, FortiGate 2500E, FortiGate 2600F, FortiGate 2601F, FortiGate 3000D, FortiGate 3001F, FortiGate 301E, FortiGate 3100D, FortiGate 3200D, FortiGate 3201F, FortiGate 3301E, FortiGate 3401E, FortiGate 3501F, FortiGate 3601E, FortiGate 3700D, FortiGate 3701F, FortiGate 401E, FortiGate 401F, FortiGate 4201F, FortiGate 4401F, FortiGate 5001E1, FortiGate 501E, FortiGate 601E, FortiGate 61E, FortiGate 71F, FortiGate 800D, FortiGate 81E-POE, FortiGate 81E, FortiGate 81F-POE, FortiGate 81F, FortiGate 900D, FortiGate 91E, FortiGate-VM64 Aliyun, FortiGate-VM64 AWS, FortiGate-VM64 Azure, FortiGate-VM64 GCP, FortiGate-VM64 OPC, FortiGate-VM64, FortiGateRugged 70F 3G4G, FortiGateRugged 70F, FortiWiFi 61E, FortiWiFi 61F, FortiWiFi 80F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G-POE, FortiWiFi 81F 2R-POE, FortiWiFi 81F 2R.

It is not available for: FortiGate 1000F, FortiGate 100EF, FortiGate 100E, FortiGate 100F, FortiGate 1100E, FortiGate 140E-POE, FortiGate 140E, FortiGate 1800F, FortiGate 200E, FortiGate 200F, FortiGate 3000F, FortiGate 300E, FortiGate 3200F, FortiGate 3300E, FortiGate 3400E, FortiGate 3600E, FortiGate 3700F, FortiGate 3960E, FortiGate 3980E, FortiGate 400E Bypass, FortiGate 400E, FortiGate 400F, FortiGate 40F 3G4G, FortiGate 4200F, FortiGate 4400F, FortiGate 5001E, FortiGate 500E, FortiGate 600E, FortiGate 60E-POE, FortiGate 60E, FortiGate 60F, FortiGate 70F, FortiGate 80E-POE, FortiGate 80E, FortiGate 80F Bypass, FortiGate 80F DSL, FortiGate 80F-POE, FortiGate 80F, FortiGate 90E, FortiGateRugged 60F 3G4G, FortiGateRugged 60F, FortiWiFi 40F 3G4G, FortiWiFi 40F, FortiWiFi 60E, FortiWiFi 60F.

Configure WAN optimization authentication groups.

```

config wanopt auth-group
  Description: Configure WAN optimization authentication groups.
  edit <name>
    set auth-method [cert|psk]
    set cert {string}
    set peer {string}
    set peer-accept [any|defined|...]
    set psk {password}
  next
end

```

config wanopt auth-group

Parameter	Description	Type	Size	Default
auth-method	Select certificate or pre-shared key authentication for this authentication group.	option	-	cert
	Option	Description		
	<i>cert</i>	Certificate authentication.		
	<i>psk</i>	Pre-shared secret key authentication.		
cert	Name of certificate to identify this peer.	string	Maximum length: 35	
name	Auth-group name.	string	Maximum length: 35	
peer	If peer-accept is set to one, select the name of one peer to add to this authentication group. The peer must have added with the wanopt peer command.	string	Maximum length: 35	
peer-accept	Determine if this auth group accepts, any peer, a list of defined peers, or just one peer.	option	-	any
	Option	Description		
	<i>any</i>	Accept any peer that can authenticate with this auth group.		
	<i>defined</i>	Accept only the peers added with the wanopt peer command.		
	<i>one</i>	Accept the peer added to this auth group using the peer option.		
psk	Pre-shared key used by the peers in this authentication group.	password	Not Specified	

config wanopt cache-service



This command is available for model(s): FortiGate 1000D, FortiGate 1001F, FortiGate 101F, FortiGate 1101E, FortiGate 1500DT, FortiGate 1500D, FortiGate 1801F, FortiGate 2000E, FortiGate 201E, FortiGate 201F, FortiGate 2201E, FortiGate 2500E, FortiGate 2600F, FortiGate 2601F, FortiGate 3000D, FortiGate 3001F, FortiGate 301E, FortiGate 3100D, FortiGate 3200D, FortiGate 3201F, FortiGate 3301E, FortiGate 3401E, FortiGate 3501F, FortiGate 3601E, FortiGate 3700D, FortiGate 3701F, FortiGate 401E, FortiGate 401F, FortiGate 4201F, FortiGate 4401F, FortiGate 5001E1, FortiGate 501E, FortiGate 601E, FortiGate 61E, FortiGate 71F, FortiGate 800D, FortiGate 81E-POE, FortiGate 81E, FortiGate 81F-POE, FortiGate 81F, FortiGate 900D, FortiGate 91E, FortiGate-VM64 Aliyun, FortiGate-VM64 AWS, FortiGate-VM64 Azure, FortiGate-VM64 GCP, FortiGate-VM64 OPC, FortiGate-VM64, FortiGateRugged 70F 3G4G, FortiGateRugged 70F, FortiWiFi 61E, FortiWiFi 61F, FortiWiFi 80F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G-POE, FortiWiFi 81F 2R-POE, FortiWiFi 81F 2R.

It is not available for: FortiGate 1000F, FortiGate 100EF, FortiGate 100E, FortiGate 100F, FortiGate 1100E, FortiGate 140E-POE, FortiGate 140E, FortiGate 1800F, FortiGate 200E, FortiGate 200F, FortiGate 3000F, FortiGate 300E, FortiGate 3200F, FortiGate 3300E, FortiGate 3400E, FortiGate 3600E, FortiGate 3700F, FortiGate 3960E, FortiGate 3980E, FortiGate 400E Bypass, FortiGate 400E, FortiGate 400F, FortiGate 40F 3G4G, FortiGate 4200F, FortiGate 4400F, FortiGate 5001E, FortiGate 500E, FortiGate 600E, FortiGate 60E-POE, FortiGate 60E, FortiGate 60F, FortiGate 70F, FortiGate 80E-POE, FortiGate 80E, FortiGate 80F Bypass, FortiGate 80F DSL, FortiGate 80F-POE, FortiGate 80F, FortiGate 90E, FortiGateRugged 60F 3G4G, FortiGateRugged 60F, FortiWiFi 40F 3G4G, FortiWiFi 40F, FortiWiFi 60E, FortiWiFi 60F.

Designate cache-service for wan-optimization and webcache.

```
config wanopt cache-service
  Description: Designate cache-service for wan-optimization and webcache.
  set acceptable-connections [any|peers]
  set collaboration [enable|disable]
  set device-id {string}
  config dst-peer
    Description: Modify cache-service destination peer list.
    edit <device-id>
      set auth-type {integer}
      set encode-type {integer}
      set ip {ipv4-address-any}
      set priority {integer}
    next
  end
  set prefer-scenario [balance|prefer-speed|...]
  config src-peer
    Description: Modify cache-service source peer list.
    edit <device-id>
      set auth-type {integer}
      set encode-type {integer}
      set ip {ipv4-address-any}
```

```

        set priority {integer}
    next
end
end

```

config wanopt cache-service

Parameter	Description	Type	Size	Default
acceptable-connections	Set strategy when accepting cache collaboration connection.	option	-	any
	Option	Description		
	<i>any</i>	We can accept any cache-collaboration connection.		
	<i>peers</i>	We can only accept connections that are already in src-peers.		
collaboration	Enable/disable cache-collaboration between cache-service clusters.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable cache cache-collaboration.		
	<i>disable</i>	Disable cache cache-collaboration.		
device-id	Set identifier for this cache device.	string	Maximum length: 35	default_dev_id
prefer-scenario	Set the preferred cache behavior towards the balance between latency and hit-ratio.	option	-	balance
	Option	Description		
	<i>balance</i>	Balance between speed and cache hit ratio.		
	<i>prefer-speed</i>	Prefer response speed at the expense of increased cache bypasses.		
	<i>prefer-cache</i>	Prefer improving hit-ratio through increasing latency tolerance.		

config dst-peer

Parameter	Description	Type	Size	Default
auth-type	Set authentication type for this peer.	integer	Minimum value: 0 Maximum value: 255	0
device-id	Device ID of this peer.	string	Maximum length: 35	

Parameter	Description	Type	Size	Default
encode-type	Set encode type for this peer.	integer	Minimum value: 0 Maximum value: 255	0
ip	Set cluster IP address of this peer.	ipv4-address-any	Not Specified	0.0.0.0
priority	Set priority for this peer.	integer	Minimum value: 0 Maximum value: 255	1

config src-peer

Parameter	Description	Type	Size	Default
auth-type	Set authentication type for this peer.	integer	Minimum value: 0 Maximum value: 255	0
device-id	Device ID of this peer.	string	Maximum length: 35	
encode-type	Set encode type for this peer.	integer	Minimum value: 0 Maximum value: 255	0
ip	Set cluster IP address of this peer.	ipv4-address-any	Not Specified	0.0.0.0
priority	Set priority for this peer.	integer	Minimum value: 0 Maximum value: 255	1

config wanopt content-delivery-network-rule



This command is available for model(s): FortiGate 1000D, FortiGate 1001F, FortiGate 101F, FortiGate 1101E, FortiGate 1500DT, FortiGate 1500D, FortiGate 1801F, FortiGate 2000E, FortiGate 201E, FortiGate 201F, FortiGate 2201E, FortiGate 2500E, FortiGate 2600F, FortiGate 2601F, FortiGate 3000D, FortiGate 3001F, FortiGate 301E, FortiGate 3100D, FortiGate 3200D, FortiGate 3201F, FortiGate 3301E, FortiGate 3401E, FortiGate 3501F, FortiGate 3601E, FortiGate 3700D, FortiGate 3701F, FortiGate 401E, FortiGate 401F, FortiGate 4201F, FortiGate 4401F, FortiGate 5001E1, FortiGate 501E, FortiGate 601E, FortiGate 61E, FortiGate 71F, FortiGate 800D, FortiGate 81E-POE, FortiGate 81E, FortiGate 81F-POE, FortiGate 81F, FortiGate 900D, FortiGate 91E, FortiGate-VM64 Aliyun, FortiGate-VM64 AWS, FortiGate-VM64 Azure, FortiGate-VM64 GCP, FortiGate-VM64 OPC, FortiGate-VM64, FortiGateRugged 70F 3G4G, FortiGateRugged 70F, FortiWiFi 61E, FortiWiFi 61F, FortiWiFi 80F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G-POE, FortiWiFi 81F 2R-POE, FortiWiFi 81F 2R.

It is not available for: FortiGate 1000F, FortiGate 100EF, FortiGate 100E, FortiGate 100F, FortiGate 1100E, FortiGate 140E-POE, FortiGate 140E, FortiGate 1800F, FortiGate 200E, FortiGate 200F, FortiGate 3000F, FortiGate 300E, FortiGate 3200F, FortiGate 3300E, FortiGate 3400E, FortiGate 3600E, FortiGate 3700F, FortiGate 3960E, FortiGate 3980E, FortiGate 400E Bypass, FortiGate 400E, FortiGate 400F, FortiGate 40F 3G4G, FortiGate 4200F, FortiGate 4400F, FortiGate 5001E, FortiGate 500E, FortiGate 600E, FortiGate 60E-POE, FortiGate 60E, FortiGate 60F, FortiGate 70F, FortiGate 80E-POE, FortiGate 80E, FortiGate 80F Bypass, FortiGate 80F DSL, FortiGate 80F-POE, FortiGate 80F, FortiGate 90E, FortiGateRugged 60F 3G4G, FortiGateRugged 60F, FortiWiFi 40F 3G4G, FortiWiFi 40F, FortiWiFi 60E, FortiWiFi 60F.

Configure WAN optimization content delivery network rules.

```
config wanopt content-delivery-network-rule
  Description: Configure WAN optimization content delivery network rules.
  edit <name>
    set category [vcache|youtube]
    set comment {var-string}
    set host-domain-name-suffix <name1>, <name2>, ...
    set request-cache-control [enable|disable]
    set response-cache-control [enable|disable]
    set response-expires [enable|disable]
  config rules
    Description: WAN optimization content delivery network rule entries.
    edit <name>
      config content-id
        Description: Content ID settings.
        set end-direction [forward|backward]
        set end-skip {integer}
        set end-str {string}
        set range-str {string}
        set start-direction [forward|backward]
        set start-skip {integer}
        set start-str {string}
```

```

        set target [path|parameter|...]
    end
    config match-entries
        Description: List of entries to match.
        edit <id>
            set pattern <string1>, <string2>, ...
            set target [path|parameter|...]
        next
    end
    set match-mode [all|any]
    config skip-entries
        Description: List of entries to skip.
        edit <id>
            set pattern <string1>, <string2>, ...
            set target [path|parameter|...]
        next
    end
    set skip-rule-mode [all|any]
next
end
set status [enable|disable]
set updateserver [enable|disable]
next
end

```

config wanopt content-delivery-network-rule

Parameter	Description	Type	Size	Default						
category	Content delivery network rule category.	option	-	vcache						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>vcache</td><td>Vcache content delivery network.</td></tr><tr><td>youtube</td><td>Youtube content delivery network.</td></tr></table>				Option	Description	vcache	Vcache content delivery network.	youtube	Youtube content delivery network.
	Option	Description								
	vcache	Vcache content delivery network.								
youtube	Youtube content delivery network.									
comment	Comment about this CDN-rule.	var-string	Maximum length: 255							
host-domain-name-suffix <name>	Suffix portion of the fully qualified domain name. For example, fortinet.com in "www.fortinet.com". Suffix portion of the fully qualified domain name.	string	Maximum length: 79							
name	Name of table.	string	Maximum length: 35							
request-cache-control	Enable/disable HTTP request cache control.	option	-	disable						

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		
response-cache-control	Enable/disable HTTP response cache control.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		
response-expires	Enable/disable HTTP response cache expires.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		
status	Enable/disable WAN optimization content delivery network rules.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		
updateserver	Enable/disable update server.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		

config rules

Parameter	Description	Type	Size	Default
match-mode	Match criteria for collecting content ID.	option	-	all
	Option	Description		
	<i>all</i>	Must match all of the match entries.		
	<i>any</i>	Must match any of the match entries.		

Parameter	Description	Type	Size	Default						
name	WAN optimization content delivery network rule name.	string	Maximum length: 35							
skip-rule-mode	Skip mode when evaluating skip-rules.	option	-	all						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>all</i></td><td>Must match all skip entries.</td></tr><tr><td><i>any</i></td><td>Must match any skip entries.</td></tr></table>				Option	Description	<i>all</i>	Must match all skip entries.	<i>any</i>	Must match any skip entries.
Option	Description									
<i>all</i>	Must match all skip entries.									
<i>any</i>	Must match any skip entries.									

config content-id

Parameter	Description	Type	Size	Default						
end-direction	Search direction from end-str match.	option	-	forward						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>forward</i></td><td>Forward direction.</td></tr><tr><td><i>backward</i></td><td>Backward direction.</td></tr></table>	Option	Description	<i>forward</i>	Forward direction.	<i>backward</i>	Backward direction.			
Option	Description									
<i>forward</i>	Forward direction.									
<i>backward</i>	Backward direction.									
end-skip	Number of characters in URL to skip after end-str has been matched.	integer	Minimum value: 0 0 Maximum value: 4294967295							
end-str	String from which to end search.	string	Maximum length: 35							
range-str	Name of content ID within the start string and end string.	string	Maximum length: 35							
start-direction	Search direction from start-str match.	option	-	forward						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>forward</i></td><td>Forward direction.</td></tr><tr><td><i>backward</i></td><td>Backward direction.</td></tr></table>	Option	Description	<i>forward</i>	Forward direction.	<i>backward</i>	Backward direction.			
Option	Description									
<i>forward</i>	Forward direction.									
<i>backward</i>	Backward direction.									
start-skip	Number of characters in URL to skip after start-str has been matched.	integer	Minimum value: 0 0 Maximum value: 4294967295							
start-str	String from which to start search.	string	Maximum length: 35							

Parameter	Description	Type	Size	Default
target	Option in HTTP header or URL parameter to match.	option	-	path
	Option	Description		
	<i>path</i>	Match with the URL path.		
	<i>parameter</i>	Match with the URL parameters.		
	<i>referrer</i>	Match with the Referrer option in HTTP header.		
	<i>youtube-map</i>	Match Youtube content-id collection.		
	<i>youtube-id</i>	Match Youtube content-id.		
	<i>youku-id</i>	Match Youku content-id.		
	<i>hls-manifest</i>	Match with HLS manifest.		
	<i>dash-manifest</i>	Match with DASH manifest.		
	<i>hls-fragment</i>	Match HLS stream fragment.		
	<i>dash-fragment</i>	Match DASH stream fragment.		

config match-entries

Parameter	Description	Type	Size	Default
id	Rule ID.	integer	Minimum value: 0 Maximum value: 4294967295	
pattern <string>	Pattern string for matching target (Referrer or URL pattern). For example, a, a*c, *a*, a*c*e, and *. Pattern strings.	string	Maximum length: 79	
target	Option in HTTP header or URL parameter to match.	option	-	path
	Option	Description		
	<i>path</i>	Match with the URL path.		
	<i>parameter</i>	Match with the URL parameters.		
	<i>referrer</i>	Match with the Referrer option in HTTP header.		
	<i>youtube-map</i>	Match Youtube content-id collection.		
	<i>youtube-id</i>	Match Youtube content-id.		
	<i>youku-id</i>	Match Youku content-id.		

config skip-entries

Parameter	Description	Type	Size	Default
id	Rule ID.	integer	Minimum value: 0 Maximum value: 4294967295	
pattern <string>	Pattern string for matching target (Referrer or URL pattern). For example, a, a*c, *a*, a*c*e, and *. Pattern strings.	string	Maximum length: 79	
target	Option in HTTP header or URL parameter to match.	option	-	path
	Option	Description		
	path	Match with the URL path.		
	parameter	Match with the URL parameters.		
	referrer	Match with the Referrer option in HTTP header.		
	youtube-map	Match Youtube content-id collection.		
	youtube-id	Match Youtube content-id.		
	youku-id	Match Youku content-id.		

config wanopt peer



This command is available for model(s): FortiGate 1000D, FortiGate 1001F, FortiGate 101F, FortiGate 1101E, FortiGate 1500DT, FortiGate 1500D, FortiGate 1801F, FortiGate 2000E, FortiGate 201E, FortiGate 201F, FortiGate 2201E, FortiGate 2500E, FortiGate 2600F, FortiGate 2601F, FortiGate 3000D, FortiGate 3001F, FortiGate 301E, FortiGate 3100D, FortiGate 3200D, FortiGate 3201F, FortiGate 3301E, FortiGate 3401E, FortiGate 3501F, FortiGate 3601E, FortiGate 3700D, FortiGate 3701F, FortiGate 401E, FortiGate 401F, FortiGate 4201F, FortiGate 4401F, FortiGate 5001E1, FortiGate 501E, FortiGate 601E, FortiGate 61E, FortiGate 71F, FortiGate 800D, FortiGate 81E-POE, FortiGate 81E, FortiGate 81F-POE, FortiGate 81F, FortiGate 900D, FortiGate 91E, FortiGate-VM64 Aliyun, FortiGate-VM64 AWS, FortiGate-VM64 Azure, FortiGate-VM64 GCP, FortiGate-VM64 OPC, FortiGate-VM64, FortiGateRugged 70F 3G4G, FortiGateRugged 70F, FortiWiFi 61E, FortiWiFi 61F, FortiWiFi 80F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G-POE, FortiWiFi 81F 2R-POE, FortiWiFi 81F 2R.

It is not available for: FortiGate 1000F, FortiGate 100EF, FortiGate 100E, FortiGate 100F, FortiGate 1100E, FortiGate 140E-POE, FortiGate 140E, FortiGate 1800F, FortiGate 200E, FortiGate 200F, FortiGate 3000F, FortiGate 300E, FortiGate 3200F, FortiGate 3300E, FortiGate 3400E, FortiGate 3600E, FortiGate 3700F, FortiGate 3960E, FortiGate 3980E, FortiGate 400E Bypass, FortiGate 400E, FortiGate 400F, FortiGate 40F 3G4G, FortiGate 4200F, FortiGate 4400F, FortiGate 5001E, FortiGate 500E, FortiGate 600E, FortiGate 60E-POE, FortiGate 60E, FortiGate 60F, FortiGate 70F, FortiGate 80E-POE, FortiGate 80E, FortiGate 80F Bypass, FortiGate 80F DSL, FortiGate 80F-POE, FortiGate 80F, FortiGate 90E, FortiGateRugged 60F 3G4G, FortiGateRugged 60F, FortiWiFi 40F 3G4G, FortiWiFi 40F, FortiWiFi 60E, FortiWiFi 60F.

Configure WAN optimization peers.

```
config wanopt peer
  Description: Configure WAN optimization peers.
  edit <peer-host-id>
    set ip {ipv4-address-any}
  next
end
```

config wanopt peer

Parameter	Description	Type	Size	Default
ip	Peer IP address.	ipv4-address-any	Not Specified	0.0.0.0
peer-host-id	Peer host ID.	string	Maximum length: 35	

config wanopt profile



This command is available for model(s): FortiGate 1000D, FortiGate 1001F, FortiGate 101F, FortiGate 1101E, FortiGate 1500DT, FortiGate 1500D, FortiGate 1801F, FortiGate 2000E, FortiGate 201E, FortiGate 201F, FortiGate 2201E, FortiGate 2500E, FortiGate 2600F, FortiGate 2601F, FortiGate 3000D, FortiGate 3001F, FortiGate 301E, FortiGate 3100D, FortiGate 3200D, FortiGate 3201F, FortiGate 3301E, FortiGate 3401E, FortiGate 3501F, FortiGate 3601E, FortiGate 3700D, FortiGate 3701F, FortiGate 401E, FortiGate 401F, FortiGate 4201F, FortiGate 4401F, FortiGate 5001E1, FortiGate 501E, FortiGate 601E, FortiGate 61E, FortiGate 71F, FortiGate 800D, FortiGate 81E-POE, FortiGate 81E, FortiGate 81F-POE, FortiGate 81F, FortiGate 900D, FortiGate 91E, FortiGate-VM64 Aliyun, FortiGate-VM64 AWS, FortiGate-VM64 Azure, FortiGate-VM64 GCP, FortiGate-VM64 OPC, FortiGate-VM64, FortiGateRugged 70F 3G4G, FortiGateRugged 70F, FortiWiFi 61E, FortiWiFi 61F, FortiWiFi 80F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G-POE, FortiWiFi 81F 2R-POE, FortiWiFi 81F 2R.

It is not available for: FortiGate 1000F, FortiGate 100EF, FortiGate 100E, FortiGate 100F, FortiGate 1100E, FortiGate 140E-POE, FortiGate 140E, FortiGate 1800F, FortiGate 200E, FortiGate 200F, FortiGate 3000F, FortiGate 300E, FortiGate 3200F, FortiGate 3300E, FortiGate 3400E, FortiGate 3600E, FortiGate 3700F, FortiGate 3960E, FortiGate 3980E, FortiGate 400E Bypass, FortiGate 400E, FortiGate 400F, FortiGate 40F 3G4G, FortiGate 4200F, FortiGate 4400F, FortiGate 5001E, FortiGate 500E, FortiGate 600E, FortiGate 60E-POE, FortiGate 60E, FortiGate 60F, FortiGate 70F, FortiGate 80E-POE, FortiGate 80E, FortiGate 80F Bypass, FortiGate 80F DSL, FortiGate 80F-POE, FortiGate 80F, FortiGate 90E, FortiGateRugged 60F 3G4G, FortiGateRugged 60F, FortiWiFi 40F 3G4G, FortiWiFi 40F, FortiWiFi 60E, FortiWiFi 60F.

Configure WAN optimization profiles.

```
config wanopt profile
  Description: Configure WAN optimization profiles.
  edit <name>
    set auth-group {string}
    config cifs
      Description: Enable/disable CIFS (Windows sharing) WAN Optimization and configure CIFS
      WAN Optimization features.
      set byte-caching [enable|disable]
      set prefer-chunking [dynamic|fix]
      set protocol-opt [protocol|tcp]
      set secure-tunnel [enable|disable]
      set status [enable|disable]
      set tunnel-sharing [shared|express-shared|...]
    end
    set comments {var-string}
    config ftp
      Description: Enable/disable FTP WAN Optimization and configure FTP WAN Optimization
      features.
      set byte-caching [enable|disable]
      set prefer-chunking [dynamic|fix]
      set protocol-opt [protocol|tcp]
```

```

        set secure-tunnel [enable|disable]
        set status [enable|disable]
        set tunnel-sharing [shared|express-shared|...]
    end
    config http
        Description: Enable/disable HTTP WAN Optimization and configure HTTP WAN Optimization
features.
        set byte-caching [enable|disable]
        set prefer-chunking [dynamic|fix]
        set protocol-opt [protocol|tcp]
        set secure-tunnel [enable|disable]
        set ssl [enable|disable]
        set status [enable|disable]
        set tunnel-sharing [shared|express-shared|...]
    end
    config mapi
        Description: Enable/disable MAPI email WAN Optimization and configure MAPI WAN
Optimization features.
        set byte-caching [enable|disable]
        set secure-tunnel [enable|disable]
        set status [enable|disable]
        set tunnel-sharing [shared|express-shared|...]
    end
    config tcp
        Description: Enable/disable TCP WAN Optimization and configure TCP WAN Optimization
features.
        set byte-caching [enable|disable]
        set byte-caching-opt [mem-only|mem-disk]
        set port {user}
        set secure-tunnel [enable|disable]
        set ssl [enable|disable]
        set ssl-port {user}
        set status [enable|disable]
        set tunnel-sharing [shared|express-shared|...]
    end
    set transparent [enable|disable]
next
end

```

config wanopt profile

Parameter	Description	Type	Size	Default
auth-group	Optionally add an authentication group to restrict access to the WAN Optimization tunnel to peers in the authentication group.	string	Maximum length: 35	
comments	Comment.	var-string	Maximum length: 255	

Parameter	Description	Type	Size	Default						
name	Profile name.	string	Maximum length: 35							
transparent	Enable/disable transparent mode.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Determine if WAN Optimization changes client packet source addresses. Affects the routing configuration on the server network.</td></tr><tr><td><i>disable</i></td><td>Disable transparent mode. Client packets source addresses are changed to the source address of the FortiGate internal interface. Similar to source NAT.</td></tr></table>	Option	Description	<i>enable</i>	Determine if WAN Optimization changes client packet source addresses. Affects the routing configuration on the server network.	<i>disable</i>	Disable transparent mode. Client packets source addresses are changed to the source address of the FortiGate internal interface. Similar to source NAT.			
Option	Description									
<i>enable</i>	Determine if WAN Optimization changes client packet source addresses. Affects the routing configuration on the server network.									
<i>disable</i>	Disable transparent mode. Client packets source addresses are changed to the source address of the FortiGate internal interface. Similar to source NAT.									

config cifs

Parameter	Description	Type	Size	Default						
byte-caching	Enable/disable byte-caching. Byte caching reduces the amount of traffic by caching file data sent across the WAN and in future serving if from the cache.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable byte-caching.</td></tr><tr><td><i>disable</i></td><td>Disable byte-caching.</td></tr></table>	Option	Description	<i>enable</i>	Enable byte-caching.	<i>disable</i>	Disable byte-caching.			
Option	Description									
<i>enable</i>	Enable byte-caching.									
<i>disable</i>	Disable byte-caching.									
prefer-chunking	Select dynamic or fixed-size data chunking for WAN Optimization.	option	-	fix						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>dynamic</i></td><td>Select dynamic data chunking to help to detect persistent data chunks in a changed file or in an embedded unknown protocol.</td></tr><tr><td><i>fix</i></td><td>Select fixed data chunking.</td></tr></table>	Option	Description	<i>dynamic</i>	Select dynamic data chunking to help to detect persistent data chunks in a changed file or in an embedded unknown protocol.	<i>fix</i>	Select fixed data chunking.			
Option	Description									
<i>dynamic</i>	Select dynamic data chunking to help to detect persistent data chunks in a changed file or in an embedded unknown protocol.									
<i>fix</i>	Select fixed data chunking.									
protocol-opt	Select protocol specific optimization or generic TCP optimization.	option	-	protocol						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>protocol</i></td><td>Using protocol-specific optimization.</td></tr><tr><td><i>tcp</i></td><td>Using generic TCP optimization.</td></tr></table>	Option	Description	<i>protocol</i>	Using protocol-specific optimization.	<i>tcp</i>	Using generic TCP optimization.			
Option	Description									
<i>protocol</i>	Using protocol-specific optimization.									
<i>tcp</i>	Using generic TCP optimization.									
secure-tunnel	Enable/disable securing the WAN Opt tunnel using SSL. Secure and non-secure tunnels use the same TCP port (7810).	option	-	disable						

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>enable</i>	Enable SSL-secured tunnelling.		
	<i>disable</i>	Disable SSL-secured tunnelling.		
status	Enable/disable WAN Optimization.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable WAN Optimization.		
	<i>disable</i>	Disable WAN Optimization.		
tunnel-sharing	Tunnel sharing mode for aggressive/non-aggressive and/or interactive/non-interactive protocols.	option	-	private
	Option	Description		
	<i>shared</i>	For profiles that accept nonaggressive and non-interactive protocols.		
	<i>express-shared</i>	For profiles that accept interactive protocols such as Telnet.		
	<i>private</i>	For profiles that accept aggressive protocols such as HTTP and FTP so that these aggressive protocols do not share tunnels with less-aggressive protocols.		

config ftp

Parameter	Description	Type	Size	Default
byte-caching	Enable/disable byte-caching. Byte caching reduces the amount of traffic by caching file data sent across the WAN and in future serving if from the cache.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable byte-caching.		
	<i>disable</i>	Disable byte-caching.		
prefer-chunking	Select dynamic or fixed-size data chunking for WAN Optimization.	option	-	fix
	Option	Description		
	<i>dynamic</i>	Select dynamic data chunking to help to detect persistent data chunks in a changed file or in an embedded unknown protocol.		
	<i>fix</i>	Select fixed data chunking.		

Parameter	Description	Type	Size	Default								
protocol-opt	Select protocol specific optimization or generic TCP optimization.	option	-	protocol								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>protocol</i></td><td>Using protocol-specific optimization.</td></tr><tr><td><i>tcp</i></td><td>Using generic TCP optimization.</td></tr></table>	Option	Description	<i>protocol</i>	Using protocol-specific optimization.	<i>tcp</i>	Using generic TCP optimization.					
Option	Description											
<i>protocol</i>	Using protocol-specific optimization.											
<i>tcp</i>	Using generic TCP optimization.											
secure-tunnel	Enable/disable securing the WAN Opt tunnel using SSL. Secure and non-secure tunnels use the same TCP port (7810).	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable SSL-secured tunnelling.</td></tr><tr><td><i>disable</i></td><td>Disable SSL-secured tunnelling.</td></tr></table>	Option	Description	<i>enable</i>	Enable SSL-secured tunnelling.	<i>disable</i>	Disable SSL-secured tunnelling.					
Option	Description											
<i>enable</i>	Enable SSL-secured tunnelling.											
<i>disable</i>	Disable SSL-secured tunnelling.											
status	Enable/disable WAN Optimization.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable WAN Optimization.</td></tr><tr><td><i>disable</i></td><td>Disable WAN Optimization.</td></tr></table>	Option	Description	<i>enable</i>	Enable WAN Optimization.	<i>disable</i>	Disable WAN Optimization.					
Option	Description											
<i>enable</i>	Enable WAN Optimization.											
<i>disable</i>	Disable WAN Optimization.											
tunnel-sharing	Tunnel sharing mode for aggressive/non-aggressive and/or interactive/non-interactive protocols.	option	-	private								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>shared</i></td><td>For profiles that accept nonaggressive and non-interactive protocols.</td></tr><tr><td><i>express-shared</i></td><td>For profiles that accept interactive protocols such as Telnet.</td></tr><tr><td><i>private</i></td><td>For profiles that accept aggressive protocols such as HTTP and FTP so that these aggressive protocols do not share tunnels with less-aggressive protocols.</td></tr></table>	Option	Description	<i>shared</i>	For profiles that accept nonaggressive and non-interactive protocols.	<i>express-shared</i>	For profiles that accept interactive protocols such as Telnet.	<i>private</i>	For profiles that accept aggressive protocols such as HTTP and FTP so that these aggressive protocols do not share tunnels with less-aggressive protocols.			
Option	Description											
<i>shared</i>	For profiles that accept nonaggressive and non-interactive protocols.											
<i>express-shared</i>	For profiles that accept interactive protocols such as Telnet.											
<i>private</i>	For profiles that accept aggressive protocols such as HTTP and FTP so that these aggressive protocols do not share tunnels with less-aggressive protocols.											

config http

Parameter	Description	Type	Size	Default
byte-caching	Enable/disable byte-caching. Byte caching reduces the amount of traffic by caching file data sent across the WAN and in future serving if from the cache.	option	-	enable

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>enable</i>	Enable byte-caching.		
	<i>disable</i>	Disable byte-caching.		
prefer-chunking	Select dynamic or fixed-size data chunking for WAN Optimization.	option	-	fix
	Option	Description		
	<i>dynamic</i>	Select dynamic data chunking to help to detect persistent data chunks in a changed file or in an embedded unknown protocol.		
	<i>fix</i>	Select fixed data chunking.		
protocol-opt	Select protocol specific optimization or generic TCP optimization.	option	-	protocol
	Option	Description		
	<i>protocol</i>	Using protocol-specific optimization.		
	<i>tcp</i>	Using generic TCP optimization.		
secure-tunnel	Enable/disable securing the WAN Opt tunnel using SSL. Secure and non-secure tunnels use the same TCP port (7810).	option	-	disable
	Option	Description		
	<i>enable</i>	Enable SSL-secured tunnelling.		
	<i>disable</i>	Disable SSL-secured tunnelling.		
ssl	Enable/disable SSL/TLS offloading (hardware acceleration) for traffic in this tunnel.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable SSL/TLS offloading.		
	<i>disable</i>	Disable SSL/TLS offloading.		
status	Enable/disable WAN Optimization.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable WAN Optimization.		
	<i>disable</i>	Disable WAN Optimization.		

Parameter	Description	Type	Size	Default								
tunnel-sharing	Tunnel sharing mode for aggressive/non-aggressive and/or interactive/non-interactive protocols.	option	-	private								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>shared</i></td><td>For profiles that accept nonaggressive and non-interactive protocols.</td></tr><tr><td><i>express-shared</i></td><td>For profiles that accept interactive protocols such as Telnet.</td></tr><tr><td><i>private</i></td><td>For profiles that accept aggressive protocols such as HTTP and FTP so that these aggressive protocols do not share tunnels with less-aggressive protocols.</td></tr></table>	Option	Description	<i>shared</i>	For profiles that accept nonaggressive and non-interactive protocols.	<i>express-shared</i>	For profiles that accept interactive protocols such as Telnet.	<i>private</i>	For profiles that accept aggressive protocols such as HTTP and FTP so that these aggressive protocols do not share tunnels with less-aggressive protocols.			
Option	Description											
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<i>express-shared</i>	For profiles that accept interactive protocols such as Telnet.											
<i>private</i>	For profiles that accept aggressive protocols such as HTTP and FTP so that these aggressive protocols do not share tunnels with less-aggressive protocols.											

config mapi

Parameter	Description	Type	Size	Default						
byte-caching	Enable/disable byte-caching. Byte caching reduces the amount of traffic by caching file data sent across the WAN and in future serving if from the cache.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable byte-caching.</td></tr><tr><td><i>disable</i></td><td>Disable byte-caching.</td></tr></table>	Option	Description	<i>enable</i>	Enable byte-caching.	<i>disable</i>	Disable byte-caching.			
Option	Description									
<i>enable</i>	Enable byte-caching.									
<i>disable</i>	Disable byte-caching.									
secure-tunnel	Enable/disable securing the WAN Opt tunnel using SSL. Secure and non-secure tunnels use the same TCP port (7810).	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable SSL-secured tunnelling.</td></tr><tr><td><i>disable</i></td><td>Disable SSL-secured tunnelling.</td></tr></table>	Option	Description	<i>enable</i>	Enable SSL-secured tunnelling.	<i>disable</i>	Disable SSL-secured tunnelling.			
Option	Description									
<i>enable</i>	Enable SSL-secured tunnelling.									
<i>disable</i>	Disable SSL-secured tunnelling.									
status	Enable/disable WAN Optimization.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable WAN Optimization.</td></tr><tr><td><i>disable</i></td><td>Disable WAN Optimization.</td></tr></table>	Option	Description	<i>enable</i>	Enable WAN Optimization.	<i>disable</i>	Disable WAN Optimization.			
Option	Description									
<i>enable</i>	Enable WAN Optimization.									
<i>disable</i>	Disable WAN Optimization.									
tunnel-sharing	Tunnel sharing mode for aggressive/non-aggressive and/or interactive/non-interactive protocols.	option	-	private						

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>shared</i>	For profiles that accept nonaggressive and non-interactive protocols.		
	<i>express-shared</i>	For profiles that accept interactive protocols such as Telnet.		
	<i>private</i>	For profiles that accept aggressive protocols such as HTTP and FTP so that these aggressive protocols do not share tunnels with less-aggressive protocols.		

config tcp

Parameter	Description	Type	Size	Default
byte-caching	Enable/disable byte-caching. Byte caching reduces the amount of traffic by caching file data sent across the WAN and in future serving it from the cache.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable byte-caching.		
	<i>disable</i>	Disable byte-caching.		
byte-caching-opt	Select whether TCP byte-caching uses system memory only or both memory and disk space.	option	-	mem-only
	Option	Description		
	<i>mem-only</i>	Byte caching with memory only.		
	<i>mem-disk</i>	Byte caching with memory and disk.		
port	Port numbers or port number ranges for TCP. Only packets with a destination port number that matches this port number or range are accepted by this profile.	user	Not Specified	
secure-tunnel	Enable/disable securing the WAN Opt tunnel using SSL. Secure and non-secure tunnels use the same TCP port (7810).	option	-	disable
	Option	Description		
	<i>enable</i>	Enable SSL-secured tunnelling.		
	<i>disable</i>	Disable SSL-secured tunnelling.		
ssl	Enable/disable SSL/TLS offloading (hardware acceleration) for traffic in this tunnel.	option	-	disable

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>enable</i>	Enable SSL/TLS offloading.		
	<i>disable</i>	Disable SSL/TLS offloading.		
ssl-port	Port numbers or port number ranges on which to expect HTTPS traffic for SSL/TLS offloading.	user	Not Specified	
status	Enable/disable WAN Optimization.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable WAN Optimization.		
	<i>disable</i>	Disable WAN Optimization.		
tunnel-sharing	Tunnel sharing mode for aggressive/non-aggressive and/or interactive/non-interactive protocols.	option	-	private
	Option	Description		
	<i>shared</i>	For profiles that accept nonaggressive and non-interactive protocols.		
	<i>express-shared</i>	For profiles that accept interactive protocols such as Telnet.		
	<i>private</i>	For profiles that accept aggressive protocols such as HTTP and FTP so that these aggressive protocols do not share tunnels with less-aggressive protocols.		

config wanopt remote-storage



This command is available for model(s): FortiGate 1000D, FortiGate 1001F, FortiGate 101F, FortiGate 1101E, FortiGate 1500DT, FortiGate 1500D, FortiGate 1801F, FortiGate 2000E, FortiGate 201E, FortiGate 201F, FortiGate 2201E, FortiGate 2500E, FortiGate 2600F, FortiGate 2601F, FortiGate 3000D, FortiGate 3001F, FortiGate 301E, FortiGate 3100D, FortiGate 3200D, FortiGate 3201F, FortiGate 3301E, FortiGate 3401E, FortiGate 3501F, FortiGate 3601E, FortiGate 3700D, FortiGate 3701F, FortiGate 401E, FortiGate 401F, FortiGate 4201F, FortiGate 4401F, FortiGate 5001E1, FortiGate 501E, FortiGate 601E, FortiGate 61E, FortiGate 71F, FortiGate 800D, FortiGate 81E-POE, FortiGate 81E, FortiGate 81F-POE, FortiGate 81F, FortiGate 900D, FortiGate 91E, FortiGate-VM64 Aliyun, FortiGate-VM64 AWS, FortiGate-VM64 Azure, FortiGate-VM64 GCP, FortiGate-VM64 OPC, FortiGate-VM64, FortiGateRugged 70F 3G4G, FortiGateRugged 70F, FortiWiFi 61E, FortiWiFi 61F, FortiWiFi 80F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G-POE, FortiWiFi 81F 2R-POE, FortiWiFi 81F 2R.

It is not available for: FortiGate 1000F, FortiGate 100EF, FortiGate 100E, FortiGate 100F, FortiGate 1100E, FortiGate 140E-POE, FortiGate 140E, FortiGate 1800F, FortiGate 200E, FortiGate 200F, FortiGate 3000F, FortiGate 300E, FortiGate 3200F, FortiGate 3300E, FortiGate 3400E, FortiGate 3600E, FortiGate 3700F, FortiGate 3960E, FortiGate 3980E, FortiGate 400E Bypass, FortiGate 400E, FortiGate 400F, FortiGate 40F 3G4G, FortiGate 4200F, FortiGate 4400F, FortiGate 5001E, FortiGate 500E, FortiGate 600E, FortiGate 60E-POE, FortiGate 60E, FortiGate 60F, FortiGate 70F, FortiGate 80E-POE, FortiGate 80E, FortiGate 80F Bypass, FortiGate 80F DSL, FortiGate 80F-POE, FortiGate 80F, FortiGate 90E, FortiGateRugged 60F 3G4G, FortiGateRugged 60F, FortiWiFi 40F 3G4G, FortiWiFi 40F, FortiWiFi 60E, FortiWiFi 60F.

Configure a remote cache device as Web cache storage.

```
config wanopt remote-storage
  Description: Configure a remote cache device as Web cache storage.
  set local-cache-id {string}
  set remote-cache-id {string}
  set remote-cache-ip {ipv4-address-any}
  set status [disable|enable]
end
```

config wanopt remote-storage

Parameter	Description	Type	Size	Default
local-cache-id	ID that this device uses to connect to the remote device.	string	Maximum length: 35	
remote-cache-id	ID of the remote device to which the device connects.	string	Maximum length: 35	

Parameter	Description	Type	Size	Default
remote-cache-ip	IP address of the remote device to which the device connects.	ipv4-address-any	Not Specified	0.0.0.0
status	Enable/disable using remote device as Web cache storage.	option	-	disable
		Option	Description	
		<i>disable</i>	Use local disks as Web cache storage.	
		<i>enable</i>	Use a remote device as Web cache storage.	

config wanopt settings



This command is available for model(s): FortiGate 1000D, FortiGate 1001F, FortiGate 101F, FortiGate 1101E, FortiGate 1500DT, FortiGate 1500D, FortiGate 1801F, FortiGate 2000E, FortiGate 201E, FortiGate 201F, FortiGate 2201E, FortiGate 2500E, FortiGate 2600F, FortiGate 2601F, FortiGate 3000D, FortiGate 3001F, FortiGate 301E, FortiGate 3100D, FortiGate 3200D, FortiGate 3201F, FortiGate 3301E, FortiGate 3401E, FortiGate 3501F, FortiGate 3601E, FortiGate 3700D, FortiGate 3701F, FortiGate 401E, FortiGate 401F, FortiGate 4201F, FortiGate 4401F, FortiGate 5001E1, FortiGate 501E, FortiGate 601E, FortiGate 61E, FortiGate 71F, FortiGate 800D, FortiGate 81E-POE, FortiGate 81E, FortiGate 81F-POE, FortiGate 81F, FortiGate 900D, FortiGate 91E, FortiGate-VM64 Aliyun, FortiGate-VM64 AWS, FortiGate-VM64 Azure, FortiGate-VM64 GCP, FortiGate-VM64 OPC, FortiGate-VM64, FortiGateRugged 70F 3G4G, FortiGateRugged 70F, FortiWiFi 61E, FortiWiFi 61F, FortiWiFi 80F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G-POE, FortiWiFi 81F 2R-POE, FortiWiFi 81F 2R.

It is not available for: FortiGate 1000F, FortiGate 100EF, FortiGate 100E, FortiGate 100F, FortiGate 1100E, FortiGate 140E-POE, FortiGate 140E, FortiGate 1800F, FortiGate 200E, FortiGate 200F, FortiGate 3000F, FortiGate 300E, FortiGate 3200F, FortiGate 3300E, FortiGate 3400E, FortiGate 3600E, FortiGate 3700F, FortiGate 3960E, FortiGate 3980E, FortiGate 400E Bypass, FortiGate 400E, FortiGate 400F, FortiGate 40F 3G4G, FortiGate 4200F, FortiGate 4400F, FortiGate 5001E, FortiGate 500E, FortiGate 600E, FortiGate 60E-POE, FortiGate 60E, FortiGate 60F, FortiGate 70F, FortiGate 80E-POE, FortiGate 80E, FortiGate 80F Bypass, FortiGate 80F DSL, FortiGate 80F-POE, FortiGate 80F, FortiGate 90E, FortiGateRugged 60F 3G4G, FortiGateRugged 60F, FortiWiFi 40F 3G4G, FortiWiFi 40F, FortiWiFi 60E, FortiWiFi 60F.

Configure WAN optimization settings.

```
config wanopt settings
  Description: Configure WAN optimization settings.
  set auto-detect-algorithm [simple|diff-req-resp]
  set host-id {string}
  set tunnel-optimization [memory-usage|balanced|...]
```

```

set tunnel-ssl-algorithm [high|medium|...]
end

```

config wanopt settings

Parameter	Description	Type	Size	Default								
auto-detect-algorithm	Auto detection algorithms used in tunnel negotiations.	option	-	simple								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>simple</i></td><td>Use the same TCP option value in SYN/SYNACK packets. Backward compatible.</td></tr><tr><td><i>diff-req-resp</i></td><td>Use different TCP option values in SYN/SYNACK packets to avoid false positive detection.</td></tr></table>	Option	Description	<i>simple</i>	Use the same TCP option value in SYN/SYNACK packets. Backward compatible.	<i>diff-req-resp</i>	Use different TCP option values in SYN/SYNACK packets to avoid false positive detection.					
Option	Description											
<i>simple</i>	Use the same TCP option value in SYN/SYNACK packets. Backward compatible.											
<i>diff-req-resp</i>	Use different TCP option values in SYN/SYNACK packets to avoid false positive detection.											
host-id	Local host ID (must also be entered in the remote FortiGate's peer list).	string	Maximum length: 35	default-id								
tunnel-optimization	WANOpt tunnel optimization option.	option	-	balanced **								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>memory-usage</i></td><td>Optimize tunnel for low system memory usage.</td></tr><tr><td><i>balanced</i></td><td>Optimize tunnel to balance between system memory usage and throughput.</td></tr><tr><td><i>throughput</i></td><td>Optimize tunnel for throughput.</td></tr></table>	Option	Description	<i>memory-usage</i>	Optimize tunnel for low system memory usage.	<i>balanced</i>	Optimize tunnel to balance between system memory usage and throughput.	<i>throughput</i>	Optimize tunnel for throughput.			
Option	Description											
<i>memory-usage</i>	Optimize tunnel for low system memory usage.											
<i>balanced</i>	Optimize tunnel to balance between system memory usage and throughput.											
<i>throughput</i>	Optimize tunnel for throughput.											
tunnel-ssl-algorithm	Relative strength of encryption algorithms accepted during tunnel negotiation.	option	-	high								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>high</i></td><td>High encryption. Allow only AES and ChaCha.</td></tr><tr><td><i>medium</i></td><td>Medium encryption. Allow AES, ChaCha, 3DES, and RC4.</td></tr><tr><td><i>low</i></td><td>Low encryption. Allow AES, ChaCha, 3DES, RC4, and DES.</td></tr></table>	Option	Description	<i>high</i>	High encryption. Allow only AES and ChaCha.	<i>medium</i>	Medium encryption. Allow AES, ChaCha, 3DES, and RC4.	<i>low</i>	Low encryption. Allow AES, ChaCha, 3DES, RC4, and DES.			
Option	Description											
<i>high</i>	High encryption. Allow only AES and ChaCha.											
<i>medium</i>	Medium encryption. Allow AES, ChaCha, 3DES, and RC4.											
<i>low</i>	Low encryption. Allow AES, ChaCha, 3DES, RC4, and DES.											

** Values may differ between models.

config wanopt webcache



This command is available for model(s): FortiGate 1000D, FortiGate 1001F, FortiGate 101F, FortiGate 1101E, FortiGate 1500DT, FortiGate 1500D, FortiGate 1801F, FortiGate 2000E, FortiGate 201E, FortiGate 201F, FortiGate 2201E, FortiGate 2500E, FortiGate 2600F, FortiGate 2601F, FortiGate 3000D, FortiGate 3001F, FortiGate 301E, FortiGate 3100D, FortiGate 3200D, FortiGate 3201F, FortiGate 3301E, FortiGate 3401E, FortiGate 3501F, FortiGate 3601E, FortiGate 3700D, FortiGate 3701F, FortiGate 401E, FortiGate 401F, FortiGate 4201F, FortiGate 4401F, FortiGate 5001E1, FortiGate 501E, FortiGate 601E, FortiGate 61E, FortiGate 71F, FortiGate 800D, FortiGate 81E-POE, FortiGate 81E, FortiGate 81F-POE, FortiGate 81F, FortiGate 900D, FortiGate 91E, FortiGate-VM64 Aliyun, FortiGate-VM64 AWS, FortiGate-VM64 Azure, FortiGate-VM64 GCP, FortiGate-VM64 OPC, FortiGate-VM64, FortiGateRugged 70F 3G4G, FortiGateRugged 70F, FortiWiFi 61E, FortiWiFi 61F, FortiWiFi 80F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G DSL, FortiWiFi 81F 2R 3G4G-POE, FortiWiFi 81F 2R-POE, FortiWiFi 81F 2R.

It is not available for: FortiGate 1000F, FortiGate 100EF, FortiGate 100E, FortiGate 100F, FortiGate 1100E, FortiGate 140E-POE, FortiGate 140E, FortiGate 1800F, FortiGate 200E, FortiGate 200F, FortiGate 3000F, FortiGate 300E, FortiGate 3200F, FortiGate 3300E, FortiGate 3400E, FortiGate 3600E, FortiGate 3700F, FortiGate 3960E, FortiGate 3980E, FortiGate 400E Bypass, FortiGate 400E, FortiGate 400F, FortiGate 40F 3G4G, FortiGate 4200F, FortiGate 4400F, FortiGate 5001E, FortiGate 500E, FortiGate 600E, FortiGate 60E-POE, FortiGate 60E, FortiGate 60F, FortiGate 70F, FortiGate 80E-POE, FortiGate 80E, FortiGate 80F Bypass, FortiGate 80F DSL, FortiGate 80F-POE, FortiGate 80F, FortiGate 90E, FortiGateRugged 60F 3G4G, FortiGateRugged 60F, FortiWiFi 40F 3G4G, FortiWiFi 40F, FortiWiFi 60E, FortiWiFi 60F.

Configure global Web cache settings.

```
config wanopt webcache
  Description: Configure global Web cache settings.
  set always-revalidate [enable|disable]
  set cache-by-default [enable|disable]
  set cache-cookie [enable|disable]
  set cache-expired [enable|disable]
  set default-ttl {integer}
  set external [enable|disable]
  set fresh-factor {integer}
  set host-validate [enable|disable]
  set ignore-conditional [enable|disable]
  set ignore-ie-reload [enable|disable]
  set ignore-ims [enable|disable]
  set ignore-pnc [enable|disable]
  set max-object-size {integer}
  set max-ttl {integer}
  set min-ttl {integer}
  set neg-resp-time {integer}
  set reval-pnc [enable|disable]
end
```

config wanopt webcache

Parameter	Description	Type	Size	Default						
always-revalidate	Enable/disable revalidation of requested cached objects, which have content on the server, before serving it to the client.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable revalidation of requested cached objects.</td></tr><tr><td><i>disable</i></td><td>Disable revalidation of requested cached objects.</td></tr></table>	Option	Description	<i>enable</i>	Enable revalidation of requested cached objects.	<i>disable</i>	Disable revalidation of requested cached objects.			
Option	Description									
<i>enable</i>	Enable revalidation of requested cached objects.									
<i>disable</i>	Disable revalidation of requested cached objects.									
cache-by-default	Enable/disable caching content that lacks explicit caching policies from the server.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable caching content that lacks explicit caching policies.</td></tr><tr><td><i>disable</i></td><td>Disable caching content that lacks explicit caching policies.</td></tr></table>	Option	Description	<i>enable</i>	Enable caching content that lacks explicit caching policies.	<i>disable</i>	Disable caching content that lacks explicit caching policies.			
Option	Description									
<i>enable</i>	Enable caching content that lacks explicit caching policies.									
<i>disable</i>	Disable caching content that lacks explicit caching policies.									
cache-cookie	Enable/disable caching cookies. Since cookies contain information for or about individual users, they not usually cached.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Cache cookies.</td></tr><tr><td><i>disable</i></td><td>Do not cache cookies.</td></tr></table>	Option	Description	<i>enable</i>	Cache cookies.	<i>disable</i>	Do not cache cookies.			
Option	Description									
<i>enable</i>	Cache cookies.									
<i>disable</i>	Do not cache cookies.									
cache-expired	Enable/disable caching type-1 objects that are already expired on arrival.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable setting.</td></tr><tr><td><i>disable</i></td><td>Disable setting.</td></tr></table>	Option	Description	<i>enable</i>	Enable setting.	<i>disable</i>	Disable setting.			
Option	Description									
<i>enable</i>	Enable setting.									
<i>disable</i>	Disable setting.									
default-ttl	Default object expiry time (default = 1440 min (1 day); maximum = 5256000 min (10 years)). This only applies to those objects that do not have an expiry time set by the web server.	integer	Minimum value: 1 Maximum value: 5256000	1440						
external	Enable/disable external Web caching.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable external Web caching.</td></tr><tr><td><i>disable</i></td><td>Disable external Web caching.</td></tr></table>	Option	Description	<i>enable</i>	Enable external Web caching.	<i>disable</i>	Disable external Web caching.			
Option	Description									
<i>enable</i>	Enable external Web caching.									
<i>disable</i>	Disable external Web caching.									

Parameter	Description	Type	Size	Default						
fresh-factor	Frequency that the server is checked to see if any objects have expired (1 - 100, default = 100). The higher the fresh factor, the less often the checks occur.	integer	Minimum value: 1 Maximum value: 100	100						
host-validate	Enable/disable validating "Host:" with original server IP.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable validating "Host:" with original server IP.</td></tr><tr><td>disable</td><td>Disable validating "Host:" with original server IP.</td></tr></table>	Option	Description	enable	Enable validating "Host:" with original server IP.	disable	Disable validating "Host:" with original server IP.			
Option	Description									
enable	Enable validating "Host:" with original server IP.									
disable	Disable validating "Host:" with original server IP.									
ignore-conditional	Enable/disable controlling the behavior of cache-control HTTP 1.1 header values.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable ignoring cache-control HTTP 1.1 header values.</td></tr><tr><td>disable</td><td>Disable ignoring cache-control HTTP 1.1 header values.</td></tr></table>	Option	Description	enable	Enable ignoring cache-control HTTP 1.1 header values.	disable	Disable ignoring cache-control HTTP 1.1 header values.			
Option	Description									
enable	Enable ignoring cache-control HTTP 1.1 header values.									
disable	Disable ignoring cache-control HTTP 1.1 header values.									
ignore-ie-reload	Enable/disable ignoring the PNC-interpretation of Internet Explorer's Accept: / header.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable Enable/disable ignoring the PNC-interpretation of Internet Explorer's Accept: / header.</td></tr><tr><td>disable</td><td>Disable Enable/disable ignoring the PNC-interpretation of Internet Explorer's Accept: / header.</td></tr></table>	Option	Description	enable	Enable Enable/disable ignoring the PNC-interpretation of Internet Explorer's Accept: / header.	disable	Disable Enable/disable ignoring the PNC-interpretation of Internet Explorer's Accept: / header.			
Option	Description									
enable	Enable Enable/disable ignoring the PNC-interpretation of Internet Explorer's Accept: / header.									
disable	Disable Enable/disable ignoring the PNC-interpretation of Internet Explorer's Accept: / header.									
ignore-ims	Enable/disable ignoring the if-modified-since (IMS) header.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable ignoring the if-modified-since (IMS) header.</td></tr><tr><td>disable</td><td>Disable ignoring the if-modified-since (IMS) header.</td></tr></table>	Option	Description	enable	Enable ignoring the if-modified-since (IMS) header.	disable	Disable ignoring the if-modified-since (IMS) header.			
Option	Description									
enable	Enable ignoring the if-modified-since (IMS) header.									
disable	Disable ignoring the if-modified-since (IMS) header.									
ignore-pnc	Enable/disable ignoring the pragma no-cache (PNC) header.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable ignoring the pragma no-cache (PNC) header.</td></tr><tr><td>disable</td><td>Disable ignoring the pragma no-cache (PNC) header.</td></tr></table>	Option	Description	enable	Enable ignoring the pragma no-cache (PNC) header.	disable	Disable ignoring the pragma no-cache (PNC) header.			
Option	Description									
enable	Enable ignoring the pragma no-cache (PNC) header.									
disable	Disable ignoring the pragma no-cache (PNC) header.									

Parameter	Description	Type	Size	Default
max-object-size	Maximum cacheable object size in kB (1 - 2147483 kb (2GB). All objects that exceed this are delivered to the client but not stored in the web cache.	integer	Minimum value: 1 Maximum value: 2147483	512000
max-ttl	Maximum time an object can stay in the web cache without checking to see if it has expired on the server (default = 7200 min (5 days); maximum = 5256000 min (10 years)).	integer	Minimum value: 1 Maximum value: 5256000	7200
min-ttl	Minimum time an object can stay in the web cache without checking to see if it has expired on the server (default = 5 min; maximum = 5256000 (10 years)).	integer	Minimum value: 1 Maximum value: 5256000	5
neg-resp-time	Time in minutes to cache negative responses or errors (0 - 4294967295, default = 0 which means negative responses are not cached).	integer	Minimum value: 0 Maximum value: 4294967295	0
reval-pnc	Enable/disable revalidation of pragma-no-cache (PNC) to address bandwidth concerns.	option	-	disable
		Option	Description	
		<i>enable</i>	Enable revalidation of pragma-no-cache (PNC).	
		<i>disable</i>	Disable revalidation of pragma-no-cache (PNC).	

web-proxy

This section includes syntax for the following commands:

- [config web-proxy debug-url on page 2058](#)
- [config web-proxy explicit on page 2059](#)
- [config web-proxy forward-server-group on page 2066](#)
- [config web-proxy forward-server on page 2064](#)
- [config web-proxy global on page 2068](#)
- [config web-proxy profile on page 2071](#)
- [config web-proxy url-match on page 2075](#)
- [config web-proxy wisp on page 2076](#)

config web-proxy debug-url

Configure debug URL addresses.

```
config web-proxy debug-url
  Description: Configure debug URL addresses.
  edit <name>
    set exact [enable|disable]
    set status [enable|disable]
    set url-pattern {string}
  next
end
```

config web-proxy debug-url

Parameter	Description	Type	Size	Default						
exact	Enable/disable matching the exact path.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable matching the exact path.</td></tr><tr><td><i>disable</i></td><td>Disable matching the exact path.</td></tr></table>	Option	Description	<i>enable</i>	Enable matching the exact path.	<i>disable</i>	Disable matching the exact path.			
	Option	Description								
	<i>enable</i>	Enable matching the exact path.								
<i>disable</i>	Disable matching the exact path.									
name	Debug URL name.	string	Maximum length: 63							
status	Enable/disable this URL exemption.	option	-	enable						

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>enable</i>	Enable this URL exemption.		
	<i>disable</i>	Disable this URL exemption.		
url-pattern	URL exemption pattern.	string	Maximum length: 511	

config web-proxy explicit

Configure explicit Web proxy settings.

```

config web-proxy explicit
  Description: Configure explicit Web proxy settings.
  set ftp-incoming-port {user}
  set ftp-over-http [enable|disable]
  set http-connection-mode [static|multiplex|...]
  set http-incoming-port {user}
  set https-incoming-port {user}
  set https-replacement-message [enable|disable]
  set incoming-ip {ipv4-address-any}
  set incoming-ip6 {ipv6-address}
  set ipv6-status [enable|disable]
  set message-upon-server-error [enable|disable]
  set outgoing-ip {ipv4-address-any}
  set outgoing-ip6 {ipv6-address}
  set pac-file-data {user}
  set pac-file-name {string}
  set pac-file-server-port {user}
  set pac-file-server-status [enable|disable]
  set pac-file-through-https [enable|disable]
  set pac-file-url {user}
  config pac-policy
    Description: PAC policies.
    edit <policyid>
      set comments {var-string}
      set dstaddr <name1>, <name2>, ...
      set pac-file-data {user}
      set pac-file-name {string}
      set srcaddr <name1>, <name2>, ...
      set srcaddr6 <name1>, <name2>, ...
      set status [enable|disable]
    next
  end
  set pref-dns-result [ipv4|ipv6|...]
  set realm {string}
  set sec-default-action [accept|deny]
  set socks [enable|disable]

```

```

set socks-incoming-port {user}
set ssl-algorithm [high|medium|...]
set status [enable|disable]
set strict-guest [enable|disable]
set trace-auth-no-rsp [enable|disable]
set unknown-http-version [reject|best-effort]
end

```

config web-proxy explicit

Parameter	Description	Type	Size	Default								
ftp-incoming-port	Accept incoming FTP-over-HTTP requests on one or more ports (0 - 65535, default = 0; use the same as HTTP).	user	Not Specified									
ftp-over-http	Enable to proxy FTP-over-HTTP sessions sent from a web browser.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable FTP-over-HTTP sessions.</td></tr><tr><td><i>disable</i></td><td>Disable FTP-over-HTTP sessions.</td></tr></table>	Option	Description	<i>enable</i>	Enable FTP-over-HTTP sessions.	<i>disable</i>	Disable FTP-over-HTTP sessions.					
Option	Description											
<i>enable</i>	Enable FTP-over-HTTP sessions.											
<i>disable</i>	Disable FTP-over-HTTP sessions.											
http-connection-mode	HTTP connection mode (default = static).	option	-	static								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>static</i></td><td>Only one server connection exists during the proxy session.</td></tr><tr><td><i>multiplex</i></td><td>Established connections are held until the proxy session ends.</td></tr><tr><td><i>serverpool</i></td><td>Established connections are shared with other proxy sessions.</td></tr></table>	Option	Description	<i>static</i>	Only one server connection exists during the proxy session.	<i>multiplex</i>	Established connections are held until the proxy session ends.	<i>serverpool</i>	Established connections are shared with other proxy sessions.			
Option	Description											
<i>static</i>	Only one server connection exists during the proxy session.											
<i>multiplex</i>	Established connections are held until the proxy session ends.											
<i>serverpool</i>	Established connections are shared with other proxy sessions.											
http-incoming-port	Accept incoming HTTP requests on one or more ports (0 - 65535, default = 8080).	user	Not Specified									
https-incoming-port	Accept incoming HTTPS requests on one or more ports (0 - 65535, default = 0, use the same as HTTP).	user	Not Specified									
https-replacement-message	Enable/disable sending the client a replacement message for HTTPS requests.	option	-	enable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Display a replacement message for HTTPS requests.</td></tr><tr><td><i>disable</i></td><td>Do not display a replacement message for HTTPS requests.</td></tr></table>	Option	Description	<i>enable</i>	Display a replacement message for HTTPS requests.	<i>disable</i>	Do not display a replacement message for HTTPS requests.					
Option	Description											
<i>enable</i>	Display a replacement message for HTTPS requests.											
<i>disable</i>	Do not display a replacement message for HTTPS requests.											

Parameter	Description	Type	Size	Default						
incoming-ip	Restrict the explicit HTTP proxy to only accept sessions from this IP address. An interface must have this IP address.	ipv4-address-any	Not Specified	0.0.0.0						
incoming-ip6	Restrict the explicit web proxy to only accept sessions from this IPv6 address. An interface must have this IPv6 address.	ipv6-address	Not Specified	::						
ipv6-status	Enable/disable allowing an IPv6 web proxy destination in policies and all IPv6 related entries in this command.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable allowing an IPv6 web proxy destination.</td></tr><tr><td>disable</td><td>Disable allowing an IPv6 web proxy destination.</td></tr></table>				Option	Description	enable	Enable allowing an IPv6 web proxy destination.	disable	Disable allowing an IPv6 web proxy destination.
	Option	Description								
	enable	Enable allowing an IPv6 web proxy destination.								
disable	Disable allowing an IPv6 web proxy destination.									
message-upon-server-error	Enable/disable displaying a replacement message when a server error is detected.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Display a replacement message when a server error is detected.</td></tr><tr><td>disable</td><td>Do not display a replacement message when a server error is detected.</td></tr></table>				Option	Description	enable	Display a replacement message when a server error is detected.	disable	Do not display a replacement message when a server error is detected.
	Option	Description								
	enable	Display a replacement message when a server error is detected.								
disable	Do not display a replacement message when a server error is detected.									
outgoing-ip	Outgoing HTTP requests will have this IP address as their source address. An interface must have this IP address.	ipv4-address-any	Not Specified							
outgoing-ip6	Outgoing HTTP requests will leave this IPv6. Multiple interfaces can be specified. Interfaces must have these IPv6 addresses.	ipv6-address	Not Specified							
pac-file-data	PAC file contents enclosed in quotes (maximum of 256K bytes).	user	Not Specified							
pac-file-name	Pac file name.	string	Maximum length: 63	proxy.pac						
pac-file-server-port	Port number that PAC traffic from client web browsers uses to connect to the explicit web proxy (0 - 65535, default = 0; use the same as HTTP).	user	Not Specified							
pac-file-server-status	Enable/disable Proxy Auto-Configuration (PAC) for users of this explicit proxy profile.	option	-	disable						

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>enable</i>	Enable Proxy Auto-Configuration (PAC).		
	<i>disable</i>	Disable Proxy Auto-Configuration (PAC).		
pac-file-through-https	Enable/disable to get Proxy Auto-Configuration (PAC) through HTTPS.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable to get Proxy Auto-Configuration (PAC) through HTTPS.		
	<i>disable</i>	Disable to get Proxy Auto-Configuration (PAC) through HTTPS.		
pac-file-url	PAC file access URL. Read-only.	user	Not Specified	
pref-dns-result	Prefer resolving addresses using the configured IPv4 or IPv6 DNS server (default = ipv4).	option	-	ipv4
	Option	Description		
	<i>ipv4</i>	Send the IPv4 request first and then the IPv6 request. Use the DNS response that returns to the FortiGate first.		
	<i>ipv6</i>	Send the IPv6 request first and then the IPv4 request. Use the DNS response that returns to the FortiGate first.		
	<i>ipv4-strict</i>	Use the IPv4 DNS response. If the IPv6 DNS response arrives first, wait 50ms for the IPv4 response and then use the IPv4 response, otherwise the IPv6.		
	<i>ipv6-strict</i>	Use the IPv6 DNS response. If the IPv4 DNS response arrives first, wait 50ms for the IPv6 response and then use the IPv6 response, otherwise the IPv4.		
realm	Authentication realm used to identify the explicit web proxy (maximum of 63 characters).	string	Maximum length: 63	default
sec-default-action	Accept or deny explicit web proxy sessions when no web proxy firewall policy exists.	option	-	deny
	Option	Description		
	<i>accept</i>	Accept requests. All explicit web proxy traffic is accepted whether there is an explicit web proxy policy or not.		
	<i>deny</i>	Deny requests unless there is a matching explicit web proxy policy.		
socks	Enable/disable the SOCKS proxy.	option	-	disable

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>enable</i>	Enable the SOCKS proxy.		
	<i>disable</i>	Disable the SOCKS proxy.		
socks-incoming-port	Accept incoming SOCKS proxy requests on one or more ports (0 - 65535, default = 0; use the same as HTTP).	user	Not Specified	
ssl-algorithm	Relative strength of encryption algorithms accepted in HTTPS deep scan: high, medium, or low.	option	-	low
	Option	Description		
	<i>high</i>	High encryption. Allow only AES and ChaCha.		
	<i>medium</i>	Medium encryption. Allow AES, ChaCha, 3DES, and RC4.		
	<i>low</i>	Low encryption. Allow AES, ChaCha, 3DES, RC4, and DES.		
status	Enable/disable the explicit Web proxy for HTTP and HTTPS session.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable the explicit web proxy.		
	<i>disable</i>	Disable the explicit web proxy.		
strict-guest	Enable/disable strict guest user checking by the explicit web proxy.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable strict guest user checking.		
	<i>disable</i>	Disable strict guest user checking.		
trace-auth-no-rsp	Enable/disable logging timed-out authentication requests.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable logging timed-out authentication requests.		
	<i>disable</i>	Disable logging timed-out authentication requests.		
unknown-http-version	How to handle HTTP sessions that do not comply with HTTP 0.9, 1.0, or 1.1.	option	-	reject

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>reject</i>	Reject or tear down HTTP sessions that do not use HTTP 0.9, 1.0, or 1.1.		
	<i>best-effort</i>	Assume all HTTP sessions comply with HTTP 0.9, 1.0, or 1.1. If a session uses a different HTTP version, it may not parse correctly and the connection may be lost.		

config pac-policy

Parameter	Description	Type	Size	Default
comments	Optional comments.	var-string	Maximum length: 1023	
dstaddr <name>	Destination address objects. Address name.	string	Maximum length: 79	
pac-file-data	PAC file contents enclosed in quotes (maximum of 256K bytes).	user	Not Specified	
pac-file-name	Pac file name.	string	Maximum length: 63	proxy.pac
policyid	Policy ID.	integer	Minimum value: 1 Maximum value: 100	0
srcaddr <name>	Source address objects. Address name.	string	Maximum length: 79	
srcaddr6 <name>	Source address6 objects. Address name.	string	Maximum length: 79	
status	Enable/disable policy.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable policy.		
	<i>disable</i>	Disable policy.		

config web-proxy forward-server

Configure forward-server addresses.

```

config web-proxy forward-server
    Description: Configure forward-server addresses.
    edit <name>
        set addr-type [ip|fqdn]
        set comment {string}
        set fqdn {string}
        set healthcheck [disable|enable]
        set ip {ipv4-address-any}
        set monitor {string}
        set password {password}
        set port {integer}
        set server-down-option [block|pass]
        set username {string}
    next
end

```

config web-proxy forward-server

Parameter	Description	Type	Size	Default
addr-type	Address type of the forwarding proxy server: IP or FQDN.	option	-	ip
	Option	Description		
	<i>ip</i>	Use an IP address for the forwarding proxy server.		
	<i>fqdn</i>	Use the FQDN for the forwarding proxy server.		
comment	Comment.	string	Maximum length: 63	
fqdn	Forward server Fully Qualified Domain Name (FQDN).	string	Maximum length: 255	
healthcheck	Enable/disable forward server health checking. Attempts to connect through the remote forwarding server to a destination to verify that the forwarding server is operating normally.	option	-	disable
	Option	Description		
	<i>disable</i>	Disable health checking.		
	<i>enable</i>	Enable health checking.		
ip	Forward proxy server IP address.	ipv4-address-any	Not Specified	0.0.0.0

Parameter	Description	Type	Size	Default						
monitor	URL for forward server health check monitoring (default = http://www.google.com).	string	Maximum length: 255	http://www.google.com						
name	Server name.	string	Maximum length: 63							
password	HTTP authentication password.	password	Not Specified							
port	Port number that the forwarding server expects to receive HTTP sessions on (1 - 65535, default = 3128).	integer	Minimum value: 1 Maximum value: 65535	3128						
server-down-option	Action to take when the forward server is found to be down: block sessions until the server is back up or pass sessions to their destination.	option	-	block						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>block</i></td><td>Block sessions until the server is back up.</td></tr><tr><td><i>pass</i></td><td>Pass sessions to their destination bypassing the forward server.</td></tr></table>				Option	Description	<i>block</i>	Block sessions until the server is back up.	<i>pass</i>	Pass sessions to their destination bypassing the forward server.
	Option	Description								
<i>block</i>	Block sessions until the server is back up.									
<i>pass</i>	Pass sessions to their destination bypassing the forward server.									
username	HTTP authentication user name.	string	Maximum length: 64							

config web-proxy forward-server-group

Configure a forward server group consisting of multiple forward servers. Supports failover and load balancing.

```

config web-proxy forward-server-group
    Description: Configure a forward server group consisting of multiple forward servers. Supports failover and load balancing.
    edit <name>
        set affinity [enable|disable]
        set group-down-option [block|pass]
        set ldb-method [weighted|least-session|...]
        config server-list
            Description: Add web forward servers to a list to form a server group. Optionally assign weights to each server.
            edit <name>
                set weight {integer}
            next
        end
    end

```

```
next
end
```

config web-proxy forward-server-group

Parameter	Description	Type	Size	Default								
affinity	Enable/disable affinity, attaching a source-ip's traffic to the assigned forwarding server until the forward-server-affinity-timeout is reached (under web-proxy global).	option	-	enable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable affinity.</td></tr><tr><td><i>disable</i></td><td>Disable affinity.</td></tr></table>	Option	Description	<i>enable</i>	Enable affinity.	<i>disable</i>	Disable affinity.					
Option	Description											
<i>enable</i>	Enable affinity.											
<i>disable</i>	Disable affinity.											
group-down-option	Action to take when all of the servers in the forward server group are down: block sessions until at least one server is back up or pass sessions to their destination.	option	-	block								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>block</i></td><td>Block sessions until at least one server in the group is back up.</td></tr><tr><td><i>pass</i></td><td>Pass sessions to their destination bypassing servers in the forward server group.</td></tr></table>	Option	Description	<i>block</i>	Block sessions until at least one server in the group is back up.	<i>pass</i>	Pass sessions to their destination bypassing servers in the forward server group.					
Option	Description											
<i>block</i>	Block sessions until at least one server in the group is back up.											
<i>pass</i>	Pass sessions to their destination bypassing servers in the forward server group.											
ldb-method	Load balance method: weighted or least-session.	option	-	weighted								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>weighted</i></td><td>Load balance traffic to forward servers based on assigned weights. Weights are ratios of total number of sessions.</td></tr><tr><td><i>least-session</i></td><td>Send new sessions to the server with lowest session count.</td></tr><tr><td><i>active-passive</i></td><td>Send new sessions to the next active server in the list. Servers are selected with highest weight first and then in order as they are configured. Traffic switches back to the first server upon failure recovery.</td></tr></table>	Option	Description	<i>weighted</i>	Load balance traffic to forward servers based on assigned weights. Weights are ratios of total number of sessions.	<i>least-session</i>	Send new sessions to the server with lowest session count.	<i>active-passive</i>	Send new sessions to the next active server in the list. Servers are selected with highest weight first and then in order as they are configured. Traffic switches back to the first server upon failure recovery.			
Option	Description											
<i>weighted</i>	Load balance traffic to forward servers based on assigned weights. Weights are ratios of total number of sessions.											
<i>least-session</i>	Send new sessions to the server with lowest session count.											
<i>active-passive</i>	Send new sessions to the next active server in the list. Servers are selected with highest weight first and then in order as they are configured. Traffic switches back to the first server upon failure recovery.											
name	Configure a forward server group consisting one or multiple forward servers. Supports failover and load balancing.	string	Maximum length: 63									

config server-list

Parameter	Description	Type	Size	Default
name	Forward server name.	string	Maximum length: 63	
weight	Optionally assign a weight of the forwarding server for weighted load balancing (1 - 100, default = 10).	integer	Minimum value: 1 Maximum value: 100	10

config web-proxy global

Configure Web proxy global settings.

```
config web-proxy global
  Description: Configure Web proxy global settings.
  set fast-policy-match [enable|disable]
  set forward-proxy-auth [enable|disable]
  set forward-server-affinity-timeout {integer}
  set ldap-user-cache [enable|disable]
  set learn-client-ip [enable|disable]
  set learn-client-ip-from-header {option1}, {option2}, ...
  set learn-client-ip-srcaddr <name1>, <name2>, ...
  set learn-client-ip-srcaddr6 <name1>, <name2>, ...
  set log-policy-pending [enable|disable]
  set max-message-length {integer}
  set max-request-length {integer}
  set max-waf-body-cache-length {integer}
  set policy-category-deep-inspect [enable|disable]
  set proxy-fqdn {string}
  set src-affinity-exempt-addr {ipv4-address-any}
  set src-affinity-exempt-addr6 {ipv6-address}
  set ssl-ca-cert {string}
  set ssl-cert {string}
  set strict-web-check [enable|disable]
  set webproxy-profile {string}
end
```

config web-proxy global

Parameter	Description	Type	Size	Default
fast-policy-match	Enable/disable fast matching algorithm for explicit and transparent proxy policy.	option	-	enable

Parameter	Description	Type	Size	Default
	Option Description			
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		
forward-proxy-auth	Enable/disable forwarding proxy authentication headers.	option	-	disable
	Option Description			
	<i>enable</i>	Enable forwarding proxy authentication headers.		
	<i>disable</i>	Disable forwarding proxy authentication headers.		
forward-server-affinity-timeout	Period of time before the source IP's traffic is no longer assigned to the forwarding server (6 - 60 min, default = 30).	integer	Minimum value: 6 Maximum value: 60	30
ldap-user-cache	Enable/disable LDAP user cache for explicit and transparent proxy user.	option	-	disable
	Option Description			
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		
learn-client-ip	Enable/disable learning the client's IP address from headers.	option	-	disable
	Option Description			
	<i>enable</i>	Enable learning the client's IP address from headers.		
	<i>disable</i>	Disable learning the client's IP address from headers.		
learn-client-ip-from-header	Learn client IP address from the specified headers.	option	-	
	Option Description			
	<i>true-client-ip</i>	Learn the client IP address from the True-Client-IP header.		
	<i>x-real-ip</i>	Learn the client IP address from the X-Real-IP header.		
	<i>x-forwarded-for</i>	Learn the client IP address from the X-Forwarded-For header.		

Parameter	Description	Type	Size	Default						
learn-client-ip-srcaddr <name>	Source address name (srcaddr or srcaddr6 must be set). Address name.	string	Maximum length: 79							
learn-client-ip-srcaddr6 <name>	IPv6 Source address name (srcaddr or srcaddr6 must be set). Address name.	string	Maximum length: 79							
log-policy-pending	Enable/disable logging sessions that are pending on policy matching.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable logging sessions that are pending on policy matching.</td></tr><tr><td>disable</td><td>Disable logging sessions that are pending on policy matching.</td></tr></table>				Option	Description	enable	Enable logging sessions that are pending on policy matching.	disable	Disable logging sessions that are pending on policy matching.
Option	Description									
enable	Enable logging sessions that are pending on policy matching.									
disable	Disable logging sessions that are pending on policy matching.									
max-message-length	Maximum length of HTTP message, not including body (16 - 256 Kbytes, default = 32).	integer	Minimum value: 16 Maximum value: 256	32						
max-request-length	Maximum length of HTTP request line (2 - 64 Kbytes, default = 8).	integer	Minimum value: 2 Maximum value: 64	8						
max-waf-body-cache-length	Maximum length of HTTP messages processed by Web Application Firewall (WAF) (1 - 1024 Kbytes, default = 1).	integer	Minimum value: 1 Maximum value: 1024	1						
policy-category-deep-inspect	Enable/disable deep inspection for application level category policy matching.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable deep inspection for application level category policy matching.</td></tr><tr><td>disable</td><td>Disable deep inspection for application level category policy matching.</td></tr></table>				Option	Description	enable	Enable deep inspection for application level category policy matching.	disable	Disable deep inspection for application level category policy matching.
Option	Description									
enable	Enable deep inspection for application level category policy matching.									
disable	Disable deep inspection for application level category policy matching.									
proxy-fqdn	Fully Qualified Domain Name (FQDN) that clients connect to (default = default.fqdn) to connect to the explicit web proxy.	string	Maximum length: 255	default.fqdn						
src-affinity-exempt-addr	IPv4 source addresses to exempt proxy affinity.	ipv4-address-any	Not Specified							

Parameter	Description	Type	Size	Default						
src-affinity-exempt-addr6	IPv6 source addresses to exempt proxy affinity.	ipv6-address	Not Specified							
ssl-ca-cert	SSL CA certificate for SSL interception.	string	Maximum length: 35	Fortinet_CA_SSL						
ssl-cert	SSL certificate for SSL interception.	string	Maximum length: 35	Fortinet_Factory						
strict-web-check	Enable/disable strict web checking to block web sites that send incorrect headers that don't conform to HTTP 1.1.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable strict web checking.</td></tr><tr><td>disable</td><td>Disable strict web checking.</td></tr></table>				Option	Description	enable	Enable strict web checking.	disable	Disable strict web checking.
Option	Description									
enable	Enable strict web checking.									
disable	Disable strict web checking.									
webproxy-profile	Name of the web proxy profile to apply when explicit proxy traffic is allowed by default and traffic is accepted that does not match an explicit proxy policy.	string	Maximum length: 63							

config web-proxy profile

Configure web proxy profiles.

```

config web-proxy profile
  Description: Configure web proxy profiles.
  edit <name>
    set header-client-ip [pass|add|...]
    set header-front-end-https [pass|add|...]
    set header-via-request [pass|add|...]
    set header-via-response [pass|add|...]
    set header-x-authenticated-groups [pass|add|...]
    set header-x-authenticated-user [pass|add|...]
    set header-x-forwarded-client-cert [pass|add|...]
    set header-x-forwarded-for [pass|add|...]
  config headers
    Description: Configure HTTP forwarded requests headers.
    edit <id>
      set action [add-to-request|add-to-response|...]
      set add-option [append|new-on-not-found|...]
      set base64-encoding [disable|enable]
      set content {string}
      set dstaddr <name1>, <name2>, ...
      set dstaddr6 <name1>, <name2>, ...
      set name {string}

```

```

        set protocol {option1}, {option2}, ...
    next
end
set log-header-change [enable|disable]
set strip-encoding [enable|disable]
next
end

```

config web-proxy profile

Parameter	Description	Type	Size	Default								
header-client-ip	Action to take on the HTTP client-IP header in forwarded requests: forwards (pass), adds, or removes the HTTP header.	option	-	pass								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>pass</i></td><td>Forward the same HTTP header.</td></tr><tr><td><i>add</i></td><td>Add the HTTP header.</td></tr><tr><td><i>remove</i></td><td>Remove the HTTP header.</td></tr></table>	Option	Description	<i>pass</i>	Forward the same HTTP header.	<i>add</i>	Add the HTTP header.	<i>remove</i>	Remove the HTTP header.			
Option	Description											
<i>pass</i>	Forward the same HTTP header.											
<i>add</i>	Add the HTTP header.											
<i>remove</i>	Remove the HTTP header.											
header-front-end-https	Action to take on the HTTP front-end-HTTPS header in forwarded requests: forwards (pass), adds, or removes the HTTP header.	option	-	pass								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>pass</i></td><td>Forward the same HTTP header.</td></tr><tr><td><i>add</i></td><td>Add the HTTP header.</td></tr><tr><td><i>remove</i></td><td>Remove the HTTP header.</td></tr></table>	Option	Description	<i>pass</i>	Forward the same HTTP header.	<i>add</i>	Add the HTTP header.	<i>remove</i>	Remove the HTTP header.			
Option	Description											
<i>pass</i>	Forward the same HTTP header.											
<i>add</i>	Add the HTTP header.											
<i>remove</i>	Remove the HTTP header.											
header-via-request	Action to take on the HTTP via header in forwarded requests: forwards (pass), adds, or removes the HTTP header.	option	-	pass								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>pass</i></td><td>Forward the same HTTP header.</td></tr><tr><td><i>add</i></td><td>Add the HTTP header.</td></tr><tr><td><i>remove</i></td><td>Remove the HTTP header.</td></tr></table>	Option	Description	<i>pass</i>	Forward the same HTTP header.	<i>add</i>	Add the HTTP header.	<i>remove</i>	Remove the HTTP header.			
Option	Description											
<i>pass</i>	Forward the same HTTP header.											
<i>add</i>	Add the HTTP header.											
<i>remove</i>	Remove the HTTP header.											
header-via-response	Action to take on the HTTP via header in forwarded responses: forwards (pass), adds, or removes the HTTP header.	option	-	pass								

Parameter	Description	Type	Size	Default
	Option Description			
	<i>pass</i>	Forward the same HTTP header.		
	<i>add</i>	Add the HTTP header.		
	<i>remove</i>	Remove the HTTP header.		
header-x-authenticated-groups	Action to take on the HTTP x-authenticated-groups header in forwarded requests: forwards (pass), adds, or removes the HTTP header.	option	-	pass
	Option Description			
	<i>pass</i>	Forward the same HTTP header.		
	<i>add</i>	Add the HTTP header.		
	<i>remove</i>	Remove the HTTP header.		
header-x-authenticated-user	Action to take on the HTTP x-authenticated-user header in forwarded requests: forwards (pass), adds, or removes the HTTP header.	option	-	pass
	Option Description			
	<i>pass</i>	Forward the same HTTP header.		
	<i>add</i>	Add the HTTP header.		
	<i>remove</i>	Remove the HTTP header.		
header-x-forwarded-client-cert	Action to take on the HTTP x-forwarded-client-cert header in forwarded requests: forwards (pass), adds, or removes the HTTP header.	option	-	pass
	Option Description			
	<i>pass</i>	Forward the same HTTP header.		
	<i>add</i>	Add the HTTP header.		
	<i>remove</i>	Remove the HTTP header.		
header-x-forwarded-for	Action to take on the HTTP x-forwarded-for header in forwarded requests: forwards (pass), adds, or removes the HTTP header.	option	-	pass
	Option Description			
	<i>pass</i>	Forward the same HTTP header.		

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>add</i>	Add the HTTP header.		
	<i>remove</i>	Remove the HTTP header.		
log-header-change	Enable/disable logging HTTP header changes.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable Enable/disable logging HTTP header changes.		
	<i>disable</i>	Disable Enable/disable logging HTTP header changes.		
name	Profile name.	string	Maximum length: 63	
strip-encoding	Enable/disable stripping unsupported encoding from the request header.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable stripping of unsupported encoding from the request header.		
	<i>disable</i>	Disable stripping of unsupported encoding from the request header.		

config headers

Parameter	Description	Type	Size	Default
action	Action when the HTTP header is forwarded.	option	-	add-to-request
	Option	Description		
	<i>add-to-request</i>	Add the HTTP header to request.		
	<i>add-to-response</i>	Add the HTTP header to response.		
	<i>remove-from-request</i>	Remove the HTTP header from request.		
	<i>remove-from-response</i>	Remove the HTTP header from response.		
add-option	Configure options to append content to existing HTTP header or add new HTTP header.	option	-	new

Parameter	Description	Type	Size	Default								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>append</i></td><td>Append content to existing HTTP header or create new header if HTTP header is not found.</td></tr><tr><td><i>new-on-not-found</i></td><td>Create new header only if existing HTTP header is not found.</td></tr><tr><td><i>new</i></td><td>Create new header regardless if existing HTTP header is found or not.</td></tr></table>	Option	Description	<i>append</i>	Append content to existing HTTP header or create new header if HTTP header is not found.	<i>new-on-not-found</i>	Create new header only if existing HTTP header is not found.	<i>new</i>	Create new header regardless if existing HTTP header is found or not.			
	Option	Description										
	<i>append</i>	Append content to existing HTTP header or create new header if HTTP header is not found.										
	<i>new-on-not-found</i>	Create new header only if existing HTTP header is not found.										
<i>new</i>	Create new header regardless if existing HTTP header is found or not.											
base64-encoding	Enable/disable use of base64 encoding of HTTP content.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>disable</i></td><td>Disable use of base64 encoding of HTTP content.</td></tr><tr><td><i>enable</i></td><td>Enable use of base64 encoding of HTTP content.</td></tr></table>	Option	Description	<i>disable</i>	Disable use of base64 encoding of HTTP content.	<i>enable</i>	Enable use of base64 encoding of HTTP content.					
	Option	Description										
	<i>disable</i>	Disable use of base64 encoding of HTTP content.										
<i>enable</i>	Enable use of base64 encoding of HTTP content.											
content	HTTP header content.	string	Maximum length: 1023									
dstaddr <name>	Destination address and address group names. Address name.	string	Maximum length: 79									
dstaddr6 <name>	Destination address and address group names (IPv6). Address name.	string	Maximum length: 79									
id	HTTP forwarded header id.	integer	Minimum value: 0 Maximum value: 4294967295									
name	HTTP forwarded header name.	string	Maximum length: 79									
protocol	Configure protocol(s) to take add-option action on (HTTP, HTTPS, or both).	option	-	https http								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>https</i></td><td>Perform add-option action on HTTPS.</td></tr><tr><td><i>http</i></td><td>Perform add-option action on HTTP.</td></tr></table>	Option	Description	<i>https</i>	Perform add-option action on HTTPS.	<i>http</i>	Perform add-option action on HTTP.					
	Option	Description										
	<i>https</i>	Perform add-option action on HTTPS.										
<i>http</i>	Perform add-option action on HTTP.											

config web-proxy url-match

Exempt URLs from web proxy forwarding and caching.

```

config web-proxy url-match
    Description: Exempt URLs from web proxy forwarding and caching.
    edit <name>
        set cache-exemption [enable|disable]
        set comment {var-string}
        set forward-server {string}
        set status [enable|disable]
        set url-pattern {string}
    next
end

```

config web-proxy url-match

Parameter	Description	Type	Size	Default
cache-exemption	Enable/disable exempting this URL pattern from caching.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable exempting this URL pattern from caching.		
	<i>disable</i>	Disable exempting this URL pattern from caching.		
comment	Comment.	var-string	Maximum length: 255	
forward-server	Forward server name.	string	Maximum length: 63	
name	Configure a name for the URL to be exempted.	string	Maximum length: 63	
status	Enable/disable exempting the URLs matching the URL pattern from web proxy forwarding and caching.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable exempting the matching URLs.		
	<i>disable</i>	Disable exempting the matching URLs.		
url-pattern	URL pattern to be exempted from web proxy forwarding and caching.	string	Maximum length: 511	

config web-proxy wisp

Configure Websense Integrated Services Protocol (WISP) servers.

```

config web-proxy wisp
  Description: Configure Websense Integrated Services Protocol (WISP) servers.
  edit <name>
    set comment {var-string}
    set max-connections {integer}
    set outgoing-ip {ipv4-address-any}
    set server-ip {ipv4-address-any}
    set server-port {integer}
    set timeout {integer}
  next
end

```

config web-proxy wisp

Parameter	Description	Type	Size	Default
comment	Comment.	var-string	Maximum length: 255	
max-connections	Maximum number of web proxy WISP connections (4 - 4096, default = 64).	integer	Minimum value: 4 Maximum value: 4096	64
name	Server name.	string	Maximum length: 35	
outgoing-ip	WISP outgoing IP address.	ipv4-address-any	Not Specified	0.0.0.0
server-ip	WISP server IP address.	ipv4-address-any	Not Specified	0.0.0.0
server-port	WISP server port (1 - 65535, default = 15868).	integer	Minimum value: 1 Maximum value: 65535	15868
timeout	Period of time before WISP requests time out (1 - 15 sec, default = 5).	integer	Minimum value: 1 Maximum value: 15	5

webfilter

This section includes syntax for the following commands:

- [config webfilter content-header on page 2080](#)
- [config webfilter content on page 2078](#)
- [config webfilter fortiguard on page 2081](#)
- [config webfilter ftgd-local-cat on page 2083](#)
- [config webfilter ftgd-local-rating on page 2084](#)
- [config webfilter ips-urlfilter-cache-setting on page 2085](#)
- [config webfilter ips-urlfilter-setting on page 2085](#)
- [config webfilter ips-urlfilter-setting6 on page 2086](#)
- [config webfilter override on page 2087](#)
- [config webfilter profile on page 2088](#)
- [config webfilter search-engine on page 2105](#)
- [config webfilter urlfilter on page 2106](#)

config webfilter content

Configure Web filter banned word table.

```
config webfilter content
  Description: Configure Web filter banned word table.
  edit <id>
    set comment {var-string}
    config entries
      Description: Configure banned word entries.
      edit <name>
        set action [block|exempt]
        set lang [western|simch|...]
        set pattern-type [wildcard|regex]
        set score {integer}
        set status [enable|disable]
      next
    end
    set name {string}
  next
end
```

config webfilter content

Parameter	Description	Type	Size	Default
comment	Optional comments.	var-string	Maximum length: 255	
id	ID.	integer	Minimum value: 0 Maximum value: 4294967295	
name	Name of table.	string	Maximum length: 63	

config entries

Parameter	Description	Type	Size	Default
action	Block or exempt word when a match is found.	option	-	block
	Option	Description		
	<i>block</i>	Block matches.		
	<i>exempt</i>	Exempt matches.		
lang	Language of banned word.	option	-	western
	Option	Description		
	<i>western</i>	Western.		
	<i>simch</i>	Simplified Chinese.		
	<i>trach</i>	Traditional Chinese.		
	<i>japanese</i>	Japanese.		
	<i>korean</i>	Korean.		
	<i>french</i>	French.		
	<i>thai</i>	Thai.		
	<i>spanish</i>	Spanish.		
	<i>cyrillic</i>	Cyrillic.		
name	Banned word.	string	Maximum length: 127	
pattern-type	Banned word pattern type: wildcard pattern or Perl regular expression.	option	-	wildcard

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>wildcard</i>	Wildcard pattern.		
	<i>regex</i>	Perl regular expression.		
score	Score, to be applied every time the word appears on a web page (0 - 4294967295, default = 10).	integer	Minimum value: 10 0 Maximum value: 4294967295	
status	Enable/disable banned word.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		

config webfilter content-header

Configure content types used by Web filter.

```

config webfilter content-header
  Description: Configure content types used by Web filter.
  edit <id>
    set comment {var-string}
    config entries
      Description: Configure content types used by web filter.
      edit <pattern>
        set action [block|allow|...]
        set category {user}
      next
    end
    set name {string}
  next
end

```

config webfilter content-header

Parameter	Description	Type	Size	Default
comment	Optional comments.	var-string	Maximum length: 255	

Parameter	Description	Type	Size	Default
id	ID.	integer	Minimum value: 0 Maximum value: 4294967295	0
name	Name of table.	string	Maximum length: 63	

config entries

Parameter	Description	Type	Size	Default
action	Action to take for this content type.	option	-	allow
	Option	Description		
	<i>block</i>	Block content type.		
	<i>allow</i>	Allow content type.		
	<i>exempt</i>	Exempt content type.		
category	Categories that this content type applies to.	user	Not Specified	all
pattern	Content type (regular expression).	string	Maximum length: 31	

config webfilter fortiguard

Configure FortiGuard Web Filter service.

```

config webfilter fortiguard
    Description: Configure FortiGuard Web Filter service.
    set cache-mem-percent {integer}
    set cache-mode [ttl|db-ver]
    set cache-prefix-match [enable|disable]
    set close-ports [enable|disable]
    set embed-image [enable|disable]
    set ovr-auth-https [enable|disable]
    set ovr-auth-port-http {integer}
    set ovr-auth-port-https {integer}
    set ovr-auth-port-https-flow {integer}
    set ovr-auth-port-warning {integer}
    set request-packet-size-limit {integer}
    set warn-auth-https [enable|disable]
end

```


config webfilter fortiguard

Parameter	Description	Type	Size	Default						
cache-mem-percent	Maximum percentage of available memory allocated to caching (1 - 15).	integer	Minimum value: 1 Maximum value: 15	2 **						
cache-mode	Cache entry expiration mode.	option	-	ttl						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>ttl</td><td>Expire cache items by time-to-live.</td></tr><tr><td>db-ver</td><td>Expire cache items when the server DB version changes.</td></tr></table>	Option	Description	ttl	Expire cache items by time-to-live.	db-ver	Expire cache items when the server DB version changes.			
Option	Description									
ttl	Expire cache items by time-to-live.									
db-ver	Expire cache items when the server DB version changes.									
cache-prefix-match	Enable/disable prefix matching in the cache.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable setting.</td></tr><tr><td>disable</td><td>Disable setting.</td></tr></table>	Option	Description	enable	Enable setting.	disable	Disable setting.			
Option	Description									
enable	Enable setting.									
disable	Disable setting.									
close-ports	Close ports used for HTTP/HTTPS override authentication and disable user overrides.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable setting.</td></tr><tr><td>disable</td><td>Disable setting.</td></tr></table>	Option	Description	enable	Enable setting.	disable	Disable setting.			
Option	Description									
enable	Enable setting.									
disable	Disable setting.									
embed-image	Enable/disable embedding images into replacement messages (default = enable).	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable setting.</td></tr><tr><td>disable</td><td>Disable setting.</td></tr></table>	Option	Description	enable	Enable setting.	disable	Disable setting.			
Option	Description									
enable	Enable setting.									
disable	Disable setting.									
ovrd-auth-https	Enable/disable use of HTTPS for override authentication.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable setting.</td></tr><tr><td>disable</td><td>Disable setting.</td></tr></table>	Option	Description	enable	Enable setting.	disable	Disable setting.			
Option	Description									
enable	Enable setting.									
disable	Disable setting.									

Parameter	Description	Type	Size	Default
ovrd-auth-port-http	Port to use for FortiGuard Web Filter HTTP override authentication.	integer	Minimum value: 0 Maximum value: 65535	8008
ovrd-auth-port-https	Port to use for FortiGuard Web Filter HTTPS override authentication in proxy mode.	integer	Minimum value: 0 Maximum value: 65535	8010
ovrd-auth-port-https-flow	Port to use for FortiGuard Web Filter HTTPS override authentication in flow mode.	integer	Minimum value: 0 Maximum value: 65535	8015
ovrd-auth-port-warning	Port to use for FortiGuard Web Filter Warning override authentication.	integer	Minimum value: 0 Maximum value: 65535	8020
request-packet-size-limit	Limit size of URL request packets sent to FortiGuard server (0 for default).	integer	Minimum value: 576 Maximum value: 10000	0
warn-auth-https	Enable/disable use of HTTPS for warning and authentication.	option	-	enable
		Option	Description	
		<i>enable</i>	Enable setting.	
		<i>disable</i>	Disable setting.	

** Values may differ between models.

config webfilter ftgd-local-cat

Configure FortiGuard Web Filter local categories.

```
config webfilter ftgd-local-cat
  Description: Configure FortiGuard Web Filter local categories.
  edit <desc>
    set id {integer}
```

```
        set status [enable|disable]
    next
end
```

config webfilter ftgd-local-cat

Parameter	Description	Type	Size	Default
desc	Local category description.	string	Maximum length: 79	
id	Local category ID.	integer	Minimum value: 140 Maximum value: 191	0
status	Enable/disable the local category.	option	-	enable
		Option	Description	
		enable	Enable the local category.	
		disable	Disable the local category.	

config webfilter ftgd-local-rating

Configure local FortiGuard Web Filter local ratings.

```
config webfilter ftgd-local-rating
    Description: Configure local FortiGuard Web Filter local ratings.
    edit <url>
        set comment {var-string}
        set rating {user}
        set status [enable|disable]
    next
end
```

config webfilter ftgd-local-rating

Parameter	Description	Type	Size	Default
comment	Comment.	var-string	Maximum length: 255	
rating	Local rating.	user	Not Specified	

Parameter	Description	Type	Size	Default						
status	Enable/disable local rating.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable local rating.</td></tr><tr><td><i>disable</i></td><td>Disable local rating.</td></tr></table>	Option	Description	<i>enable</i>	Enable local rating.	<i>disable</i>	Disable local rating.			
	Option	Description								
	<i>enable</i>	Enable local rating.								
<i>disable</i>	Disable local rating.									
url	URL to rate locally.	string	Maximum length: 511							

config webfilter ips-urlfilter-cache-setting

Configure IPS URL filter cache settings.

```
config webfilter ips-urlfilter-cache-setting
    Description: Configure IPS URL filter cache settings.
    set dns-retry-interval {integer}
    set extended-ttl {integer}
end
```

config webfilter ips-urlfilter-cache-setting

Parameter	Description	Type	Size	Default
dns-retry-interval	Retry interval. Refresh DNS faster than TTL to capture multiple IPs for hosts. 0 means use DNS server's TTL only.	integer	Minimum value: 0 Maximum value: 2147483	0
extended-ttl	Extend time to live beyond reported by DNS. Use of 0 means use DNS server's TTL.	integer	Minimum value: 0 Maximum value: 2147483	0

config webfilter ips-urlfilter-setting

Configure IPS URL filter settings.

```
config webfilter ips-urlfilter-setting
    Description: Configure IPS URL filter settings.
    set device {string}
    set distance {integer}
```

```
set gateway {ipv4-address}
set geo-filter {var-string}
end
```

config webfilter ips-urlfilter-setting

Parameter	Description	Type	Size	Default
device	Interface for this route.	string	Maximum length: 35	
distance	Administrative distance (1 - 255) for this route.	integer	Minimum value: 1 Maximum value: 255	1
gateway	Gateway IP address for this route.	ipv4-address	Not Specified	0.0.0.0
geo-filter	Filter based on geographical location. Route will NOT be installed if the resolved IP address belongs to the country in the filter.	var-string	Maximum length: 255	

config webfilter ips-urlfilter-setting6

Configure IPS URL filter settings for IPv6.

```
config webfilter ips-urlfilter-setting6
  Description: Configure IPS URL filter settings for IPv6.
  set device {string}
  set distance {integer}
  set gateway6 {ipv6-address}
  set geo-filter {var-string}
end
```

config webfilter ips-urlfilter-setting6

Parameter	Description	Type	Size	Default
device	Interface for this route.	string	Maximum length: 35	
distance	Administrative distance (1 - 255) for this route.	integer	Minimum value: 1 Maximum value: 255	1

Parameter	Description	Type	Size	Default
gateway6	Gateway IPv6 address for this route.	ipv6-address	Not Specified	::
geo-filter	Filter based on geographical location. Route will NOT be installed if the resolved IPv6 address belongs to the country in the filter.	var-string	Maximum length: 255	

config webfilter override

Configure FortiGuard Web Filter administrative overrides.

```

config webfilter override
  Description: Configure FortiGuard Web Filter administrative overrides.
  edit <id>
    set expires {user}
    set initiator {string}
    set ip {ipv4-address}
    set ip6 {ipv6-address}
    set new-profile {string}
    set old-profile {string}
    set scope [user|user-group|...]
    set status [enable|disable]
    set user {string}
    set user-group {string}
  next
end

```

config webfilter override

Parameter	Description	Type	Size	Default
expires	Override expiration date and time, from 5 minutes to 365 from now (format: yyyy/mm/dd hh:mm:ss).	user	Not Specified	1969/12/31 16:00:00 **
id	Override rule ID.	integer	Minimum value: 0 Maximum value: 4294967295	
initiator	Initiating user of override (read-only setting).	string	Maximum length: 64	
ip	IPv4 address which the override applies.	ipv4-address	Not Specified	0.0.0.0
ip6	IPv6 address which the override applies.	ipv6-address	Not Specified	::

Parameter	Description	Type	Size	Default										
new-profile	Name of the new web filter profile used by the override.	string	Maximum length: 35											
old-profile	Name of the web filter profile which the override applies.	string	Maximum length: 35											
scope	Override either the specific user, user group, IPv4 address, or IPv6 address.	option	-	user										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>user</td><td>Override the specified user.</td></tr><tr><td>user-group</td><td>Override the specified user group.</td></tr><tr><td>ip</td><td>Override the specified IP address.</td></tr><tr><td>ip6</td><td>Override the specified IPv6 address.</td></tr></table>				Option	Description	user	Override the specified user.	user-group	Override the specified user group.	ip	Override the specified IP address.	ip6	Override the specified IPv6 address.
	Option	Description												
	user	Override the specified user.												
	user-group	Override the specified user group.												
	ip	Override the specified IP address.												
ip6	Override the specified IPv6 address.													
status	Enable/disable override rule.	option	-	disable										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable override rule.</td></tr><tr><td>disable</td><td>Disable override rule.</td></tr></table>				Option	Description	enable	Enable override rule.	disable	Disable override rule.				
	Option	Description												
	enable	Enable override rule.												
disable	Disable override rule.													
user	Name of the user which the override applies.	string	Maximum length: 64											
user-group	Specify the user group for which the override applies.	string	Maximum length: 63											

** Values may differ between models.

config webfilter profile

Configure Web filter profiles.

```

config webfilter profile
  Description: Configure Web filter profiles.
  edit <name>
    config antiphish
      Description: AntiPhishing profile.
      set authentication [domain-controller|ldap]
      set check-basic-auth [enable|disable]
      set check-uri [enable|disable]
      set check-username-only [enable|disable]
    config custom-patterns
      Description: Custom username and password regex patterns.
      edit <pattern>
        set category [username|password]

```

```

        set type [regex|literal]
    next
end
set default-action [exempt|log|...]
set domain-controller {string}
config inspection-entries
    Description: AntiPhishing entries.
    edit <name>
        set action [exempt|log|...]
        set fortiguard-category {user}
    next
end
set ldap {string}
set max-body-len {integer}
set status [enable|disable]
end
set comment {var-string}
set extended-log [enable|disable]
set feature-set [flow|proxy]
config ftgd-wf
    Description: FortiGuard Web Filter settings.
    set exempt-quota {user}
    config filters
        Description: FortiGuard filters.
        edit <id>
            set action [block|authenticate|...]
            set auth-usr-grp <name1>, <name2>, ...
            set category {integer}
            set log [enable|disable]
            set override-replacemsg {string}
            set warn-duration {user}
            set warning-duration-type [session|timeout]
            set warning-prompt [per-domain|per-category]
        next
    end
    set max-quota-timeout {integer}
    set options {option1}, {option2}, ...
    set ovrd {user}
    config quota
        Description: FortiGuard traffic quota settings.
        edit <id>
            set category {user}
            set duration {user}
            set override-replacemsg {string}
            set type [time|traffic]
            set unit [B|KB|...]
            set value {integer}
        next
    end
    set rate-crl-urls [disable|enable]
    set rate-css-urls [disable|enable]
    set rate-javascript-urls [disable|enable]

```



```

end
set https-replacemsg [enable|disable]
set log-all-url [enable|disable]
set options {option1}, {option2}, ...
config override
    Description: Web Filter override settings.
    set ovr-dur [allow|deny]
    set ovr-dur {user}
    set ovr-dur-mode [constant|ask]
    set ovr-scope [user|user-group|...]
    set ovr-user-group <name1>, <name2>, ...
    set profile <name1>, <name2>, ...
    set profile-attribute [User-Name|NAS-IP-Address|...]
    set profile-type [list|radius]
end
set ovr-perm {option1}, {option2}, ...
set post-action [normal|block]
set replacemsg-group {string}
config web
    Description: Web content filtering settings.
    set allowlist {option1}, {option2}, ...
    set blocklist [enable|disable]
    set bword-table {integer}
    set bword-threshold {integer}
    set content-header-list {integer}
    set keyword-match <pattern1>, <pattern2>, ...
    set log-search [enable|disable]
    set safe-search {option1}, {option2}, ...
    set urlfilter-table {integer}
    set vimeo-restrict {string}
    set youtube-restrict [none|strict|...]
end
set web-antiphishing-log [enable|disable]
set web-content-log [enable|disable]
set web-extended-all-action-log [enable|disable]
set web-filter-activex-log [enable|disable]
set web-filter-applet-log [enable|disable]
set web-filter-command-block-log [enable|disable]
set web-filter-cookie-log [enable|disable]
set web-filter-cookie-removal-log [enable|disable]
set web-filter-js-log [enable|disable]
set web-filter-jscript-log [enable|disable]
set web-filter-referer-log [enable|disable]
set web-filter-unknown-log [enable|disable]
set web-filter-vbs-log [enable|disable]
set web-ftgd-err-log [enable|disable]
set web-ftgd-quota-usage [enable|disable]
set web-invalid-domain-log [enable|disable]
set web-url-log [enable|disable]
set wisp [enable|disable]
set wisp-algorithm [primary-secondary|round-robin|...]
set wisp-servers <name1>, <name2>, ...

```

```
next
end
```

config webfilter profile

Parameter	Description	Type	Size	Default
comment	Optional comments.	var-string	Maximum length: 255	
extended-log	Enable/disable extended logging for web filtering.	option	-	disable
	Option	Description		
	enable	Enable setting.		
	disable	Disable setting.		
feature-set	Flow/proxy feature set.	option	-	flow
	Option	Description		
	flow	Flow feature set.		
	proxy	Proxy feature set.		
https-replacemsg	Enable replacement messages for HTTPS.	option	-	enable
	Option	Description		
	enable	Enable setting.		
	disable	Disable setting.		
log-all-url	Enable/disable logging all URLs visited.	option	-	disable
	Option	Description		
	enable	Enable setting.		
	disable	Disable setting.		
name	Profile name.	string	Maximum length: 35	
options	Options.	option	-	
	Option	Description		
	activexfilter	ActiveX filter.		
	cookiefilter	Cookie filter.		

Parameter	Description	Type	Size	Default																						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>javafilter</i></td><td>Java applet filter.</td></tr><tr><td><i>block-invalid-url</i></td><td>Block sessions contained an invalid domain name.</td></tr><tr><td><i>jscript</i></td><td>Javascript block.</td></tr><tr><td><i>js</i></td><td>JS block.</td></tr><tr><td><i>vbs</i></td><td>VB script block.</td></tr><tr><td><i>unknown</i></td><td>Unknown script block.</td></tr><tr><td><i>intrinsic</i></td><td>Intrinsic script block.</td></tr><tr><td><i>wf-referer</i></td><td>Referring block.</td></tr><tr><td><i>wf-cookie</i></td><td>Cookie block.</td></tr><tr><td><i>per-user-bal</i></td><td>Per-user block/allow list filter</td></tr></table>	Option	Description	<i>javafilter</i>	Java applet filter.	<i>block-invalid-url</i>	Block sessions contained an invalid domain name.	<i>jscript</i>	Javascript block.	<i>js</i>	JS block.	<i>vbs</i>	VB script block.	<i>unknown</i>	Unknown script block.	<i>intrinsic</i>	Intrinsic script block.	<i>wf-referer</i>	Referring block.	<i>wf-cookie</i>	Cookie block.	<i>per-user-bal</i>	Per-user block/allow list filter			
	Option	Description																								
	<i>javafilter</i>	Java applet filter.																								
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	<i>vbs</i>	VB script block.																								
	<i>unknown</i>	Unknown script block.																								
	<i>intrinsic</i>	Intrinsic script block.																								
	<i>wf-referer</i>	Referring block.																								
	<i>wf-cookie</i>	Cookie block.																								
<i>per-user-bal</i>	Per-user block/allow list filter																									
ovrd-perm	Permitted override types.	option	-																							
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>bannedword-override</i></td><td>Banned word override.</td></tr><tr><td><i>urlfilter-override</i></td><td>URL filter override.</td></tr><tr><td><i>fortiguard-wf-override</i></td><td>FortiGuard Web Filter override.</td></tr><tr><td><i>contenttype-check-override</i></td><td>Content-type header override.</td></tr></table>	Option	Description	<i>bannedword-override</i>	Banned word override.	<i>urlfilter-override</i>	URL filter override.	<i>fortiguard-wf-override</i>	FortiGuard Web Filter override.	<i>contenttype-check-override</i>	Content-type header override.															
	Option	Description																								
	<i>bannedword-override</i>	Banned word override.																								
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	<i>fortiguard-wf-override</i>	FortiGuard Web Filter override.																								
<i>contenttype-check-override</i>	Content-type header override.																									
post-action	Action taken for HTTP POST traffic.	option	-	normal																						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>normal</i></td><td>Normal, POST requests are allowed.</td></tr><tr><td><i>block</i></td><td>POST requests are blocked.</td></tr></table>	Option	Description	<i>normal</i>	Normal, POST requests are allowed.	<i>block</i>	POST requests are blocked.																			
	Option	Description																								
	<i>normal</i>	Normal, POST requests are allowed.																								
<i>block</i>	POST requests are blocked.																									
replacemsg-group	Replacement message group.	string	Maximum length: 35																							
web-antiphishing-log	Enable/disable logging of AntiPhishing checks.	option	-	enable																						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable setting.</td></tr><tr><td><i>disable</i></td><td>Disable setting.</td></tr></table>	Option	Description	<i>enable</i>	Enable setting.	<i>disable</i>	Disable setting.																			
	Option	Description																								
	<i>enable</i>	Enable setting.																								
<i>disable</i>	Disable setting.																									

Parameter	Description	Type	Size	Default						
web-content-log	Enable/disable logging logging blocked web content.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable setting.</td></tr><tr><td><i>disable</i></td><td>Disable setting.</td></tr></table>	Option	Description	<i>enable</i>	Enable setting.	<i>disable</i>	Disable setting.			
Option	Description									
<i>enable</i>	Enable setting.									
<i>disable</i>	Disable setting.									
web-extended-all-action-log	Enable/disable extended any filter action logging for web filtering.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable setting.</td></tr><tr><td><i>disable</i></td><td>Disable setting.</td></tr></table>	Option	Description	<i>enable</i>	Enable setting.	<i>disable</i>	Disable setting.			
Option	Description									
<i>enable</i>	Enable setting.									
<i>disable</i>	Disable setting.									
web-filter-activex-log	Enable/disable logging ActiveX.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable setting.</td></tr><tr><td><i>disable</i></td><td>Disable setting.</td></tr></table>	Option	Description	<i>enable</i>	Enable setting.	<i>disable</i>	Disable setting.			
Option	Description									
<i>enable</i>	Enable setting.									
<i>disable</i>	Disable setting.									
web-filter-applet-log	Enable/disable logging Java applets.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable setting.</td></tr><tr><td><i>disable</i></td><td>Disable setting.</td></tr></table>	Option	Description	<i>enable</i>	Enable setting.	<i>disable</i>	Disable setting.			
Option	Description									
<i>enable</i>	Enable setting.									
<i>disable</i>	Disable setting.									
web-filter-command-block-log	Enable/disable logging blocked commands.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable setting.</td></tr><tr><td><i>disable</i></td><td>Disable setting.</td></tr></table>	Option	Description	<i>enable</i>	Enable setting.	<i>disable</i>	Disable setting.			
Option	Description									
<i>enable</i>	Enable setting.									
<i>disable</i>	Disable setting.									
web-filter-cookie-log	Enable/disable logging cookie filtering.	option	-	enable						

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		
web-filter-cookie-removal-log	Enable/disable logging blocked cookies.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		
web-filter-js-log	Enable/disable logging Java scripts.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		
web-filter-jscript-log	Enable/disable logging JScripts.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		
web-filter-referer-log	Enable/disable logging referrers.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		
web-filter-unknown-log	Enable/disable logging unknown scripts.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		

Parameter	Description	Type	Size	Default						
web-filter-vbs-log	Enable/disable logging VBS scripts.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable setting.</td></tr><tr><td><i>disable</i></td><td>Disable setting.</td></tr></table>	Option	Description	<i>enable</i>	Enable setting.	<i>disable</i>	Disable setting.			
Option	Description									
<i>enable</i>	Enable setting.									
<i>disable</i>	Disable setting.									
web-ftgd-err-log	Enable/disable logging rating errors.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable setting.</td></tr><tr><td><i>disable</i></td><td>Disable setting.</td></tr></table>	Option	Description	<i>enable</i>	Enable setting.	<i>disable</i>	Disable setting.			
Option	Description									
<i>enable</i>	Enable setting.									
<i>disable</i>	Disable setting.									
web-ftgd-quota-usage	Enable/disable logging daily quota usage.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable setting.</td></tr><tr><td><i>disable</i></td><td>Disable setting.</td></tr></table>	Option	Description	<i>enable</i>	Enable setting.	<i>disable</i>	Disable setting.			
Option	Description									
<i>enable</i>	Enable setting.									
<i>disable</i>	Disable setting.									
web-invalid-domain-log	Enable/disable logging invalid domain names.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable setting.</td></tr><tr><td><i>disable</i></td><td>Disable setting.</td></tr></table>	Option	Description	<i>enable</i>	Enable setting.	<i>disable</i>	Disable setting.			
Option	Description									
<i>enable</i>	Enable setting.									
<i>disable</i>	Disable setting.									
web-url-log	Enable/disable logging URL filtering.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable setting.</td></tr><tr><td><i>disable</i></td><td>Disable setting.</td></tr></table>	Option	Description	<i>enable</i>	Enable setting.	<i>disable</i>	Disable setting.			
Option	Description									
<i>enable</i>	Enable setting.									
<i>disable</i>	Disable setting.									
wisp	Enable/disable web proxy WISP.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable web proxy WISP.</td></tr><tr><td><i>disable</i></td><td>Disable web proxy WISP.</td></tr></table>	Option	Description	<i>enable</i>	Enable web proxy WISP.	<i>disable</i>	Disable web proxy WISP.			
Option	Description									
<i>enable</i>	Enable web proxy WISP.									
<i>disable</i>	Disable web proxy WISP.									

Parameter	Description	Type	Size	Default
wisp-algorithm	WISP server selection algorithm.	option	-	auto-learning
	Option	Description		
	primary-secondary	Select the first healthy server in order.		
	round-robin	Select the next healthy server.		
	auto-learning	Select the lightest loading healthy server.		
wisp-servers <name>	WISP servers. Server name.	string	Maximum length: 79	

config antiphish

Parameter	Description	Type	Size	Default						
authentication	Authentication methods.	option	-	domain-controller						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>domain-controller</td><td>Domain Controller to verify user credential.</td></tr><tr><td>ldap</td><td>LDAP to verify user credential.</td></tr></table>	Option	Description	domain-controller	Domain Controller to verify user credential.	ldap	LDAP to verify user credential.			
Option	Description									
domain-controller	Domain Controller to verify user credential.									
ldap	LDAP to verify user credential.									
check-basic-auth	Enable/disable checking of HTTP Basic Auth field for known credentials.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable checking of HTTP Basic Auth field for known credentials.</td></tr><tr><td>disable</td><td>Disable checking of HTTP Basic Auth field for known credentials.</td></tr></table>	Option	Description	enable	Enable checking of HTTP Basic Auth field for known credentials.	disable	Disable checking of HTTP Basic Auth field for known credentials.			
Option	Description									
enable	Enable checking of HTTP Basic Auth field for known credentials.									
disable	Disable checking of HTTP Basic Auth field for known credentials.									
check-uri	Enable/disable checking of GET URI parameters for known credentials.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable checking of GET URI for username and password fields.</td></tr><tr><td>disable</td><td>Disable checking of GET URI for username and password fields.</td></tr></table>	Option	Description	enable	Enable checking of GET URI for username and password fields.	disable	Disable checking of GET URI for username and password fields.			
Option	Description									
enable	Enable checking of GET URI for username and password fields.									
disable	Disable checking of GET URI for username and password fields.									
check-username-only	Enable/disable username only matching of credentials. Action will be taken for valid usernames regardless of password validity.	option	-	disable						

Parameter	Description	Type	Size	Default
	Option Description			
	<i>enable</i>	Enable username only credential matches.		
	<i>disable</i>	Disable username only credential matches.		
default-action	Action to be taken when there is no matching rule.	option	-	exempt
	Option Description			
	<i>exempt</i>	Exempt requests from matching.		
	<i>log</i>	Log all matched requests.		
	<i>block</i>	Block all matched requests.		
domain-controller	Domain for which to verify received credentials against.	string	Maximum length: 63	
ldap	LDAP server for which to verify received credentials against.	string	Maximum length: 63	
max-body-len	Maximum size of a POST body to check for credentials.	integer	Minimum value: 0 Maximum value: 4294967295	1024
status	Toggle AntiPhishing functionality.	option	-	disable
	Option Description			
	<i>enable</i>	Enable AntiPhishing functionality.		
	<i>disable</i>	Disable AntiPhishing functionality.		

config custom-patterns

Parameter	Description	Type	Size	Default
category	Category that the pattern matches.	option	-	username
	Option Description			
	<i>username</i>	Pattern matches username fields.		
	<i>password</i>	Pattern matches password fields.		
pattern	Target pattern.	string	Maximum length: 255	
type	Pattern will be treated either as a regex pattern or literal string.	option	-	regex

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>regex</i>	Pattern will be treated as a regex pattern.		
	<i>literal</i>	Pattern will be treated as a literal string.		

config inspection-entries

Parameter	Description	Type	Size	Default
action	Action to be taken upon an AntiPhishing match.	option	-	exempt
	Option	Description		
	<i>exempt</i>	Exempt requests from matching.		
	<i>log</i>	Log all matched requests.		
	<i>block</i>	Block all matched requests.		
fortiguard-category	FortiGuard category to match.	user	Not Specified	0
name	Inspection target name.	string	Maximum length: 63	

config ftgd-wf

Parameter	Description	Type	Size	Default
exempt-quota	Do not stop quota for these categories.	user	Not Specified	17
max-quota-timeout	Maximum FortiGuard quota used by single page view in seconds (excludes streams).	integer	Minimum value: 1 Maximum value: 86400	300
options	Options for FortiGuard Web Filter.	option	-	ftgd-disable
	Option	Description		
	<i>error-allow</i>	Allow web pages with a rating error to pass through.		
	<i>rate-server-ip</i>	Rate the server IP in addition to the domain name.		
	<i>connect-request-bypass</i>	Bypass connection which has CONNECT request.		
	<i>ftgd-disable</i>	Disable FortiGuard scanning.		

Parameter	Description	Type	Size	Default						
ovrd	Allow web filter profile overrides.	user	Not Specified							
rate-crl-urls	Enable/disable rating CRL by URL.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Disable rating CRL by URL.</td></tr><tr><td>enable</td><td>Enable rating CRL by URL.</td></tr></table>	Option	Description	disable	Disable rating CRL by URL.	enable	Enable rating CRL by URL.			
Option	Description									
disable	Disable rating CRL by URL.									
enable	Enable rating CRL by URL.									
rate-css-urls	Enable/disable rating CSS by URL.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Disable rating CSS by URL.</td></tr><tr><td>enable</td><td>Enable rating CSS by URL.</td></tr></table>	Option	Description	disable	Disable rating CSS by URL.	enable	Enable rating CSS by URL.			
Option	Description									
disable	Disable rating CSS by URL.									
enable	Enable rating CSS by URL.									
rate-javascript-urls	Enable/disable rating JavaScript by URL.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Disable rating JavaScript by URL.</td></tr><tr><td>enable</td><td>Enable rating JavaScript by URL.</td></tr></table>	Option	Description	disable	Disable rating JavaScript by URL.	enable	Enable rating JavaScript by URL.			
Option	Description									
disable	Disable rating JavaScript by URL.									
enable	Enable rating JavaScript by URL.									

config filters

Parameter	Description	Type	Size	Default
action	Action to take for matches.	option	-	monitor
	Option	Description		
	<i>block</i>	Block access.		
	<i>authenticate</i>	Authenticate user before allowing access.		
	<i>monitor</i>	Allow access while logging the action.		
	<i>warning</i>	Allow access after warning the user.		
auth-usr-grp <name>	Groups with permission to authenticate. User group name.	string	Maximum length: 79	
category	Categories and groups the filter examines.	integer	Minimum value: 0 Maximum value: 255	0

Parameter	Description	Type	Size	Default						
id	ID number.	integer	Minimum value: 0 Maximum value: 255	0						
log	Enable/disable logging.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable setting.</td></tr><tr><td>disable</td><td>Disable setting.</td></tr></table>				Option	Description	enable	Enable setting.	disable	Disable setting.
	Option	Description								
	enable	Enable setting.								
disable	Disable setting.									
override-replacemsg	Override replacement message.	string	Maximum length: 28							
warn-duration	Duration of warnings.	user	Not Specified	5m						
warning-duration-type	Re-display warning after closing browser or after a timeout.	option	-	timeout						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>session</td><td>After session ends.</td></tr><tr><td>timeout</td><td>After timeout occurs.</td></tr></table>				Option	Description	session	After session ends.	timeout	After timeout occurs.
	Option	Description								
	session	After session ends.								
timeout	After timeout occurs.									
warning-prompt	Warning prompts in each category or each domain.	option	-	per-category						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>per-domain</td><td>Per-domain warnings.</td></tr><tr><td>per-category</td><td>Per-category warnings.</td></tr></table>				Option	Description	per-domain	Per-domain warnings.	per-category	Per-category warnings.
	Option	Description								
	per-domain	Per-domain warnings.								
per-category	Per-category warnings.									

config quota

Parameter	Description	Type	Size	Default
category	FortiGuard categories to apply quota to (category action must be set to monitor).	user	Not Specified	
duration	Duration of quota.	user	Not Specified	5m
id	ID number.	integer	Minimum value: 0 Maximum value: 4294967295	0
override-replacemsg	Override replacement message.	string	Maximum length: 28	

Parameter	Description	Type	Size	Default										
type	Quota type.	option	-	time										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>time</td><td>Use a time-based quota.</td></tr><tr><td>traffic</td><td>Use a traffic-based quota.</td></tr></table>				Option	Description	time	Use a time-based quota.	traffic	Use a traffic-based quota.				
	Option	Description												
	time	Use a time-based quota.												
traffic	Use a traffic-based quota.													
unit	Traffic quota unit of measurement.	option	-	MB										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>B</td><td>Quota in bytes.</td></tr><tr><td>KB</td><td>Quota in kilobytes.</td></tr><tr><td>MB</td><td>Quota in megabytes.</td></tr><tr><td>GB</td><td>Quota in gigabytes.</td></tr></table>				Option	Description	B	Quota in bytes.	KB	Quota in kilobytes.	MB	Quota in megabytes.	GB	Quota in gigabytes.
	Option	Description												
	B	Quota in bytes.												
	KB	Quota in kilobytes.												
	MB	Quota in megabytes.												
GB	Quota in gigabytes.													
value	Traffic quota value.	integer	Minimum value: 1024 1 Maximum value: 4294967295											

config override

Parameter	Description	Type	Size	Default						
ovrd-cookie	Allow/deny browser-based (cookie) overrides.	option	-	deny						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>allow</i></td><td>Allow browser-based (cookie) override.</td></tr><tr><td><i>deny</i></td><td>Deny browser-based (cookie) override.</td></tr></table>	Option	Description	<i>allow</i>	Allow browser-based (cookie) override.	<i>deny</i>	Deny browser-based (cookie) override.			
Option	Description									
<i>allow</i>	Allow browser-based (cookie) override.									
<i>deny</i>	Deny browser-based (cookie) override.									
ovrd-dur	Override duration.	user	Not Specified	15m						
ovrd-dur-mode	Override duration mode.	option	-	constant						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>constant</i></td><td>Constant mode.</td></tr><tr><td><i>ask</i></td><td>Prompt for duration when initiating an override.</td></tr></table>	Option	Description	<i>constant</i>	Constant mode.	<i>ask</i>	Prompt for duration when initiating an override.			
Option	Description									
<i>constant</i>	Constant mode.									
<i>ask</i>	Prompt for duration when initiating an override.									
ovrd-scope	Override scope.	option	-	user						

Parameter	Description	Type	Size	Default																										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>user</i></td><td>Override for the user.</td></tr><tr><td><i>user-group</i></td><td>Override for the user's group.</td></tr><tr><td><i>ip</i></td><td>Override for the initiating IP.</td></tr><tr><td><i>browser</i></td><td>Create browser-based (cookie) override.</td></tr><tr><td><i>ask</i></td><td>Prompt for scope when initiating an override.</td></tr></table>	Option	Description	<i>user</i>	Override for the user.	<i>user-group</i>	Override for the user's group.	<i>ip</i>	Override for the initiating IP.	<i>browser</i>	Create browser-based (cookie) override.	<i>ask</i>	Prompt for scope when initiating an override.																	
	Option	Description																												
	<i>user</i>	Override for the user.																												
	<i>user-group</i>	Override for the user's group.																												
	<i>ip</i>	Override for the initiating IP.																												
	<i>browser</i>	Create browser-based (cookie) override.																												
<i>ask</i>	Prompt for scope when initiating an override.																													
ovrd-user-group <name>	User groups with permission to use the override. User group name.	string	Maximum length: 79																											
profile <name>	Web filter profile with permission to create overrides. Web profile.	string	Maximum length: 79																											
profile-attribute	Profile attribute to retrieve from the RADIUS server.	option	-	Login-LAT-Service																										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>User-Name</i></td><td>Use this attribute.</td></tr><tr><td><i>NAS-IP-Address</i></td><td>Use this attribute.</td></tr><tr><td><i>Framed-IP-Address</i></td><td>Use this attribute.</td></tr><tr><td><i>Framed-IP-Netmask</i></td><td>Use this attribute.</td></tr><tr><td><i>Filter-Id</i></td><td>Use this attribute.</td></tr><tr><td><i>Login-IP-Host</i></td><td>Use this attribute.</td></tr><tr><td><i>Reply-Message</i></td><td>Use this attribute.</td></tr><tr><td><i>Callback-Number</i></td><td>Use this attribute.</td></tr><tr><td><i>Callback-Id</i></td><td>Use this attribute.</td></tr><tr><td><i>Framed-Route</i></td><td>Use this attribute.</td></tr><tr><td><i>Framed-IPX-Network</i></td><td>Use this attribute.</td></tr><tr><td><i>Class</i></td><td>Use this attribute.</td></tr></table>	Option	Description	<i>User-Name</i>	Use this attribute.	<i>NAS-IP-Address</i>	Use this attribute.	<i>Framed-IP-Address</i>	Use this attribute.	<i>Framed-IP-Netmask</i>	Use this attribute.	<i>Filter-Id</i>	Use this attribute.	<i>Login-IP-Host</i>	Use this attribute.	<i>Reply-Message</i>	Use this attribute.	<i>Callback-Number</i>	Use this attribute.	<i>Callback-Id</i>	Use this attribute.	<i>Framed-Route</i>	Use this attribute.	<i>Framed-IPX-Network</i>	Use this attribute.	<i>Class</i>	Use this attribute.			
	Option	Description																												
	<i>User-Name</i>	Use this attribute.																												
	<i>NAS-IP-Address</i>	Use this attribute.																												
	<i>Framed-IP-Address</i>	Use this attribute.																												
	<i>Framed-IP-Netmask</i>	Use this attribute.																												
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<i>Framed-IPX-Network</i>	Use this attribute.																													
<i>Class</i>	Use this attribute.																													

Parameter	Description	Type	Size	Default																						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>Called-Station-Id</i></td><td>Use this attribute.</td></tr><tr><td><i>Calling-Station-Id</i></td><td>Use this attribute.</td></tr><tr><td><i>NAS-Identifier</i></td><td>Use this attribute.</td></tr><tr><td><i>Proxy-State</i></td><td>Use this attribute.</td></tr><tr><td><i>Login-LAT-Service</i></td><td>Use this attribute.</td></tr><tr><td><i>Login-LAT-Node</i></td><td>Use this attribute.</td></tr><tr><td><i>Login-LAT-Group</i></td><td>Use this attribute.</td></tr><tr><td><i>Framed-AppleTalk-Zone</i></td><td>Use this attribute.</td></tr><tr><td><i>Acct-Session-Id</i></td><td>Use this attribute.</td></tr><tr><td><i>Acct-Multi-Session-Id</i></td><td>Use this attribute.</td></tr></table>	Option	Description	<i>Called-Station-Id</i>	Use this attribute.	<i>Calling-Station-Id</i>	Use this attribute.	<i>NAS-Identifier</i>	Use this attribute.	<i>Proxy-State</i>	Use this attribute.	<i>Login-LAT-Service</i>	Use this attribute.	<i>Login-LAT-Node</i>	Use this attribute.	<i>Login-LAT-Group</i>	Use this attribute.	<i>Framed-AppleTalk-Zone</i>	Use this attribute.	<i>Acct-Session-Id</i>	Use this attribute.	<i>Acct-Multi-Session-Id</i>	Use this attribute.			
	Option	Description																								
	<i>Called-Station-Id</i>	Use this attribute.																								
	<i>Calling-Station-Id</i>	Use this attribute.																								
	<i>NAS-Identifier</i>	Use this attribute.																								
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	<i>Login-LAT-Service</i>	Use this attribute.																								
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	<i>Acct-Session-Id</i>	Use this attribute.																								
<i>Acct-Multi-Session-Id</i>	Use this attribute.																									
profile-type	Override profile type.	option	-	list																						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>list</i></td><td>Profile chosen from list.</td></tr><tr><td><i>radius</i></td><td>Profile determined by RADIUS server.</td></tr></table>	Option	Description	<i>list</i>	Profile chosen from list.	<i>radius</i>	Profile determined by RADIUS server.																			
	Option	Description																								
	<i>list</i>	Profile chosen from list.																								
<i>radius</i>	Profile determined by RADIUS server.																									

config web

Parameter	Description	Type	Size	Default						
allowlist	FortiGuard allowlist settings.	option	-							
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>exempt-av</i></td><td>Exempt antivirus.</td></tr><tr><td><i>exempt-webcontent</i></td><td>Exempt web content.</td></tr></table>	Option	Description	<i>exempt-av</i>	Exempt antivirus.	<i>exempt-webcontent</i>	Exempt web content.			
Option	Description									
<i>exempt-av</i>	Exempt antivirus.									
<i>exempt-webcontent</i>	Exempt web content.									

Parameter	Description	Type	Size	Default										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>exempt-activex-java-cookie</i></td><td>Exempt ActiveX-JAVA-Cookie.</td></tr><tr><td><i>exempt-dlp</i></td><td>Exempt DLP.</td></tr><tr><td><i>exempt-rangeblock</i></td><td>Exempt RangeBlock.</td></tr><tr><td><i>extended-log-others</i></td><td>Support extended log.</td></tr></table>	Option	Description	<i>exempt-activex-java-cookie</i>	Exempt ActiveX-JAVA-Cookie.	<i>exempt-dlp</i>	Exempt DLP.	<i>exempt-rangeblock</i>	Exempt RangeBlock.	<i>extended-log-others</i>	Support extended log.			
	Option	Description												
	<i>exempt-activex-java-cookie</i>	Exempt ActiveX-JAVA-Cookie.												
	<i>exempt-dlp</i>	Exempt DLP.												
	<i>exempt-rangeblock</i>	Exempt RangeBlock.												
<i>extended-log-others</i>	Support extended log.													
blocklist	Enable/disable automatic addition of URLs detected by FortiSandbox to blocklist.	option	-	disable										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable setting.</td></tr><tr><td><i>disable</i></td><td>Disable setting.</td></tr></table>	Option	Description	<i>enable</i>	Enable setting.	<i>disable</i>	Disable setting.							
	Option	Description												
	<i>enable</i>	Enable setting.												
<i>disable</i>	Disable setting.													
bword-table	Banned word table ID.	integer	Minimum value: 0 0 Maximum value: 4294967295											
bword-threshold	Banned word score threshold.	integer	Minimum value: 10 0 Maximum value: 2147483647											
content-header-list	Content header list.	integer	Minimum value: 0 0 Maximum value: 4294967295											
keyword-match <pattern>	Search keywords to log when match is found. Pattern/keyword to search for.	string	Maximum length: 79	**										
log-search	Enable/disable logging all search phrases.	option	-	disable										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable setting.</td></tr><tr><td><i>disable</i></td><td>Disable setting.</td></tr></table>	Option	Description	<i>enable</i>	Enable setting.	<i>disable</i>	Disable setting.							
	Option	Description												
	<i>enable</i>	Enable setting.												
<i>disable</i>	Disable setting.													
safe-search	Safe search type.	option	-											

Parameter	Description	Type	Size	Default								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>url</i></td><td>Insert safe search string into URL.</td></tr><tr><td><i>header</i></td><td>Insert safe search header.</td></tr></table>	Option	Description	<i>url</i>	Insert safe search string into URL.	<i>header</i>	Insert safe search header.					
	Option	Description										
	<i>url</i>	Insert safe search string into URL.										
<i>header</i>	Insert safe search header.											
urlfilter-table	URL filter table ID.	integer	Minimum value: 0 Maximum value: 4294967295									
vimeo-restrict	Set Vimeo-restrict ("7" = don't show mature content, "134" = don't show unrated and mature content). A value of cookie "content_rating".	string	Maximum length: 63									
youtube-restrict	YouTube EDU filter level.	option	-	none								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>none</i></td><td>Full access for YouTube.</td></tr><tr><td><i>strict</i></td><td>Strict access for YouTube.</td></tr><tr><td><i>moderate</i></td><td>Moderate access for YouTube.</td></tr></table>	Option	Description	<i>none</i>	Full access for YouTube.	<i>strict</i>	Strict access for YouTube.	<i>moderate</i>	Moderate access for YouTube.			
	Option	Description										
	<i>none</i>	Full access for YouTube.										
	<i>strict</i>	Strict access for YouTube.										
<i>moderate</i>	Moderate access for YouTube.											

config webfilter search-engine

Configure web filter search engines.

```

config webfilter search-engine
    Description: Configure web filter search engines.
    edit <name>
        set charset [utf-8|gb2312]
        set hostname {string}
        set query {string}
        set safesearch [disable|url|...]
        set safesearch-str {string}
        set url {string}
    next
end

```

config webfilter search-engine

Parameter	Description	Type	Size	Default
charset	Search engine charset.	option	-	utf-8

Parameter	Description	Type	Size	Default																		
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>utf-8</i></td><td>UTF-8 encoding.</td></tr><tr><td><i>gb2312</i></td><td>GB2312 encoding.</td></tr></table>	Option	Description	<i>utf-8</i>	UTF-8 encoding.	<i>gb2312</i>	GB2312 encoding.															
	Option	Description																				
	<i>utf-8</i>	UTF-8 encoding.																				
<i>gb2312</i>	GB2312 encoding.																					
hostname	Hostname (regular expression).	string	Maximum length: 127																			
name	Search engine name.	string	Maximum length: 35																			
query	Code used to prefix a query (must end with an equals character).	string	Maximum length: 15																			
safesearch	Safe search method. You can disable safe search, add the safe search string to URLs, or insert a safe search header.	option	-	disable																		
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>disable</i></td><td>Site does not support safe search.</td></tr><tr><td><i>url</i></td><td>Safe search selected with a parameter in the URL.</td></tr><tr><td><i>header</i></td><td>Safe search selected by search header (i.e. youtube.edu).</td></tr><tr><td><i>translate</i></td><td>Perform URL FortiGuard check on translated URL.</td></tr><tr><td><i>yt-pattern</i></td><td>Pattern to match YouTube channel ID.</td></tr><tr><td><i>yt-scan</i></td><td>Perform IPS scan.</td></tr><tr><td><i>yt-video</i></td><td>Pattern to match YouTube video name.</td></tr><tr><td><i>yt-channel</i></td><td>Pattern to match YouTube channel name.</td></tr></table>	Option	Description	<i>disable</i>	Site does not support safe search.	<i>url</i>	Safe search selected with a parameter in the URL.	<i>header</i>	Safe search selected by search header (i.e. youtube.edu).	<i>translate</i>	Perform URL FortiGuard check on translated URL.	<i>yt-pattern</i>	Pattern to match YouTube channel ID.	<i>yt-scan</i>	Perform IPS scan.	<i>yt-video</i>	Pattern to match YouTube video name.	<i>yt-channel</i>	Pattern to match YouTube channel name.			
	Option	Description																				
	<i>disable</i>	Site does not support safe search.																				
	<i>url</i>	Safe search selected with a parameter in the URL.																				
	<i>header</i>	Safe search selected by search header (i.e. youtube.edu).																				
	<i>translate</i>	Perform URL FortiGuard check on translated URL.																				
	<i>yt-pattern</i>	Pattern to match YouTube channel ID.																				
	<i>yt-scan</i>	Perform IPS scan.																				
<i>yt-video</i>	Pattern to match YouTube video name.																					
<i>yt-channel</i>	Pattern to match YouTube channel name.																					
safesearch-str	Safe search parameter used in the URL in URL mode. In translate mode, it provides either the regex to translate the URL or the special case to translate the URL.	string	Maximum length: 255																			
url	URL (regular expression).	string	Maximum length: 127																			

config webfilter urlfilter

Configure URL filter lists.

```
config webfilter urlfilter
    Description: Configure URL filter lists.
    edit <id>
        set comment {var-string}
```

```

config entries
  Description: URL filter entries.
  edit <id>
    set action [exempt|block|...]
    set antiphish-action [block|log]
    set dns-address-family [ipv4|ipv6|...]
    set exempt {option1}, {option2}, ...
    set referrer-host {string}
    set status [enable|disable]
    set type [simple|regex|...]
    set url {string}
    set web-proxy-profile {string}
  next
end
set ip-addr-block [enable|disable]
set ip4-mapped-ip6 [enable|disable]
set name {string}
set one-arm-ips-urlfilter [enable|disable]
next
end

```

config webfilter urlfilter

Parameter	Description	Type	Size	Default						
comment	Optional comments.	var-string	Maximum length: 255							
id	ID.	integer	Minimum value: 0 Maximum value: 4294967295	0						
ip-addr-block	Enable/disable blocking URLs when the hostname appears as an IP address.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable blocking URLs when the hostname appears as an IP address.</td></tr><tr><td>disable</td><td>Disable blocking URLs when the hostname appears as an IP address.</td></tr></table>				Option	Description	enable	Enable blocking URLs when the hostname appears as an IP address.	disable	Disable blocking URLs when the hostname appears as an IP address.
Option	Description									
enable	Enable blocking URLs when the hostname appears as an IP address.									
disable	Disable blocking URLs when the hostname appears as an IP address.									
ip4-mapped-ip6	Enable/disable matching of IPv4 mapped IPv6 URLs.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable matching IPv4 mapped IPv6 URLs.</td></tr><tr><td>disable</td><td>Disable matching IPv4 mapped IPv6 URLs.</td></tr></table>				Option	Description	enable	Enable matching IPv4 mapped IPv6 URLs.	disable	Disable matching IPv4 mapped IPv6 URLs.
Option	Description									
enable	Enable matching IPv4 mapped IPv6 URLs.									
disable	Disable matching IPv4 mapped IPv6 URLs.									

Parameter	Description	Type	Size	Default						
name	Name of URL filter list.	string	Maximum length: 63							
one-arm-ips-urlfilter	Enable/disable DNS resolver for one-arm IPS URL filter operation.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable DNS resolver for one-arm IPS URL filter operation.</td></tr><tr><td><i>disable</i></td><td>Disable DNS resolver for one-arm IPS URL filter operation.</td></tr></table>	Option	Description	<i>enable</i>	Enable DNS resolver for one-arm IPS URL filter operation.	<i>disable</i>	Disable DNS resolver for one-arm IPS URL filter operation.			
Option	Description									
<i>enable</i>	Enable DNS resolver for one-arm IPS URL filter operation.									
<i>disable</i>	Disable DNS resolver for one-arm IPS URL filter operation.									

config entries

Parameter	Description	Type	Size	Default										
action	Action to take for URL filter matches.	option	-	exempt										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>exempt</td><td>Exempt matches.</td></tr><tr><td>block</td><td>Block matches.</td></tr><tr><td>allow</td><td>Allow matches (no log).</td></tr><tr><td>monitor</td><td>Allow matches (with log).</td></tr></table>	Option	Description	exempt	Exempt matches.	block	Block matches.	allow	Allow matches (no log).	monitor	Allow matches (with log).			
Option	Description													
exempt	Exempt matches.													
block	Block matches.													
allow	Allow matches (no log).													
monitor	Allow matches (with log).													
antiphish-action	Action to take for AntiPhishing matches.	option	-	block										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>block</td><td>Block matches.</td></tr><tr><td>log</td><td>Allow matches with log.</td></tr></table>	Option	Description	block	Block matches.	log	Allow matches with log.							
Option	Description													
block	Block matches.													
log	Allow matches with log.													
dns-address-family	Resolve IPv4 address, IPv6 address, or both from DNS server.	option	-	ipv4										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>ipv4</td><td>Resolve IPv4 address from DNS server.</td></tr><tr><td>ipv6</td><td>Resolve IPv6 address from DNS server.</td></tr><tr><td>both</td><td>Resolve both IPv4 and IPv6 addresses from DNS server.</td></tr></table>	Option	Description	ipv4	Resolve IPv4 address from DNS server.	ipv6	Resolve IPv6 address from DNS server.	both	Resolve both IPv4 and IPv6 addresses from DNS server.					
Option	Description													
ipv4	Resolve IPv4 address from DNS server.													
ipv6	Resolve IPv6 address from DNS server.													
both	Resolve both IPv4 and IPv6 addresses from DNS server.													

Parameter	Description	Type	Size	Default																				
exempt	If action is set to exempt, select the security profile operations that exempt URLs skip. Separate multiple options with a space.	option	-	av web-content activex-java-cookie dlp fortiguard range-block antiphish all																				
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>av</td><td>AntiVirus scanning.</td></tr><tr><td>web-content</td><td>Web filter content matching.</td></tr><tr><td>activex-java-cookie</td><td>ActiveX, Java, and cookie filtering.</td></tr><tr><td>dlp</td><td>DLP scanning.</td></tr><tr><td>fortiguard</td><td>FortiGuard web filtering.</td></tr><tr><td>range-block</td><td>Range block feature.</td></tr><tr><td>pass</td><td>Pass single connection from all.</td></tr><tr><td>antiphish</td><td>AntiPhish credential checking.</td></tr><tr><td>all</td><td>Exempt from all security profiles.</td></tr></table>	Option	Description	av	AntiVirus scanning.	web-content	Web filter content matching.	activex-java-cookie	ActiveX, Java, and cookie filtering.	dlp	DLP scanning.	fortiguard	FortiGuard web filtering.	range-block	Range block feature.	pass	Pass single connection from all.	antiphish	AntiPhish credential checking.	all	Exempt from all security profiles.			
Option	Description																							
av	AntiVirus scanning.																							
web-content	Web filter content matching.																							
activex-java-cookie	ActiveX, Java, and cookie filtering.																							
dlp	DLP scanning.																							
fortiguard	FortiGuard web filtering.																							
range-block	Range block feature.																							
pass	Pass single connection from all.																							
antiphish	AntiPhish credential checking.																							
all	Exempt from all security profiles.																							
id	Id.	integer	Minimum value: 0 0 Maximum value: 4294967295																					
referrer-host	Referrer host name.	string	Maximum length: 255																					
status	Enable/disable this URL filter.	option	-	enable																				
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable this URL filter.</td></tr><tr><td>disable</td><td>Disable this URL filter.</td></tr></table>	Option	Description	enable	Enable this URL filter.	disable	Disable this URL filter.																	
Option	Description																							
enable	Enable this URL filter.																							
disable	Disable this URL filter.																							
type	Filter type (simple, regex, or wildcard).	option	-	simple																				
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>simple</td><td>Simple URL string.</td></tr><tr><td>regex</td><td>Regular expression URL string.</td></tr><tr><td>wildcard</td><td>Wildcard URL string.</td></tr></table>	Option	Description	simple	Simple URL string.	regex	Regular expression URL string.	wildcard	Wildcard URL string.															
Option	Description																							
simple	Simple URL string.																							
regex	Regular expression URL string.																							
wildcard	Wildcard URL string.																							

Parameter	Description	Type	Size	Default
url	URL to be filtered.	string	Maximum length: 511	
web-proxy-profile	Web proxy profile.	string	Maximum length: 63	

wireless-controller

This section includes syntax for the following commands:

- [config wireless-controller access-control-list on page 2112](#)
- [config wireless-controller ap-status on page 2116](#)
- [config wireless-controller apcfg-profile on page 2114](#)
- [config wireless-controller arrp-profile on page 2117](#)
- [config wireless-controller ble-profile on page 2120](#)
- [config wireless-controller bonjour-profile on page 2122](#)
- [config wireless-controller global on page 2124](#)
- [config wireless-controller hotspot20 anqp-3gpp-cellular on page 2128](#)
- [config wireless-controller hotspot20 anqp-ip-address-type on page 2129](#)
- [config wireless-controller hotspot20 anqp-nai-realm on page 2130](#)
- [config wireless-controller hotspot20 anqp-network-auth-type on page 2133](#)
- [config wireless-controller hotspot20 anqp-roaming-consortium on page 2134](#)
- [config wireless-controller hotspot20 anqp-venue-name on page 2135](#)
- [config wireless-controller hotspot20 anqp-venue-url on page 2136](#)
- [config wireless-controller hotspot20 h2qp-advice-of-charge on page 2137](#)
- [config wireless-controller hotspot20 h2qp-conn-capability on page 2138](#)
- [config wireless-controller hotspot20 h2qp-operator-name on page 2141](#)
- [config wireless-controller hotspot20 h2qp-osu-provider-nai on page 2144](#)
- [config wireless-controller hotspot20 h2qp-osu-provider on page 2142](#)
- [config wireless-controller hotspot20 h2qp-terms-and-conditions on page 2144](#)
- [config wireless-controller hotspot20 h2qp-wan-metric on page 2145](#)
- [config wireless-controller hotspot20 hs-profile on page 2146](#)
- [config wireless-controller hotspot20 icon on page 2154](#)
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- [config wireless-controller ssid-policy on page 2185](#)
- [config wireless-controller syslog-profile on page 2185](#)
- [config wireless-controller timers on page 2187](#)
- [config wireless-controller vap-group on page 2220](#)

- [config wireless-controller vap on page 2189](#)
- [config wireless-controller wag-profile on page 2221](#)
- [config wireless-controller wids-profile on page 2222](#)
- [config wireless-controller wtp-group on page 2254](#)
- [config wireless-controller wtp-profile on page 2257](#)
- [config wireless-controller wtp on page 2230](#)

config wireless-controller access-control-list

Configure WiFi bridge access control list.

```
config wireless-controller access-control-list
  Description: Configure WiFi bridge access control list.
  edit <name>
    set comment {string}
    config layer3-ipv4-rules
      Description: AP ACL layer3 ipv4 rule list.
      edit <rule-id>
        set action [allow|deny]
        set comment {string}
        set dstaddr {user}
        set dstport {integer}
        set protocol {integer}
        set srcaddr {user}
        set srcport {integer}
      next
    end
    config layer3-ipv6-rules
      Description: AP ACL layer3 ipv6 rule list.
      edit <rule-id>
        set action [allow|deny]
        set comment {string}
        set dstaddr {user}
        set dstport {integer}
        set protocol {integer}
        set srcaddr {user}
        set srcport {integer}
      next
    end
  next
end
```

config wireless-controller access-control-list

Parameter	Description	Type	Size	Default
comment	Description.	string	Maximum length: 63	
name	AP access control list name.	string	Maximum length: 35	

config layer3-ipv4-rules

Parameter	Description	Type	Size	Default						
action	Policy action (allow deny).	option	-							
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>allow</td><td>Allows traffic matching the policy.</td></tr><tr><td>deny</td><td>Blocks traffic matching the policy.</td></tr></table>	Option	Description	allow	Allows traffic matching the policy.	deny	Blocks traffic matching the policy.			
	Option	Description								
	allow	Allows traffic matching the policy.								
deny	Blocks traffic matching the policy.									
comment	Description.	string	Maximum length: 63							
dstaddr	Destination IP address (any local-LAN IPv4 address[/<network mask mask length>], default = any).	user	Not Specified							
dstport	Destination port (0 - 65535, default = 0, meaning any).	integer	Minimum value: 0 Maximum value: 65535	0						
protocol	Protocol type as defined by IANA (0 - 255, default = 255, meaning any).	integer	Minimum value: 0 Maximum value: 255	255						
rule-id	Rule ID (1 - 65535).	integer	Minimum value: 1 Maximum value: 65535	0						
srcaddr	Source IP address (any local-LAN IPv4 address [/<network mask mask length>], default = any).	user	Not Specified							
srcport	Source port (0 - 65535, default = 0, meaning any).	integer	Minimum value: 0 Maximum value: 65535	0						

config layer3-ipv6-rules

Parameter	Description	Type	Size	Default
action	Policy action (allow deny).	option	-	
	Option	Description		
	<i>allow</i>	Allows traffic matching the policy.		
	<i>deny</i>	Blocks traffic matching the policy.		
comment	Description.	string	Maximum length: 63	
dstaddr	Destination IPv6 address (any local-LAN IPv6 address[/prefix length]), default = any.	user	Not Specified	
dstport	Destination port (0 - 65535, default = 0, meaning any).	integer	Minimum value: 0 Maximum value: 65535	0
protocol	Protocol type as defined by IANA (0 - 255, default = 255, meaning any).	integer	Minimum value: 0 Maximum value: 255	255
rule-id	Rule ID (1 - 65535).	integer	Minimum value: 1 Maximum value: 65535	0
srcaddr	Source IPv6 address (any local-LAN IPv6 address[/prefix length]), default = any.	user	Not Specified	
srcport	Source port (0 - 65535, default = 0, meaning any).	integer	Minimum value: 0 Maximum value: 65535	0

config wireless-controller apcfg-profile

Configure AP local configuration profiles.

```
config wireless-controller apcfg-profile
  Description: Configure AP local configuration profiles.
  edit <name>
    set ac-ip {ipv4-address}
```

```

set ac-port {integer}
set ac-timer {integer}
set ac-type [default|specify|...]
set ap-family [fap|fap-u|...]
config command-list
    Description: AP local configuration command list.
    edit <id>
        set name {string}
        set passwd-value {password}
        set type [non-password|password]
        set value {string}
    next
end
set comment {var-string}
next
end

```

config wireless-controller apcfg-profile

Parameter	Description	Type	Size	Default								
ac-ip	IP address of the validation controller that AP must be able to join after applying AP local configuration.	ipv4-address	Not Specified	0.0.0.0								
ac-port	Port of the validation controller that AP must be able to join after applying AP local configuration (1024 - 49150, default = 5246).	integer	Minimum value: 1024 Maximum value: 49150	0								
ac-timer	Maximum waiting time for the AP to join the validation controller after applying AP local configuration (3 - 30 min, default = 10).	integer	Minimum value: 3 Maximum value: 30	10								
ac-type	Validation controller type (default = default).	option	-	default								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>default</td><td>This controller is the one and only controller that the AP could join after applying AP local configuration.</td></tr><tr><td>specify</td><td>Specified controller is the one and only controller that the AP could join after applying AP local configuration.</td></tr><tr><td>apcfg</td><td>Any controller defined by AP local configuration after applying AP local configuration.</td></tr></table>				Option	Description	default	This controller is the one and only controller that the AP could join after applying AP local configuration.	specify	Specified controller is the one and only controller that the AP could join after applying AP local configuration.	apcfg	Any controller defined by AP local configuration after applying AP local configuration.
Option	Description											
default	This controller is the one and only controller that the AP could join after applying AP local configuration.											
specify	Specified controller is the one and only controller that the AP could join after applying AP local configuration.											
apcfg	Any controller defined by AP local configuration after applying AP local configuration.											
ap-family	FortiAP family type (default = fap).	option	-	fap								

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>fap</i>	FortiAP Family.		
	<i>fap-u</i>	FortiAP-U Family.		
	<i>fap-c</i>	FortiAP-C Family.		
comment	Comment.	var-string	Maximum length: 255	
name	AP local configuration profile name.	string	Maximum length: 35	

config command-list

Parameter	Description	Type	Size	Default						
id	Command ID.	integer	Minimum value: 1 Maximum value: 255	0						
name	AP local configuration command name.	string	Maximum length: 63							
passwd-value	AP local configuration command password value.	password	Not Specified							
type	The command type (default = non-password).	option	-	non-password						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>non-password</i></td><td>Non-password command.</td></tr><tr><td><i>password</i></td><td>Password command.</td></tr></table>				Option	Description	<i>non-password</i>	Non-password command.	<i>password</i>	Password command.
Option	Description									
<i>non-password</i>	Non-password command.									
<i>password</i>	Password command.									
value	AP local configuration command value.	string	Maximum length: 127							

config wireless-controller ap-status

Configure access point status (rogue | accepted | suppressed).

```
config wireless-controller ap-status
  Description: Configure access point status (rogue | accepted | suppressed).
  edit <id>
    set bssid {mac-address}
    set ssid {string}
```

```

        set status [rogue|accepted|...]
    next
end

```

config wireless-controller ap-status

Parameter	Description	Type	Size	Default
bssid	Access Point's (AP's) BSSID.	mac-address	Not Specified	00:00:00:00:00:00
id	AP ID.	integer	Minimum value: 0 Maximum value: 4294967295	0
ssid	Access Point's (AP's) SSID.	string	Maximum length: 32	
status	Access Point's (AP's) status: rogue, accepted, or suppressed.	option	-	rogue
	Option	Description		
	rogue	Rogue AP.		
	accepted	Accepted AP.		
	suppressed	Suppressed AP.		

config wireless-controller arrp-profile

Configure WiFi Automatic Radio Resource Provisioning (ARRP) profiles.

```

config wireless-controller arrp-profile
    Description: Configure WiFi Automatic Radio Resource Provisioning (ARRP) profiles.
    edit <name>
        set comment {var-string}
        set darrp-optimize {integer}
        set darrp-optimize-schedules <name1>, <name2>, ...
        set include-dfs-channel [enable|disable]
        set include-weather-channel [enable|disable]
        set monitor-period {integer}
        set override-darrp-optimize [enable|disable]
        set selection-period {integer}
        set threshold-ap {integer}
        set threshold-channel-load {integer}
        set threshold-noise-floor {string}
        set threshold-rx-errors {integer}
        set threshold-spectral-rssi {string}
    end
end

```

```

set threshold-tx-retries {integer}
set weight-channel-load {integer}
set weight-dfs-channel {integer}
set weight-managed-ap {integer}
set weight-noise-floor {integer}
set weight-rogue-ap {integer}
set weight-spectral-rssi {integer}
set weight-weather-channel {integer}
next
end

```

config wireless-controller arrp-profile

Parameter	Description	Type	Size	Default						
comment	Comment.	var-string	Maximum length: 255							
darrp-optimize	Time for running Dynamic Automatic Radio Resource Provisioning (DARRP) optimizations (0 - 86400 sec, default = 86400, 0 = disable).	integer	Minimum value: 0 Maximum value: 86400	86400						
darrp-optimize-schedules <name>	Firewall schedules for DARRP running time. DARRP will run periodically based on darrp-optimize within the schedules. Separate multiple schedule names with a space. Schedule name.	string	Maximum length: 35							
include-dfs-channel	Enable/disable use of DFS channel in DARRP channel selection phase 1 (default = disable).	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Include DFS channel in darrp channel selection phase 1.</td></tr><tr><td>disable</td><td>Exclude DFS channel in darrp channel selection phase 1.</td></tr></table>				Option	Description	enable	Include DFS channel in darrp channel selection phase 1.	disable	Exclude DFS channel in darrp channel selection phase 1.
Option	Description									
enable	Include DFS channel in darrp channel selection phase 1.									
disable	Exclude DFS channel in darrp channel selection phase 1.									
include-weather-channel	Enable/disable use of weather channel in DARRP channel selection phase 1 (default = disable).	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Include weather channel in darrp channel selection phase 1.</td></tr><tr><td>disable</td><td>Exclude weather channel in darrp channel selection phase 1.</td></tr></table>				Option	Description	enable	Include weather channel in darrp channel selection phase 1.	disable	Exclude weather channel in darrp channel selection phase 1.
Option	Description									
enable	Include weather channel in darrp channel selection phase 1.									
disable	Exclude weather channel in darrp channel selection phase 1.									

Parameter	Description	Type	Size	Default						
monitor-period	Period in seconds to measure average transmit retries and receive errors (default = 300).	integer	Minimum value: 0 Maximum value: 65535	300						
name	WiFi ARRP profile name.	string	Maximum length: 35							
override-darrp-optimize	Enable to override setting darrp-optimize and darrp-optimize-schedules (default = disable).	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Override setting darrp-optimize and darrp-optimize-schedules.</td></tr><tr><td><i>disable</i></td><td>Use setting darrp-optimize and darrp-optimize-schedules.</td></tr></table>				Option	Description	<i>enable</i>	Override setting darrp-optimize and darrp-optimize-schedules.	<i>disable</i>	Use setting darrp-optimize and darrp-optimize-schedules.
Option	Description									
<i>enable</i>	Override setting darrp-optimize and darrp-optimize-schedules.									
<i>disable</i>	Use setting darrp-optimize and darrp-optimize-schedules.									
selection-period	Period in seconds to measure average channel load, noise floor, spectral RSSI (default = 3600).	integer	Minimum value: 0 Maximum value: 65535	3600						
threshold-ap	Threshold to reject channel in DARRP channel selection phase 1 due to surrounding APs (0 - 500, default = 250).	integer	Minimum value: 0 Maximum value: 500	250						
threshold-channel-load	Threshold in percentage to reject channel in DARRP channel selection phase 1 due to channel load (0 - 100, default = 60).	integer	Minimum value: 0 Maximum value: 100	60						
threshold-noise-floor	Threshold in dBm to reject channel in DARRP channel selection phase 1 due to noise floor (-95 to -20, default = -85).	string	Maximum length: 7	-85						
threshold-rx-errors	Threshold in percentage for receive errors to trigger channel reselection in DARRP monitor stage (0 - 100, default = 50).	integer	Minimum value: 0 Maximum value: 100	50						
threshold-spectral-rssi	Threshold in dBm to reject channel in DARRP channel selection phase 1 due to spectral RSSI (-95 to -20, default = -65).	string	Maximum length: 7	-65						

Parameter	Description	Type	Size	Default
threshold-tx-retries	Threshold in percentage for transmit retries to trigger channel reselection in DARRP monitor stage (0 - 1000, default = 300).	integer	Minimum value: 0 Maximum value: 1000	300
weight-channel-load	Weight in DARRP channel score calculation for channel load (0 - 2000, default = 20).	integer	Minimum value: 0 Maximum value: 2000	20
weight-dfs-channel	Weight in DARRP channel score calculation for DFS channel (0 - 2000, default = 500).	integer	Minimum value: 0 Maximum value: 2000	0
weight-managed-ap	Weight in DARRP channel score calculation for managed APs (0 - 2000, default = 50).	integer	Minimum value: 0 Maximum value: 2000	50
weight-noise-floor	Weight in DARRP channel score calculation for noise floor (0 - 2000, default = 40).	integer	Minimum value: 0 Maximum value: 2000	40
weight-rogue-ap	Weight in DARRP channel score calculation for rogue APs (0 - 2000, default = 10).	integer	Minimum value: 0 Maximum value: 2000	10
weight-spectral-rssi	Weight in DARRP channel score calculation for spectral RSSI (0 - 2000, default = 40).	integer	Minimum value: 0 Maximum value: 2000	40
weight-weather-channel	Weight in DARRP channel score calculation for weather channel (0 - 2000, default = 1000).	integer	Minimum value: 0 Maximum value: 2000	0

config wireless-controller ble-profile

Configure Bluetooth Low Energy profile.

```

config wireless-controller ble-profile
  Description: Configure Bluetooth Low Energy profile.
  edit <name>
    set advertising {option1}, {option2}, ...
    set beacon-interval {integer}

```

```

set ble-scanning [enable|disable]
set comment {string}
set eddystone-instance {string}
set eddystone-namespace {string}
set eddystone-url {string}
set ibeacon-uuid {string}
set major-id {integer}
set minor-id {integer}
set txpower [0|1|...]
next
end

```

config wireless-controller ble-profile

Parameter	Description	Type	Size	Default								
advertising	Advertising type.	option	-									
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>ibeacon</i></td><td>iBeacon advertising.</td></tr><tr><td><i>eddystone-uid</i></td><td>Eddystone UID advertising.</td></tr><tr><td><i>eddystone-url</i></td><td>Eddystone URL advertising.</td></tr></table>	Option	Description	<i>ibeacon</i>	iBeacon advertising.	<i>eddystone-uid</i>	Eddystone UID advertising.	<i>eddystone-url</i>	Eddystone URL advertising.			
Option	Description											
<i>ibeacon</i>	iBeacon advertising.											
<i>eddystone-uid</i>	Eddystone UID advertising.											
<i>eddystone-url</i>	Eddystone URL advertising.											
beacon-interval	Beacon interval (default = 100 msec).	integer	Minimum value: 40 Maximum value: 3500	100								
ble-scanning	Enable/disable Bluetooth Low Energy (BLE) scanning.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable BLE scanning.</td></tr><tr><td><i>disable</i></td><td>Disable BLE scanning.</td></tr></table>	Option	Description	<i>enable</i>	Enable BLE scanning.	<i>disable</i>	Disable BLE scanning.					
Option	Description											
<i>enable</i>	Enable BLE scanning.											
<i>disable</i>	Disable BLE scanning.											
comment	Comment.	string	Maximum length: 63									
eddystone-instance	Eddystone instance ID.	string	Maximum length: 12	abcdef								
eddystone-namespace	Eddystone namespace ID.	string	Maximum length: 20	0102030405								
eddystone-url	Eddystone URL.	string	Maximum length: 127	http://www.fortinet.com								

Parameter	Description	Type	Size	Default																												
ibeacon-uuid	Universally Unique Identifier (UUID; automatically assigned but can be manually reset).	string	Maximum length: 63	005ea414-cbd1-11e5-9956-625662870761																												
major-id	Major ID.	integer	Minimum value: 0 Maximum value: 65535	1000																												
minor-id	Minor ID.	integer	Minimum value: 0 Maximum value: 65535	2000																												
name	Bluetooth Low Energy profile name.	string	Maximum length: 35																													
txpower	Transmit power level (default = 0).	option	-	0																												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>0</td><td>Transmit power level 0 (-21 dBm)</td></tr><tr><td>1</td><td>Transmit power level 1 (-18 dBm)</td></tr><tr><td>2</td><td>Transmit power level 2 (-15 dBm)</td></tr><tr><td>3</td><td>Transmit power level 3 (-12 dBm)</td></tr><tr><td>4</td><td>Transmit power level 4 (-9 dBm)</td></tr><tr><td>5</td><td>Transmit power level 5 (-6 dBm)</td></tr><tr><td>6</td><td>Transmit power level 6 (-3 dBm)</td></tr><tr><td>7</td><td>Transmit power level 7 (0 dBm)</td></tr><tr><td>8</td><td>Transmit power level 8 (1 dBm)</td></tr><tr><td>9</td><td>Transmit power level 9 (2 dBm)</td></tr><tr><td>10</td><td>Transmit power level 10 (3 dBm)</td></tr><tr><td>11</td><td>Transmit power level 11 (4 dBm)</td></tr><tr><td>12</td><td>Transmit power level 12 (5 dBm)</td></tr></table>				Option	Description	0	Transmit power level 0 (-21 dBm)	1	Transmit power level 1 (-18 dBm)	2	Transmit power level 2 (-15 dBm)	3	Transmit power level 3 (-12 dBm)	4	Transmit power level 4 (-9 dBm)	5	Transmit power level 5 (-6 dBm)	6	Transmit power level 6 (-3 dBm)	7	Transmit power level 7 (0 dBm)	8	Transmit power level 8 (1 dBm)	9	Transmit power level 9 (2 dBm)	10	Transmit power level 10 (3 dBm)	11	Transmit power level 11 (4 dBm)	12	Transmit power level 12 (5 dBm)
	Option	Description																														
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config wireless-controller bonjour-profile

Configure Bonjour profiles. Bonjour is Apple's zero configuration networking protocol. Bonjour profiles allow APs and FortiAPs to connect to networks using Bonjour.

```

config wireless-controller bonjour-profile
    Description: Configure Bonjour profiles. Bonjour is Apple's zero configuration networking
    protocol. Bonjour profiles allow APs and FortiAPs to connect to networks using Bonjour.
    edit <name>
        set comment {string}
        config policy-list
            Description: Bonjour policy list.
            edit <policy-id>
                set description {string}
                set from-vlan {string}
                set services {option1}, {option2}, ...
                set to-vlan {string}
            next
        end
    next
end

```

config wireless-controller bonjour-profile

Parameter	Description	Type	Size	Default
comment	Comment.	string	Maximum length: 63	
name	Bonjour profile name.	string	Maximum length: 35	

config policy-list

Parameter	Description	Type	Size	Default				
description	Description.	string	Maximum length: 63					
from-vlan	VLAN ID from which the Bonjour service is advertised (0 - 4094, default = 0).	string	Maximum length: 63	0				
policy-id	Policy ID.	integer	Minimum value: 1 Maximum value: 65535	0				
services	Bonjour services for the VLAN connecting to the Bonjour network.	option	-	all				
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>all</td><td>All services.</td></tr></table>				Option	Description	all	All services.
Option	Description							
all	All services.							

Parameter	Description	Type	Size	Default																								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>airplay</i></td><td>AirPlay.</td></tr><tr><td><i>afp</i></td><td>AFP (Apple File Sharing).</td></tr><tr><td><i>bit-torrent</i></td><td>BitTorrent.</td></tr><tr><td><i>ftp</i></td><td>FTP.</td></tr><tr><td><i>ichat</i></td><td>iChat.</td></tr><tr><td><i>itunes</i></td><td>iTunes.</td></tr><tr><td><i>printers</i></td><td>Printers.</td></tr><tr><td><i>samba</i></td><td>Samba.</td></tr><tr><td><i>scanners</i></td><td>Scanners.</td></tr><tr><td><i>ssh</i></td><td>SSH.</td></tr><tr><td><i>chromecast</i></td><td>ChromeCast.</td></tr></table>	Option	Description	<i>airplay</i>	AirPlay.	<i>afp</i>	AFP (Apple File Sharing).	<i>bit-torrent</i>	BitTorrent.	<i>ftp</i>	FTP.	<i>ichat</i>	iChat.	<i>itunes</i>	iTunes.	<i>printers</i>	Printers.	<i>samba</i>	Samba.	<i>scanners</i>	Scanners.	<i>ssh</i>	SSH.	<i>chromecast</i>	ChromeCast.			
	Option	Description																										
	<i>airplay</i>	AirPlay.																										
	<i>afp</i>	AFP (Apple File Sharing).																										
	<i>bit-torrent</i>	BitTorrent.																										
	<i>ftp</i>	FTP.																										
	<i>ichat</i>	iChat.																										
	<i>itunes</i>	iTunes.																										
	<i>printers</i>	Printers.																										
	<i>samba</i>	Samba.																										
	<i>scanners</i>	Scanners.																										
	<i>ssh</i>	SSH.																										
<i>chromecast</i>	ChromeCast.																											
to-vlan	VLAN ID to which the Bonjour service is made available (0 - 4094, default = all).	string	Maximum length: 63	all																								

config wireless-controller global

Configure wireless controller global settings.

```
config wireless-controller global
Description: Configure wireless controller global settings.
set acd-process-count {integer}
set ap-log-server [enable|disable]
set ap-log-server-ip {ipv4-address}
set ap-log-server-port {integer}
set control-message-offload {option1}, {option2}, ...
set data-ethernet-II [enable|disable]
set dfs-lab-test [enable|disable]
set discovery-mc-addr {ipv4-address-multicast}
set fiapp-eth-type {integer}
set image-download [enable|disable]
set ipsec-base-ip {ipv4-address}
set link-aggregation [enable|disable]
set local-radio-vdom {string}
set location {string}
set max-clients {integer}
set max-retransmit {integer}
set mesh-eth-type {integer}
set nac-interval {integer}
set name {string}
```

```

set rogue-scan-mac-adjacency {integer}
set tunnel-mode [compatible|strict]
set wtp-share [enable|disable]
end

```

config wireless-controller global

Parameter	Description	Type	Size	Default												
acd-process-count	Configure the number cw_acd daemons for multi-core CPU support (default = 0).	integer	Minimum value: 0 Maximum value: 255	0												
ap-log-server	Enable/disable configuring FortiGate to redirect wireless event log messages or FortiAPs to send UTM log messages to a syslog server (default = disable).	option	-	disable												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable AP log server.</td></tr><tr><td>disable</td><td>Disable AP log server.</td></tr></table>				Option	Description	enable	Enable AP log server.	disable	Disable AP log server.						
	Option	Description														
	enable	Enable AP log server.														
disable	Disable AP log server.															
ap-log-server-ip	IP address that FortiGate or FortiAPs send log messages to.	ipv4-address	Not Specified	0.0.0.0												
ap-log-server-port	Port that FortiGate or FortiAPs send log messages to.	integer	Minimum value: 0 Maximum value: 65535	0												
control-message-offload	Configure CAPWAP control message data channel offload.	option	-	ebp-frame aeroscout-tag ap-list sta-list sta-cap-list stats aeroscout-mu sta-health spectral-analysis												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>ebp-frame</td><td>Ekahau blink protocol (EBP) frames.</td></tr><tr><td>aeroscout-tag</td><td>AeroScout tag.</td></tr><tr><td>ap-list</td><td>Rogue AP list.</td></tr><tr><td>sta-list</td><td>Rogue STA list.</td></tr><tr><td>sta-cap-list</td><td>STA capability list.</td></tr></table>				Option	Description	ebp-frame	Ekahau blink protocol (EBP) frames.	aeroscout-tag	AeroScout tag.	ap-list	Rogue AP list.	sta-list	Rogue STA list.	sta-cap-list	STA capability list.
	Option	Description														
	ebp-frame	Ekahau blink protocol (EBP) frames.														
	aeroscout-tag	AeroScout tag.														
	ap-list	Rogue AP list.														
	sta-list	Rogue STA list.														
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Parameter	Description	Type	Size	Default										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>stats</td><td>WTP, radio, VAP, and STA statistics.</td></tr><tr><td>aeroscout-mu</td><td>AeroScout Mobile Unit (MU) report.</td></tr><tr><td>sta-health</td><td>STA health log.</td></tr><tr><td>spectral-analysis</td><td>Spectral analysis report.</td></tr></table>	Option	Description	stats	WTP, radio, VAP, and STA statistics.	aeroscout-mu	AeroScout Mobile Unit (MU) report.	sta-health	STA health log.	spectral-analysis	Spectral analysis report.			
	Option	Description												
	stats	WTP, radio, VAP, and STA statistics.												
	aeroscout-mu	AeroScout Mobile Unit (MU) report.												
	sta-health	STA health log.												
spectral-analysis	Spectral analysis report.													
data-ethernet-II	Configure the wireless controller to use Ethernet II or 802.3 frames with 802.3 data tunnel mode (default = enable).	option	-	enable										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Use Ethernet II frames with 802.3 data tunnel mode.</td></tr><tr><td>disable</td><td>Use 802.3 Ethernet frames with 802.3 data tunnel mode.</td></tr></table>	Option	Description	enable	Use Ethernet II frames with 802.3 data tunnel mode.	disable	Use 802.3 Ethernet frames with 802.3 data tunnel mode.							
	Option	Description												
	enable	Use Ethernet II frames with 802.3 data tunnel mode.												
disable	Use 802.3 Ethernet frames with 802.3 data tunnel mode.													
dfs-lab-test	Enable/disable DFS certificate lab test mode.	option	-	disable										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable DFS certificate lab test mode.</td></tr><tr><td>disable</td><td>Disable DFS certificate lab test mode.</td></tr></table>	Option	Description	enable	Enable DFS certificate lab test mode.	disable	Disable DFS certificate lab test mode.							
	Option	Description												
	enable	Enable DFS certificate lab test mode.												
disable	Disable DFS certificate lab test mode.													
discovery-mc-addr	Multicast IP address for AP discovery (default = 244.0.1.140).	ipv4-address-multicast	Not Specified	224.0.1.140										
fiapp-eth-type	Ethernet type for Fortinet Inter-Access Point Protocol (IAPP), or IEEE 802.11f, packets (0 - 65535, default = 5252).	integer	Minimum value: 0 Maximum value: 65535	5252										
image-download	Enable/disable WTP image download at join time.	option	-	enable										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable WTP image download at join time.</td></tr><tr><td>disable</td><td>Disable WTP image download at join time.</td></tr></table>	Option	Description	enable	Enable WTP image download at join time.	disable	Disable WTP image download at join time.							
	Option	Description												
	enable	Enable WTP image download at join time.												
disable	Disable WTP image download at join time.													
ipsec-base-ip	Base IP address for IPsec VPN tunnels between the access points and the wireless controller (default = 169.254.0.1).	ipv4-address	Not Specified	169.254.0.1										

Parameter	Description	Type	Size	Default
link-aggregation	Enable/disable calculating the CAPWAP transmit hash to load balance sessions to link aggregation nodes (default = disable).	option	-	disable
	Option	Description		
	enable	Enable calculating the CAPWAP transmit hash.		
	disable	Disable calculating the CAPWAP transmit hash.		
local-radio-vdom *	Assign local radio's virtual domain.	string	Maximum length: 31	root
location	Description of the location of the wireless controller.	string	Maximum length: 35	
max-clients	Maximum number of clients that can connect simultaneously (default = 0, meaning no limitation).	integer	Minimum value: 0 Maximum value: 4294967295	0
max-retransmit	Maximum number of tunnel packet retransmissions (0 - 64, default = 3).	integer	Minimum value: 0 Maximum value: 64	3
mesh-eth-type	Mesh Ethernet identifier included in backhaul packets (0 - 65535, default = 8755).	integer	Minimum value: 0 Maximum value: 65535	8755
nac-interval	Interval in seconds between two WiFi network access control (NAC) checks (10 - 600, default = 120).	integer	Minimum value: 10 Maximum value: 600	120
name	Name of the wireless controller.	string	Maximum length: 35	
rogue-scan-mac-adjacency	Maximum numerical difference between an AP's Ethernet and wireless MAC values to match for rogue detection (0 - 31, default = 7).	integer	Minimum value: 0 Maximum value: 31	7
tunnel-mode	Compatible/strict tunnel mode.	option	-	compatible
	Option	Description		
	compatible	Allow for backward compatible ciphers(3DES+SHA1+Strong list).		
	strict	Follow system level strong-crypto ciphers.		
wtp-share	Enable/disable sharing of WTPs between VDOMs.	option	-	disable

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>enable</i>	WTP can be shared between all VDOMs.		
	<i>disable</i>	WTP can be used only in its own VDOM.		

* This parameter may not exist in some models.

config wireless-controller hotspot20 anqp-3gpp-cellular

Configure 3GPP public land mobile network (PLMN).

```
config wireless-controller hotspot20 anqp-3gpp-cellular
  Description: Configure 3GPP public land mobile network (PLMN).
  edit <name>
    config mcc-mnc-list
      Description: Mobile Country Code and Mobile Network Code configuration.
      edit <id>
        set mcc {string}
        set mnc {string}
      next
    end
  next
end
```

config wireless-controller hotspot20 anqp-3gpp-cellular

Parameter	Description	Type	Size	Default
name	3GPP PLMN name.	string	Maximum length: 35	

config mcc-mnc-list

Parameter	Description	Type	Size	Default
id	ID.	integer	Minimum value: 1 Maximum value: 6	0
mcc	Mobile country code.	string	Maximum length: 3	
mnc	Mobile network code.	string	Maximum length: 3	

config wireless-controller hotspot20 anqp-ip-address-type

Configure IP address type availability.

```
config wireless-controller hotspot20 anqp-ip-address-type
  Description: Configure IP address type availability.
  edit <name>
    set ipv4-address-type [not-available|public|...]
    set ipv6-address-type [not-available|available|...]
  next
end
```

config wireless-controller hotspot20 anqp-ip-address-type

Parameter	Description	Type	Size	Default																		
ipv4-address-type	IPv4 address type.	option	-	not-available																		
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>not-available</td><td>Address type not available.</td></tr><tr><td>public</td><td>Public IPv4 address available.</td></tr><tr><td>port-restricted</td><td>Port-restricted IPv4 address available.</td></tr><tr><td>single-NATed-private</td><td>Single NATed private IPv4 address available.</td></tr><tr><td>double-NATed-private</td><td>Double NATed private IPv4 address available.</td></tr><tr><td>port-restricted-and-single-NATed</td><td>Port-restricted IPv4 address and single NATed IPv4 address available.</td></tr><tr><td>port-restricted-and-double-NATed</td><td>Port-restricted IPv4 address and double NATed IPv4 address available.</td></tr><tr><td>not-known</td><td>Availability of the address type is not known.</td></tr></table>	Option	Description	not-available	Address type not available.	public	Public IPv4 address available.	port-restricted	Port-restricted IPv4 address available.	single-NATed-private	Single NATed private IPv4 address available.	double-NATed-private	Double NATed private IPv4 address available.	port-restricted-and-single-NATed	Port-restricted IPv4 address and single NATed IPv4 address available.	port-restricted-and-double-NATed	Port-restricted IPv4 address and double NATed IPv4 address available.	not-known	Availability of the address type is not known.			
Option	Description																					
not-available	Address type not available.																					
public	Public IPv4 address available.																					
port-restricted	Port-restricted IPv4 address available.																					
single-NATed-private	Single NATed private IPv4 address available.																					
double-NATed-private	Double NATed private IPv4 address available.																					
port-restricted-and-single-NATed	Port-restricted IPv4 address and single NATed IPv4 address available.																					
port-restricted-and-double-NATed	Port-restricted IPv4 address and double NATed IPv4 address available.																					
not-known	Availability of the address type is not known.																					
ipv6-address-type	IPv6 address type.	option	-	not-available																		
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>not-available</td><td>Address type not available.</td></tr></table>	Option	Description	not-available	Address type not available.																	
Option	Description																					
not-available	Address type not available.																					

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>available</i>	Address type available.		
	<i>not-known</i>	Availability of the address type not known.		
name	IP type name.	string	Maximum length: 35	

config wireless-controller hotspot20 anqp-nai-realm

Configure network access identifier (NAI) realm.

```

config wireless-controller hotspot20 anqp-nai-realm
  Description: Configure network access identifier (NAI) realm.
  edit <name>
    config nai-list
      Description: NAI list.
      edit <name>
        config eap-method
          Description: EAP Methods.
          edit <index>
            config auth-param
              Description: EAP auth param.
              edit <index>
                set id [non-eap-inner-auth|inner-auth-eap|...]
                set val [eap-identity|eap-md5|...]
              next
            end
            set method [eap-identity|eap-md5|...]
          next
        end
        set encoding [disable|enable]
        set nai-realm {string}
      next
    end
  next
end

```

config wireless-controller hotspot20 anqp-nai-realm

Parameter	Description	Type	Size	Default
name	NAI realm list name.	string	Maximum length: 35	

config nai-list

Parameter	Description	Type	Size	Default
encoding	Enable/disable format in accordance with IETF RFC 4282.	option	-	enable
	Option	Description		
	<i>disable</i>	Disable format in accordance with IETF RFC 4282.		
	<i>enable</i>	Enable format in accordance with IETF RFC 4282.		
nai-realm	Configure NAI realms (delimited by a semi-colon character).	string	Maximum length: 255	
name	NAI realm name.	string	Maximum length: 35	

config eap-method

Parameter	Description	Type	Size	Default
index	EAP method index.	integer	Minimum value: 1 Maximum value: 5	0
method	EAP method type.	option	-	eap-identity
	Option	Description		
	<i>eap-identity</i>	Identity.		
	<i>eap-md5</i>	MD5.		
	<i>eap-tls</i>	TLS.		
	<i>eap-ttls</i>	TTLS.		
	<i>eap-peap</i>	PEAP.		
	<i>eap-sim</i>	SIM.		
	<i>eap-aka</i>	AKA.		
	<i>eap-aka-prime</i>	AKA'.		

config auth-param

Parameter	Description	Type	Size	Default
id	ID of authentication parameter.	option	-	inner-auth-eap
	Option	Description		
	<i>non-eap-inner-auth</i>	Non-EAP inner authentication type.		
	<i>inner-auth-eap</i>	Inner authentication EAP method type.		
	<i>credential</i>	Credential type.		
	<i>tunneled-credential</i>	Tunneled EAP method credential type.		
index	Param index.	integer	Minimum value: 1 Maximum value: 4	0
val	Value of authentication parameter.	option	-	eap-identity
	Option	Description		
	<i>eap-identity</i>	EAP Identity.		
	<i>eap-md5</i>	EAP MD5.		
	<i>eap-tls</i>	EAP TLS.		
	<i>eap-ttls</i>	EAP TTLS.		
	<i>eap-peap</i>	EAP PEAP.		
	<i>eap-sim</i>	EAP SIM.		
	<i>eap-aka</i>	EAP AKA.		
	<i>eap-aka-prime</i>	EAP AKA'.		
	<i>non-eap-pap</i>	Non EAP PAP.		
	<i>non-eap-chap</i>	Non EAP CHAP.		
	<i>non-eap-mschap</i>	Non EAP MSCHAP.		
	<i>non-eap-mschapv2</i>	Non EAP MSCHAPV2.		
	<i>cred-sim</i>	Credential SIM.		

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>cred-usim</i>	Credential USIM.		
	<i>cred-nfc</i>	Credential NFC secure element.		
	<i>cred-hardware-token</i>	Credential hardware token.		
	<i>cred-softtoken</i>	Credential softtoken.		
	<i>cred-certificate</i>	Credential certificate.		
	<i>cred-user-pwd</i>	Credential username password.		
	<i>cred-none</i>	Credential none.		
	<i>cred-vendor-specific</i>	Credential vendor specific.		
	<i>tun-cred-sim</i>	Tunneled credential SIM.		
	<i>tun-cred-usim</i>	Tunneled credential USIM.		
	<i>tun-cred-nfc</i>	Tunneled credential NFC secure element.		
	<i>tun-cred-hardware-token</i>	Tunneled credential hardware token.		
	<i>tun-cred-softtoken</i>	Tunneled credential softtoken.		
	<i>tun-cred-certificate</i>	Tunneled credential certificate.		
	<i>tun-cred-user-pwd</i>	Tunneled credential username password.		
	<i>tun-cred-anonymous</i>	Tunneled credential anonymous.		
	<i>tun-cred-vendor-specific</i>	Tunneled credential vendor specific.		

config wireless-controller hotspot20 anqp-network-auth-type

Configure network authentication type.

```
config wireless-controller hotspot20 anqp-network-auth-type
  Description: Configure network authentication type.
  edit <name>
```

```

        set auth-type [acceptance-of-terms|online-enrollment|...]
        set url {string}
    next
end

```

config wireless-controller hotspot20 anqp-network-auth-type

Parameter	Description	Type	Size	Default
auth-type	Network authentication type.	option	-	acceptance-of-terms
	Option	Description		
	<i>acceptance-of-terms</i>	Acceptance of terms and conditions.		
	<i>online-enrollment</i>	Online enrollment supported.		
	<i>http-redirection</i>	HTTP and HTTPS redirection.		
	<i>dns-redirection</i>	DNS redirection.		
name	Authentication type name.	string	Maximum length: 35	
url	Redirect URL.	string	Maximum length: 255	

config wireless-controller hotspot20 anqp-roaming-consortium

Configure roaming consortium.

```

config wireless-controller hotspot20 anqp-roaming-consortium
    Description: Configure roaming consortium.
    edit <name>
        config oi-list
            Description: Organization identifier list.
            edit <index>
                set comment {string}
                set oi {string}
            next
        end
    next
end

```

config wireless-controller hotspot20 anqp-roaming-consortium

Parameter	Description	Type	Size	Default
name	Roaming consortium name.	string	Maximum length: 35	

config oi-list

Parameter	Description	Type	Size	Default
comment	Comment.	string	Maximum length: 35	
index	OI index.	integer	Minimum value: 1 Maximum value: 10	0
oi	Organization identifier.	string	Maximum length: 10	

config wireless-controller hotspot20 anqp-venue-name

Configure venue name duple.

```
config wireless-controller hotspot20 anqp-venue-name
  Description: Configure venue name duple.
  edit <name>
    config value-list
      Description: Name list.
      edit <index>
        set lang {string}
        set value {string}
      next
    end
  next
end
```

config wireless-controller hotspot20 anqp-venue-name

Parameter	Description	Type	Size	Default
name	Name of venue name duple.	string	Maximum length: 35	

config value-list

Parameter	Description	Type	Size	Default
index	Value index.	integer	Minimum value: 1 Maximum value: 10	0
lang	Language code.	string	Maximum length: 3	eng
value	Venue name value.	string	Maximum length: 252	

config wireless-controller hotspot20 anqp-venue-url

Configure venue URL.

```
config wireless-controller hotspot20 anqp-venue-url
  Description: Configure venue URL.
  edit <name>
    config value-list
      Description: URL list.
      edit <index>
        set number {integer}
        set value {string}
      next
    end
  next
end
```

config wireless-controller hotspot20 anqp-venue-url

Parameter	Description	Type	Size	Default
name	Name of venue url.	string	Maximum length: 35	

config value-list

Parameter	Description	Type	Size	Default
index	URL index.	integer	Minimum value: 1 Maximum value: 10	0

Parameter	Description	Type	Size	Default
number	Venue number.	integer	Minimum value: 0 Maximum value: 255	0
value	Venue URL value.	string	Maximum length: 254	

config wireless-controller hotspot20 h2qp-advice-of-charge

Configure advice of charge.

```

config wireless-controller hotspot20 h2qp-advice-of-charge
  Description: Configure advice of charge.
  edit <name>
    config aoc-list
      Description: AOC list.
      edit <name>
        set nai-realm {string}
        set nai-realm-encoding {string}
        config plan-info
          Description: Plan info.
          edit <name>
            set currency {string}
            set info-file {string}
            set lang {string}
          next
        end
        set type [time-based|volume-based|...]
      next
    end
  next
end

```

config wireless-controller hotspot20 h2qp-advice-of-charge

Parameter	Description	Type	Size	Default
name	Plan name.	string	Maximum length: 35	

config aoc-list

Parameter	Description	Type	Size	Default
nai-realm	NAI realm list name.	string	Maximum length: 255	
nai-realm-encoding	NAI realm encoding.	string	Maximum length: 1	
name	Advice of charge ID.	string	Maximum length: 35	
type	Usage charge type.	option	-	time-based
		Option	Description	
		<i>time-based</i>	Time based usage charge.	
		<i>volume-based</i>	Volume based usage charge.	
		<i>time-and-volume-based</i>	Time and volume based usage charge.	
		<i>unlimited</i>	Unlimited usage.	

config plan-info

Parameter	Description	Type	Size	Default
currency	Currency code.	string	Maximum length: 3	
info-file	Info file.	string	Maximum length: 64	
lang	Language code.	string	Maximum length: 3	
name	Plan name.	string	Maximum length: 35	

config wireless-controller hotspot20 h2qp-conn-capability

Configure connection capability.

```
config wireless-controller hotspot20 h2qp-conn-capability
  Description: Configure connection capability.
  edit <name>
    set esp-port [closed|open|...]
    set ftp-port [closed|open|...]
```

```

set http-port [closed|open|...]
set icmp-port [closed|open|...]
set ikev2-port [closed|open|...]
set ikev2-xx-port [closed|open|...]
set pptp-vpn-port [closed|open|...]
set ssh-port [closed|open|...]
set tls-port [closed|open|...]
set voip-tcp-port [closed|open|...]
set voip-udp-port [closed|open|...]
next
end

```

config wireless-controller hotspot20 h2qp-conn-capability

Parameter	Description	Type	Size	Default								
esp-port	Set ESP port service (used by IPsec VPNs) status.	option	-	unknown								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>closed</i></td><td>The port is not open for communication.</td></tr><tr><td><i>open</i></td><td>The port is open for communication.</td></tr><tr><td><i>unknown</i></td><td>The port may or may not be open for communication.</td></tr></table>	Option	Description	<i>closed</i>	The port is not open for communication.	<i>open</i>	The port is open for communication.	<i>unknown</i>	The port may or may not be open for communication.			
Option	Description											
<i>closed</i>	The port is not open for communication.											
<i>open</i>	The port is open for communication.											
<i>unknown</i>	The port may or may not be open for communication.											
ftp-port	Set FTP port service status.	option	-	unknown								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>closed</i></td><td>The port is not open for communication.</td></tr><tr><td><i>open</i></td><td>The port is open for communication.</td></tr><tr><td><i>unknown</i></td><td>The port may or may not be open for communication.</td></tr></table>	Option	Description	<i>closed</i>	The port is not open for communication.	<i>open</i>	The port is open for communication.	<i>unknown</i>	The port may or may not be open for communication.			
Option	Description											
<i>closed</i>	The port is not open for communication.											
<i>open</i>	The port is open for communication.											
<i>unknown</i>	The port may or may not be open for communication.											
http-port	Set HTTP port service status.	option	-	unknown								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>closed</i></td><td>The port is not open for communication.</td></tr><tr><td><i>open</i></td><td>The port is open for communication.</td></tr><tr><td><i>unknown</i></td><td>The port may or may not be open for communication.</td></tr></table>	Option	Description	<i>closed</i>	The port is not open for communication.	<i>open</i>	The port is open for communication.	<i>unknown</i>	The port may or may not be open for communication.			
Option	Description											
<i>closed</i>	The port is not open for communication.											
<i>open</i>	The port is open for communication.											
<i>unknown</i>	The port may or may not be open for communication.											
icmp-port	Set ICMP port service status.	option	-	unknown								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>closed</i></td><td>The port is not open for communication.</td></tr><tr><td><i>open</i></td><td>The port is open for communication.</td></tr><tr><td><i>unknown</i></td><td>The port may or may not be open for communication.</td></tr></table>	Option	Description	<i>closed</i>	The port is not open for communication.	<i>open</i>	The port is open for communication.	<i>unknown</i>	The port may or may not be open for communication.			
Option	Description											
<i>closed</i>	The port is not open for communication.											
<i>open</i>	The port is open for communication.											
<i>unknown</i>	The port may or may not be open for communication.											

Parameter	Description	Type	Size	Default								
ikev2-port	Set IKEv2 port service for IPsec VPN status.	option	-	unknown								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>closed</i></td><td>The port is not open for communication.</td></tr><tr><td><i>open</i></td><td>The port is open for communication.</td></tr><tr><td><i>unknown</i></td><td>The port may or may not be open for communication.</td></tr></table>	Option	Description	<i>closed</i>	The port is not open for communication.	<i>open</i>	The port is open for communication.	<i>unknown</i>	The port may or may not be open for communication.			
Option	Description											
<i>closed</i>	The port is not open for communication.											
<i>open</i>	The port is open for communication.											
<i>unknown</i>	The port may or may not be open for communication.											
ikev2-xx-port	Set UDP port 4500 (which may be used by IKEv2 for IPsec VPN) service status.	option	-	unknown								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>closed</i></td><td>The port is not open for communication.</td></tr><tr><td><i>open</i></td><td>The port is open for communication.</td></tr><tr><td><i>unknown</i></td><td>The port may or may not be open for communication.</td></tr></table>	Option	Description	<i>closed</i>	The port is not open for communication.	<i>open</i>	The port is open for communication.	<i>unknown</i>	The port may or may not be open for communication.			
Option	Description											
<i>closed</i>	The port is not open for communication.											
<i>open</i>	The port is open for communication.											
<i>unknown</i>	The port may or may not be open for communication.											
name	Connection capability name.	string	Maximum length: 35									
pptp-vpn-port	Set Point to Point Tunneling Protocol (PPTP) VPN port service status.	option	-	unknown								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>closed</i></td><td>The port is not open for communication.</td></tr><tr><td><i>open</i></td><td>The port is open for communication.</td></tr><tr><td><i>unknown</i></td><td>The port may or may not be open for communication.</td></tr></table>	Option	Description	<i>closed</i>	The port is not open for communication.	<i>open</i>	The port is open for communication.	<i>unknown</i>	The port may or may not be open for communication.			
Option	Description											
<i>closed</i>	The port is not open for communication.											
<i>open</i>	The port is open for communication.											
<i>unknown</i>	The port may or may not be open for communication.											
ssh-port	Set SSH port service status.	option	-	unknown								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>closed</i></td><td>The port is not open for communication.</td></tr><tr><td><i>open</i></td><td>The port is open for communication.</td></tr><tr><td><i>unknown</i></td><td>The port may or may not be open for communication.</td></tr></table>	Option	Description	<i>closed</i>	The port is not open for communication.	<i>open</i>	The port is open for communication.	<i>unknown</i>	The port may or may not be open for communication.			
Option	Description											
<i>closed</i>	The port is not open for communication.											
<i>open</i>	The port is open for communication.											
<i>unknown</i>	The port may or may not be open for communication.											
tls-port	Set TLS VPN (HTTPS) port service status.	option	-	unknown								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>closed</i></td><td>The port is not open for communication.</td></tr><tr><td><i>open</i></td><td>The port is open for communication.</td></tr><tr><td><i>unknown</i></td><td>The port may or may not be open for communication.</td></tr></table>	Option	Description	<i>closed</i>	The port is not open for communication.	<i>open</i>	The port is open for communication.	<i>unknown</i>	The port may or may not be open for communication.			
Option	Description											
<i>closed</i>	The port is not open for communication.											
<i>open</i>	The port is open for communication.											
<i>unknown</i>	The port may or may not be open for communication.											

Parameter	Description	Type	Size	Default
voip-tcp-port	Set VoIP TCP port service status.	option	-	unknown
	Option	Description		
	<i>closed</i>	The port is not open for communication.		
	<i>open</i>	The port is open for communication.		
	<i>unknown</i>	The port may or may not be open for communication.		
voip-udp-port	Set VoIP UDP port service status.	option	-	unknown
	Option	Description		
	<i>closed</i>	The port is not open for communication.		
	<i>open</i>	The port is open for communication.		
	<i>unknown</i>	The port may or may not be open for communication.		

config wireless-controller hotspot20 h2qp-operator-name

Configure operator friendly name.

```

config wireless-controller hotspot20 h2qp-operator-name
  Description: Configure operator friendly name.
  edit <name>
    config value-list
      Description: Name list.
      edit <index>
        set lang {string}
        set value {string}
      next
    end
  next
end

```

config wireless-controller hotspot20 h2qp-operator-name

Parameter	Description	Type	Size	Default
name	Friendly name ID.	string	Maximum length: 35	

config value-list

Parameter	Description	Type	Size	Default
index	Value index.	integer	Minimum value: 1 Maximum value: 10	0
lang	Language code.	string	Maximum length: 3	eng
value	Friendly name value.	string	Maximum length: 252	

config wireless-controller hotspot20 h2qp-osu-provider

Configure online sign up (OSU) provider list.

```
config wireless-controller hotspot20 h2qp-osu-provider
  Description: Configure online sign up (OSU) provider list.
  edit <name>
    config friendly-name
      Description: OSU provider friendly name.
      edit <index>
        set friendly-name {string}
        set lang {string}
      next
    end
    set icon {string}
    set osu-method {option1}, {option2}, ...
    set osu-nai {string}
    set server-uri {string}
    config service-description
      Description: OSU service name.
      edit <service-id>
        set lang {string}
        set service-description {string}
      next
    end
  next
end
```

config wireless-controller hotspot20 h2qp-osu-provider

Parameter	Description	Type	Size	Default
icon	OSU provider icon.	string	Maximum length: 35	

Parameter	Description	Type	Size	Default
name	OSU provider ID.	string	Maximum length: 35	
osu-method	OSU method list.	option	-	
	Option	Description		
	oma-dm	OMA DM.		
	soap-xml-spp	SOAP XML SPP.		
	reserved	Reserved.		
osu-nai	OSU NAI.	string	Maximum length: 255	
server-uri	Server URI.	string	Maximum length: 255	

config friendly-name

Parameter	Description	Type	Size	Default
friendly-name	OSU provider friendly name.	string	Maximum length: 252	
index	OSU provider friendly name index.	integer	Minimum value: 1 Maximum value: 10	0
lang	Language code.	string	Maximum length: 3	eng

config service-description

Parameter	Description	Type	Size	Default
lang	Language code.	string	Maximum length: 3	eng
service-description	Service description.	string	Maximum length: 252	
service-id	OSU service ID.	integer	Minimum value: 0 Maximum value: 4294967295	0

config wireless-controller hotspot20 h2qp-osu-provider-nai

Configure online sign up (OSU) provider NAI list.

```
config wireless-controller hotspot20 h2qp-osu-provider-nai
  Description: Configure online sign up (OSU) provider NAI list.
  edit <name>
    config nai-list
      Description: OSU NAI list.
      edit <name>
        set osu-nai {string}
      next
    end
  next
end
```

config wireless-controller hotspot20 h2qp-osu-provider-nai

Parameter	Description	Type	Size	Default
name	OSU provider NAI ID.	string	Maximum length: 35	

config nai-list

Parameter	Description	Type	Size	Default
name	OSU NAI ID.	string	Maximum length: 35	
osu-nai	OSU NAI.	string	Maximum length: 255	

config wireless-controller hotspot20 h2qp-terms-and-conditions

Configure terms and conditions.

```
config wireless-controller hotspot20 h2qp-terms-and-conditions
  Description: Configure terms and conditions.
  edit <name>
    set filename {string}
    set timestamp {integer}
    set url {string}
  end
```

```
next
end
```

config wireless-controller hotspot20 h2qp-terms-and-conditions

Parameter	Description	Type	Size	Default
filename	Filename.	string	Maximum length: 254	
name	Terms and Conditions ID.	string	Maximum length: 35	
timestamp	Timestamp.	integer	Minimum value: 0 Maximum value: 4294967295	
url	URL.	string	Maximum length: 253	

config wireless-controller hotspot20 h2qp-wan-metric

Configure WAN metrics.

```
config wireless-controller hotspot20 h2qp-wan-metric
  Description: Configure WAN metrics.
  edit <name>
    set downlink-load {integer}
    set downlink-speed {integer}
    set link-at-capacity [enable|disable]
    set link-status [up|down|...]
    set load-measurement-duration {integer}
    set symmetric-wan-link [symmetric|asymmetric]
    set uplink-load {integer}
    set uplink-speed {integer}
  next
end
```

config wireless-controller hotspot20 h2qp-wan-metric

Parameter	Description	Type	Size	Default
downlink-load	Downlink load.	integer	Minimum value: 0 Maximum value: 255	

Parameter	Description	Type	Size	Default
downlink-speed	Downlink speed (in kilobits/s).	integer	Minimum value: 0 Maximum value: 4294967295	2400
link-at-capacity	Link at capacity.	option	-	disable
	Option	Description		
	<i>enable</i>	Link at capacity (not allow additional mobile devices to associate).		
	<i>disable</i>	Link not at capacity (allow additional mobile devices to associate).		
link-status	Link status.	option	-	up
	Option	Description		
	<i>up</i>	Link up.		
	<i>down</i>	Link down.		
	<i>in-test</i>	Link in test state.		
load-measurement-duration	Load measurement duration (in tenths of a second).	integer	Minimum value: 0 Maximum value: 65535	0
name	WAN metric name.	string	Maximum length: 35	
symmetric-wan-link	WAN link symmetry.	option	-	asymmetric
	Option	Description		
	<i>symmetric</i>	Symmetric WAN link (uplink and downlink speeds are the same).		
	<i>asymmetric</i>	Asymmetric WAN link (uplink and downlink speeds are not the same).		
uplink-load	Uplink load.	integer	Minimum value: 0 Maximum value: 255	0
uplink-speed	Uplink speed (in kilobits/s).	integer	Minimum value: 0 Maximum value: 4294967295	2400

config wireless-controller hotspot20 hs-profile

Configure hotspot profile.

```

config wireless-controller hotspot20 hs-profile
  Description: Configure hotspot profile.
  edit <name>
    set 3gpp-plmn {string}
    set access-network-asra [enable|disable]
    set access-network-esr [enable|disable]
    set access-network-internet [enable|disable]
    set access-network-type [private-network|private-network-with-guest-access|...]
    set access-network-uesa [enable|disable]
    set advice-of-charge {string}
    set anqp-domain-id {integer}
    set bss-transition [enable|disable]
    set conn-cap {string}
    set deauth-request-timeout {integer}
    set dgaf [enable|disable]
    set domain-name {string}
    set gas-comeback-delay {integer}
    set gas-fragmentation-limit {integer}
    set hessid {mac-address}
    set ip-addr-type {string}
    set l2tif [enable|disable]
    set nai-realm {string}
    set network-auth {string}
    set oper-friendly-name {string}
    set oper-icon {string}
    set osu-provider <name1>, <name2>, ...
    set osu-provider-nai {string}
    set osu-ssid {string}
    set pame-bi [disable|enable]
    set proxy-arp [enable|disable]
    set qos-map {string}
    set release {integer}
    set roaming-consortium {string}
    set terms-and-conditions {string}
    set venue-group [unspecified|assembly|...]
    set venue-name {string}
    set venue-type [unspecified|arena|...]
    set venue-url {string}
    set wan-metrics {string}
    set wnm-sleep-mode [enable|disable]
  next
end

```

config wireless-controller hotspot20 hs-profile

Parameter	Description	Type	Size	Default
3gpp-plmn	3GPP PLMN name.	string	Maximum length: 35	

Parameter	Description	Type	Size	Default														
access-network-asra	Enable/disable additional step required for access (ASRA).	option	-	disable														
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable additional step required for access (ASRA).</td></tr><tr><td>disable</td><td>Disable additional step required for access (ASRA).</td></tr></table>	Option	Description	enable	Enable additional step required for access (ASRA).	disable	Disable additional step required for access (ASRA).											
Option	Description																	
enable	Enable additional step required for access (ASRA).																	
disable	Disable additional step required for access (ASRA).																	
access-network-esr	Enable/disable emergency services reachable (ESR).	option	-	disable														
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable emergency services reachable (ESR).</td></tr><tr><td>disable</td><td>Disable emergency services reachable (ESR).</td></tr></table>	Option	Description	enable	Enable emergency services reachable (ESR).	disable	Disable emergency services reachable (ESR).											
Option	Description																	
enable	Enable emergency services reachable (ESR).																	
disable	Disable emergency services reachable (ESR).																	
access-network-internet	Enable/disable connectivity to the Internet.	option	-	disable														
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable connectivity to the Internet.</td></tr><tr><td>disable</td><td>Disable connectivity to the Internet.</td></tr></table>	Option	Description	enable	Enable connectivity to the Internet.	disable	Disable connectivity to the Internet.											
Option	Description																	
enable	Enable connectivity to the Internet.																	
disable	Disable connectivity to the Internet.																	
access-network-type	Access network type.	option	-	private-network														
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>private-network</td><td>Private network.</td></tr><tr><td>private-network-with-guest-access</td><td>Private network with guest access.</td></tr><tr><td>chargeable-public-network</td><td>Chargeable public network.</td></tr><tr><td>free-public-network</td><td>Free public network.</td></tr><tr><td>personal-device-network</td><td>Personal devices network.</td></tr><tr><td>emergency-services-only-network</td><td>Emergency services only network.</td></tr></table>	Option	Description	private-network	Private network.	private-network-with-guest-access	Private network with guest access.	chargeable-public-network	Chargeable public network.	free-public-network	Free public network.	personal-device-network	Personal devices network.	emergency-services-only-network	Emergency services only network.			
Option	Description																	
private-network	Private network.																	
private-network-with-guest-access	Private network with guest access.																	
chargeable-public-network	Chargeable public network.																	
free-public-network	Free public network.																	
personal-device-network	Personal devices network.																	
emergency-services-only-network	Emergency services only network.																	

Parameter	Description	Type	Size	Default
	Option Description			
	<i>test-or-experimental</i>	Test or experimental.		
	<i>wildcard</i>	Wildcard.		
access-network-uesa	Enable/disable unauthenticated emergency service accessible (UESA).	option	-	disable
	Option Description			
	<i>enable</i>	Enable unauthenticated emergency service accessible (UESA).		
	<i>disable</i>	Disable unauthenticated emergency service accessible (UESA).		
advice-of-charge	Advice of charge.	string	Maximum length: 35	
anqp-domain-id	ANQP Domain ID (0-65535).	integer	Minimum value: 0 Maximum value: 65535	0
bss-transition	Enable/disable basic service set (BSS) transition Support.	option	-	disable
	Option Description			
	<i>enable</i>	Enable basic service set (BSS) transition support.		
	<i>disable</i>	Disable basic service set (BSS) transition support.		
conn-cap	Connection capability name.	string	Maximum length: 35	
deauth-request-timeout	Deauthentication request timeout (in seconds).	integer	Minimum value: 30 Maximum value: 120	60
dgaf	Enable/disable downstream group-addressed forwarding (DGAF).	option	-	disable
	Option Description			
	<i>enable</i>	Enable downstream group-addressed forwarding (DGAF).		
	<i>disable</i>	Disable downstream group-addressed forwarding (DGAF).		

Parameter	Description	Type	Size	Default						
domain-name	Domain name.	string	Maximum length: 255							
gas-comeback-delay	GAS comeback delay (0 or 100 - 10000 milliseconds, default = 500).	integer	Minimum value: 100 Maximum value: 10000	500						
gas-fragmentation-limit	GAS fragmentation limit (512 - 4096, default = 1024).	integer	Minimum value: 512 Maximum value: 4096	1024						
hessid	Homogeneous extended service set identifier (HESSID).	mac-address	Not Specified	00:00:00:00:00:00						
ip-addr-type	IP address type name.	string	Maximum length: 35							
l2tif	Enable/disable Layer 2 traffic inspection and filtering.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable Layer 2 traffic inspection and filtering.</td></tr><tr><td>disable</td><td>Disable Layer 2 traffic inspection and filtering.</td></tr></table>				Option	Description	enable	Enable Layer 2 traffic inspection and filtering.	disable	Disable Layer 2 traffic inspection and filtering.
Option	Description									
enable	Enable Layer 2 traffic inspection and filtering.									
disable	Disable Layer 2 traffic inspection and filtering.									
nai-realm	NAI realm list name.	string	Maximum length: 35							
name	Hotspot profile name.	string	Maximum length: 35							
network-auth	Network authentication name.	string	Maximum length: 35							
oper-friendly-name	Operator friendly name.	string	Maximum length: 35							
oper-icon	Operator icon.	string	Maximum length: 35							
osu-provider <name>	Manually selected list of OSU provider(s). OSU provider name.	string	Maximum length: 35							
osu-provider-nai	OSU Provider NAI.	string	Maximum length: 35							
osu-ssid	Online sign up (OSU) SSID.	string	Maximum length: 255							

Parameter	Description	Type	Size	Default																		
pame-bi	Enable/disable Pre-Association Message Exchange BSSID Independent (PAME-BI).	option	-	enable																		
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>disable</i></td><td>Disable Pre-Association Message Exchange BSSID Independent (PAME-BI).</td></tr><tr><td><i>enable</i></td><td>Enable Pre-Association Message Exchange BSSID Independent (PAME-BI).</td></tr></table>	Option	Description	<i>disable</i>	Disable Pre-Association Message Exchange BSSID Independent (PAME-BI).	<i>enable</i>	Enable Pre-Association Message Exchange BSSID Independent (PAME-BI).															
Option	Description																					
<i>disable</i>	Disable Pre-Association Message Exchange BSSID Independent (PAME-BI).																					
<i>enable</i>	Enable Pre-Association Message Exchange BSSID Independent (PAME-BI).																					
proxy-arp	Enable/disable Proxy ARP.	option	-	enable																		
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable Proxy ARP.</td></tr><tr><td><i>disable</i></td><td>Disable Proxy ARP.</td></tr></table>	Option	Description	<i>enable</i>	Enable Proxy ARP.	<i>disable</i>	Disable Proxy ARP.															
Option	Description																					
<i>enable</i>	Enable Proxy ARP.																					
<i>disable</i>	Disable Proxy ARP.																					
qos-map	QoS MAP set ID.	string	Maximum length: 35																			
release	Hotspot 2.0 Release number (1, 2, 3, default = 2).	integer	Minimum value: 1 Maximum value: 3	2																		
roaming-consortium	Roaming consortium list name.	string	Maximum length: 35																			
terms-and-conditions	Terms and conditions.	string	Maximum length: 35																			
venue-group	Venue group.	option	-	unspecified																		
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>unspecified</i></td><td>Unspecified.</td></tr><tr><td><i>assembly</i></td><td>Assembly.</td></tr><tr><td><i>business</i></td><td>Business.</td></tr><tr><td><i>educational</i></td><td>Educational.</td></tr><tr><td><i>factory</i></td><td>Factory and industrial.</td></tr><tr><td><i>institutional</i></td><td>Institutional.</td></tr><tr><td><i>mercantile</i></td><td>Mercantile.</td></tr><tr><td><i>residential</i></td><td>Residential.</td></tr></table>	Option	Description	<i>unspecified</i>	Unspecified.	<i>assembly</i>	Assembly.	<i>business</i>	Business.	<i>educational</i>	Educational.	<i>factory</i>	Factory and industrial.	<i>institutional</i>	Institutional.	<i>mercantile</i>	Mercantile.	<i>residential</i>	Residential.			
Option	Description																					
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Parameter	Description	Type	Size	Default																																										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>storage</td><td>Storage.</td></tr><tr><td>utility</td><td>Utility and miscellaneous.</td></tr><tr><td>vehicular</td><td>Vehicular.</td></tr><tr><td>outdoor</td><td>Outdoor.</td></tr></table>	Option	Description	storage	Storage.	utility	Utility and miscellaneous.	vehicular	Vehicular.	outdoor	Outdoor.																																			
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outdoor	Outdoor.																																													
venue-name	Venue name.	string	Maximum length: 35																																											
venue-type	Venue type.	option	-	unspecified																																										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>unspecified</td><td>Unspecified.</td></tr><tr><td>arena</td><td>Arena.</td></tr><tr><td>stadium</td><td>Stadium.</td></tr><tr><td>passenger-terminal</td><td>Passenger terminal.</td></tr><tr><td>amphitheater</td><td>Amphitheater.</td></tr><tr><td>amusement-park</td><td>Amusement park.</td></tr><tr><td>place-of-worship</td><td>Place of worship.</td></tr><tr><td>convention-center</td><td>Convention center.</td></tr><tr><td>library</td><td>Library.</td></tr><tr><td>museum</td><td>Museum.</td></tr><tr><td>restaurant</td><td>Restaurant.</td></tr><tr><td>theater</td><td>Theater.</td></tr><tr><td>bar</td><td>Bar.</td></tr><tr><td>coffee-shop</td><td>Coffee shop.</td></tr><tr><td>zoo-or-aquarium</td><td>Zoo or aquarium.</td></tr><tr><td>emergency-center</td><td>Emergency coordination center.</td></tr><tr><td>doctor-office</td><td>Doctor or dentist office.</td></tr><tr><td>bank</td><td>Bank.</td></tr><tr><td>fire-station</td><td>Fire station.</td></tr><tr><td>police-station</td><td>Police station.</td></tr></table>	Option	Description	unspecified	Unspecified.	arena	Arena.	stadium	Stadium.	passenger-terminal	Passenger terminal.	amphitheater	Amphitheater.	amusement-park	Amusement park.	place-of-worship	Place of worship.	convention-center	Convention center.	library	Library.	museum	Museum.	restaurant	Restaurant.	theater	Theater.	bar	Bar.	coffee-shop	Coffee shop.	zoo-or-aquarium	Zoo or aquarium.	emergency-center	Emergency coordination center.	doctor-office	Doctor or dentist office.	bank	Bank.	fire-station	Fire station.	police-station	Police station.			
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	police-station	Police station.																																												

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>post-office</i>	Post office.		
	<i>professional-office</i>	Professional office.		
	<i>research-facility</i>	Research and development facility.		
	<i>attorney-office</i>	Attorney office.		
	<i>primary-school</i>	Primary school.		
	<i>secondary-school</i>	Secondary school.		
	<i>university-or-college</i>	University or college.		
	<i>factory</i>	Factory.		
	<i>hospital</i>	Hospital.		
	<i>long-term-care-facility</i>	Long term care facility.		
	<i>rehab-center</i>	Alcohol and drug rehabilitation center.		
	<i>group-home</i>	Group home.		
	<i>prison-or-jail</i>	Prison or jail.		
	<i>retail-store</i>	Retail store.		
	<i>grocery-market</i>	Grocery market.		
	<i>auto-service-station</i>	Auto service station.		
	<i>shopping-mall</i>	Shopping mall.		
	<i>gas-station</i>	Gas station.		
	<i>private</i>	Private residence.		
	<i>hotel-or-motel</i>	Hotel or motel.		
	<i>dormitory</i>	Dormitory.		
	<i>boarding-house</i>	Boarding house.		
	<i>automobile</i>	Automobile or truck.		
	<i>airplane</i>	Airplane.		
	<i>bus</i>	Bus.		
	<i>ferry</i>	Ferry.		
	<i>ship-or-boat</i>	Ship or boat.		
	<i>train</i>	Train.		
	<i>motor-bike</i>	Motor bike.		

Parameter	Description	Type	Size	Default														
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>muni-mesh-network</i></td><td>Muni mesh network.</td></tr><tr><td><i>city-park</i></td><td>City park.</td></tr><tr><td><i>rest-area</i></td><td>Rest area.</td></tr><tr><td><i>traffic-control</i></td><td>Traffic control.</td></tr><tr><td><i>bus-stop</i></td><td>Bus stop.</td></tr><tr><td><i>kiosk</i></td><td>Kiosk.</td></tr></table>	Option	Description	<i>muni-mesh-network</i>	Muni mesh network.	<i>city-park</i>	City park.	<i>rest-area</i>	Rest area.	<i>traffic-control</i>	Traffic control.	<i>bus-stop</i>	Bus stop.	<i>kiosk</i>	Kiosk.			
	Option	Description																
	<i>muni-mesh-network</i>	Muni mesh network.																
	<i>city-park</i>	City park.																
	<i>rest-area</i>	Rest area.																
	<i>traffic-control</i>	Traffic control.																
	<i>bus-stop</i>	Bus stop.																
<i>kiosk</i>	Kiosk.																	
venue-url	Venue name.	string	Maximum length: 35															
wan-metrics	WAN metric name.	string	Maximum length: 35															
wnm-sleep-mode	Enable/disable wireless network management (WNM) sleep mode.	option	-	disable														
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable wireless network management (WNM) sleep mode.</td></tr><tr><td><i>disable</i></td><td>Disable wireless network management (WNM) sleep mode.</td></tr></table>	Option	Description	<i>enable</i>	Enable wireless network management (WNM) sleep mode.	<i>disable</i>	Disable wireless network management (WNM) sleep mode.											
	Option	Description																
	<i>enable</i>	Enable wireless network management (WNM) sleep mode.																
<i>disable</i>	Disable wireless network management (WNM) sleep mode.																	

config wireless-controller hotspot20 icon

Configure OSU provider icon.

```

config wireless-controller hotspot20 icon
  Description: Configure OSU provider icon.
  edit <name>
    config icon-list
      Description: Icon list.
      edit <name>
        set file {string}
        set height {integer}
        set lang {string}
        set type [bmp|gif|...]
        set width {integer}
      next
    end
  next
end

```

config wireless-controller hotspot20 icon

Parameter	Description	Type	Size	Default
name	Icon list ID.	string	Maximum length: 35	

config icon-list

Parameter	Description	Type	Size	Default
file	Icon file.	string	Maximum length: 255	
height	Icon height.	integer	Minimum value: 1 Maximum value: 65535	0
lang	Language code.	string	Maximum length: 3	eng
name	Icon name.	string	Maximum length: 255	
type	Icon type.	option	-	png
	Option Description			
	bmp BMP image.			
	gif GIF image.			
	jpeg JPEG image.			
	png PNG image.			
	tiff TIFF image.			
width	Icon width.	integer	Minimum value: 1 Maximum value: 65535	0

config wireless-controller hotspot20 qos-map

Configure QoS map set.

```

config wireless-controller hotspot20 qos-map
  Description: Configure QoS map set.
  edit <name>
    config dscp-except
      Description: Differentiated Services Code Point (DSCP) exceptions.
      edit <index>
        set dscp {integer}
        set up {integer}
      next
    end
    config dscp-range
      Description: Differentiated Services Code Point (DSCP) ranges.
      edit <index>
        set high {integer}
        set low {integer}
        set up {integer}
      next
    end
  next
end

```

config wireless-controller hotspot20 qos-map

Parameter	Description	Type	Size	Default
name	QOS-MAP name.	string	Maximum length: 35	

config dscp-except

Parameter	Description	Type	Size	Default
dscp	DSCP value.	integer	Minimum value: 0 Maximum value: 63	0
index	DSCP exception index.	integer	Minimum value: 1 Maximum value: 21	0
up	User priority.	integer	Minimum value: 0 Maximum value: 7	0

config dscp-range

Parameter	Description	Type	Size	Default
high	DSCP high value.	integer	Minimum value: 0 Maximum value: 63	255
index	DSCP range index.	integer	Minimum value: 1 Maximum value: 8	0
low	DSCP low value.	integer	Minimum value: 0 Maximum value: 63	255
up	User priority.	integer	Minimum value: 0 Maximum value: 7	0

config wireless-controller inter-controller

Configure inter wireless controller operation.

```
config wireless-controller inter-controller
  Description: Configure inter wireless controller operation.
  set fast-failover-max {integer}
  set fast-failover-wait {integer}
  set inter-controller-key {password}
  set inter-controller-mode [disable|l2-roaming|...]
  config inter-controller-peer
    Description: Fast failover peer wireless controller list.
    edit <id>
      set peer-ip {ipv4-address}
      set peer-port {integer}
      set peer-priority [primary|secondary]
    next
  end
  set inter-controller-pri [primary|secondary]
  set l3-roaming [enable|disable]
end
```

config wireless-controller inter-controller

Parameter	Description	Type	Size	Default								
fast-failover-max	Maximum number of retransmissions for fast failover HA messages between peer wireless controllers (3 - 64, default = 10).	integer	Minimum value: 3 Maximum value: 64	10								
fast-failover-wait	Minimum wait time before an AP transitions from secondary controller to primary controller (10 - 86400 sec, default = 10).	integer	Minimum value: 10 Maximum value: 86400	10								
inter-controller-key	Secret key for inter-controller communications.	password	Not Specified									
inter-controller-mode	Configure inter-controller mode (disable, l2-roaming, 1+1, default = disable).	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Disable inter-controller mode.</td></tr><tr><td>l2-roaming</td><td>Enable layer 2 roaming support between inter-controllers.</td></tr><tr><td>1+1</td><td>Enable 1+1 fast failover mode.</td></tr></table>	Option	Description	disable	Disable inter-controller mode.	l2-roaming	Enable layer 2 roaming support between inter-controllers.	1+1	Enable 1+1 fast failover mode.			
Option	Description											
disable	Disable inter-controller mode.											
l2-roaming	Enable layer 2 roaming support between inter-controllers.											
1+1	Enable 1+1 fast failover mode.											
inter-controller-pri	Configure inter-controller's priority (primary or secondary, default = primary).	option	-	primary								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>primary</td><td>Primary fast failover mode.</td></tr><tr><td>secondary</td><td>Secondary fast failover mode.</td></tr></table>	Option	Description	primary	Primary fast failover mode.	secondary	Secondary fast failover mode.					
Option	Description											
primary	Primary fast failover mode.											
secondary	Secondary fast failover mode.											
l3-roaming	Enable/disable layer 3 roaming (default = disable).	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable layer 3 roaming.</td></tr><tr><td>disable</td><td>Disable layer 3 roaming.</td></tr></table>	Option	Description	enable	Enable layer 3 roaming.	disable	Disable layer 3 roaming.					
Option	Description											
enable	Enable layer 3 roaming.											
disable	Disable layer 3 roaming.											

config inter-controller-peer

Parameter	Description	Type	Size	Default
id	ID.	integer	Minimum value: 0 Maximum value: 4294967295	0
peer-ip	Peer wireless controller's IP address.	ipv4-address	Not Specified	0.0.0.0
peer-port	Port used by the wireless controller's for inter-controller communications (1024 - 49150, default = 5246).	integer	Minimum value: 1024 Maximum value: 49150	5246
peer-priority	Peer wireless controller's priority (primary or secondary, default = primary).	option	-	primary
		Option	Description	
		<i>primary</i>	Primary fast failover mode.	
		<i>secondary</i>	Secondary fast failover mode.	

config wireless-controller log

Configure wireless controller event log filters.

```
config wireless-controller log
  Description: Configure wireless controller event log filters.
  set addrgrp-log [emergency|alert|...]
  set ble-log [emergency|alert|...]
  set clb-log [emergency|alert|...]
  set dhcp-starv-log [emergency|alert|...]
  set led-sched-log [emergency|alert|...]
  set radio-event-log [emergency|alert|...]
  set rogue-event-log [emergency|alert|...]
  set sta-event-log [emergency|alert|...]
  set sta-locate-log [emergency|alert|...]
  set status [enable|disable]
  set wids-log [emergency|alert|...]
  set wtp-event-log [emergency|alert|...]
end
```

config wireless-controller log

Parameter	Description	Type	Size	Default
addrgrp-log	Lowest severity level to log address group message.	option	-	notification
		Option	Description	
		<i>emergency</i>	Emergency level.	
		<i>alert</i>	Alert level.	
		<i>critical</i>	Critical level.	
		<i>error</i>	Error level.	
		<i>warning</i>	Warning level.	
		<i>notification</i>	Notification level.	
		<i>information</i>	Information level.	
		<i>debug</i>	Debug level.	
ble-log	Lowest severity level to log BLE detection message.	option	-	notification
		Option	Description	
		<i>emergency</i>	Emergency level.	
		<i>alert</i>	Alert level.	
		<i>critical</i>	Critical level.	
		<i>error</i>	Error level.	
		<i>warning</i>	Warning level.	
		<i>notification</i>	Notification level.	
		<i>information</i>	Information level.	
		<i>debug</i>	Debug level.	
clb-log	Lowest severity level to log client load balancing message.	option	-	notification
		Option	Description	
		<i>emergency</i>	Emergency level.	
		<i>alert</i>	Alert level.	
		<i>critical</i>	Critical level.	

Parameter	Description	Type	Size	Default																		
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>error</i></td><td>Error level.</td></tr><tr><td><i>warning</i></td><td>Warning level.</td></tr><tr><td><i>notification</i></td><td>Notification level.</td></tr><tr><td><i>information</i></td><td>Information level.</td></tr><tr><td><i>debug</i></td><td>Debug level.</td></tr></table>	Option	Description	<i>error</i>	Error level.	<i>warning</i>	Warning level.	<i>notification</i>	Notification level.	<i>information</i>	Information level.	<i>debug</i>	Debug level.									
	Option	Description																				
	<i>error</i>	Error level.																				
	<i>warning</i>	Warning level.																				
	<i>notification</i>	Notification level.																				
	<i>information</i>	Information level.																				
<i>debug</i>	Debug level.																					
dhcp-starv-log	Lowest severity level to log DHCP starvation event message.	option	-	notification																		
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>emergency</i></td><td>Emergency level.</td></tr><tr><td><i>alert</i></td><td>Alert level.</td></tr><tr><td><i>critical</i></td><td>Critical level.</td></tr><tr><td><i>error</i></td><td>Error level.</td></tr><tr><td><i>warning</i></td><td>Warning level.</td></tr><tr><td><i>notification</i></td><td>Notification level.</td></tr><tr><td><i>information</i></td><td>Information level.</td></tr><tr><td><i>debug</i></td><td>Debug level.</td></tr></table>	Option	Description	<i>emergency</i>	Emergency level.	<i>alert</i>	Alert level.	<i>critical</i>	Critical level.	<i>error</i>	Error level.	<i>warning</i>	Warning level.	<i>notification</i>	Notification level.	<i>information</i>	Information level.	<i>debug</i>	Debug level.			
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	<i>warning</i>	Warning level.																				
	<i>notification</i>	Notification level.																				
	<i>information</i>	Information level.																				
<i>debug</i>	Debug level.																					
led-sched-log	Lowest severity level to log LED schedule event message.	option	-	notification																		
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>emergency</i></td><td>Emergency level.</td></tr><tr><td><i>alert</i></td><td>Alert level.</td></tr><tr><td><i>critical</i></td><td>Critical level.</td></tr><tr><td><i>error</i></td><td>Error level.</td></tr><tr><td><i>warning</i></td><td>Warning level.</td></tr><tr><td><i>notification</i></td><td>Notification level.</td></tr><tr><td><i>information</i></td><td>Information level.</td></tr><tr><td><i>debug</i></td><td>Debug level.</td></tr></table>	Option	Description	<i>emergency</i>	Emergency level.	<i>alert</i>	Alert level.	<i>critical</i>	Critical level.	<i>error</i>	Error level.	<i>warning</i>	Warning level.	<i>notification</i>	Notification level.	<i>information</i>	Information level.	<i>debug</i>	Debug level.			
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	<i>emergency</i>	Emergency level.																				
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	<i>information</i>	Information level.																				
<i>debug</i>	Debug level.																					
radio-event-log	Lowest severity level to log radio event message.	option	-	notification																		

Parameter	Description	Type	Size	Default																		
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>emergency</i></td><td>Emergency level.</td></tr><tr><td><i>alert</i></td><td>Alert level.</td></tr><tr><td><i>critical</i></td><td>Critical level.</td></tr><tr><td><i>error</i></td><td>Error level.</td></tr><tr><td><i>warning</i></td><td>Warning level.</td></tr><tr><td><i>notification</i></td><td>Notification level.</td></tr><tr><td><i>information</i></td><td>Information level.</td></tr><tr><td><i>debug</i></td><td>Debug level.</td></tr></table>	Option	Description	<i>emergency</i>	Emergency level.	<i>alert</i>	Alert level.	<i>critical</i>	Critical level.	<i>error</i>	Error level.	<i>warning</i>	Warning level.	<i>notification</i>	Notification level.	<i>information</i>	Information level.	<i>debug</i>	Debug level.			
	Option	Description																				
	<i>emergency</i>	Emergency level.																				
	<i>alert</i>	Alert level.																				
	<i>critical</i>	Critical level.																				
	<i>error</i>	Error level.																				
	<i>warning</i>	Warning level.																				
	<i>notification</i>	Notification level.																				
	<i>information</i>	Information level.																				
<i>debug</i>	Debug level.																					
rogue-event-log	Lowest severity level to log rogue AP event message.	option	-	notification																		
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>emergency</i></td><td>Emergency level.</td></tr><tr><td><i>alert</i></td><td>Alert level.</td></tr><tr><td><i>critical</i></td><td>Critical level.</td></tr><tr><td><i>error</i></td><td>Error level.</td></tr><tr><td><i>warning</i></td><td>Warning level.</td></tr><tr><td><i>notification</i></td><td>Notification level.</td></tr><tr><td><i>information</i></td><td>Information level.</td></tr><tr><td><i>debug</i></td><td>Debug level.</td></tr></table>	Option	Description	<i>emergency</i>	Emergency level.	<i>alert</i>	Alert level.	<i>critical</i>	Critical level.	<i>error</i>	Error level.	<i>warning</i>	Warning level.	<i>notification</i>	Notification level.	<i>information</i>	Information level.	<i>debug</i>	Debug level.			
	Option	Description																				
	<i>emergency</i>	Emergency level.																				
	<i>alert</i>	Alert level.																				
	<i>critical</i>	Critical level.																				
	<i>error</i>	Error level.																				
	<i>warning</i>	Warning level.																				
	<i>notification</i>	Notification level.																				
	<i>information</i>	Information level.																				
<i>debug</i>	Debug level.																					
sta-event-log	Lowest severity level to log station event message.	option	-	notification																		
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>emergency</i></td><td>Emergency level.</td></tr><tr><td><i>alert</i></td><td>Alert level.</td></tr><tr><td><i>critical</i></td><td>Critical level.</td></tr><tr><td><i>error</i></td><td>Error level.</td></tr><tr><td><i>warning</i></td><td>Warning level.</td></tr><tr><td><i>notification</i></td><td>Notification level.</td></tr></table>	Option	Description	<i>emergency</i>	Emergency level.	<i>alert</i>	Alert level.	<i>critical</i>	Critical level.	<i>error</i>	Error level.	<i>warning</i>	Warning level.	<i>notification</i>	Notification level.							
	Option	Description																				
	<i>emergency</i>	Emergency level.																				
	<i>alert</i>	Alert level.																				
	<i>critical</i>	Critical level.																				
	<i>error</i>	Error level.																				
	<i>warning</i>	Warning level.																				
<i>notification</i>	Notification level.																					

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>information</i>	Information level.		
	<i>debug</i>	Debug level.		
sta-locate-log	Lowest severity level to log station locate message.	option	-	notification
	Option	Description		
	<i>emergency</i>	Emergency level.		
	<i>alert</i>	Alert level.		
	<i>critical</i>	Critical level.		
	<i>error</i>	Error level.		
	<i>warning</i>	Warning level.		
	<i>notification</i>	Notification level.		
	<i>information</i>	Information level.		
	<i>debug</i>	Debug level.		
status	Enable/disable wireless event logging.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable wireless event logging.		
	<i>disable</i>	Disable wireless event logging.		
wids-log	Lowest severity level to log WIDS message.	option	-	notification
	Option	Description		
	<i>emergency</i>	Emergency level.		
	<i>alert</i>	Alert level.		
	<i>critical</i>	Critical level.		
	<i>error</i>	Error level.		
	<i>warning</i>	Warning level.		
	<i>notification</i>	Notification level.		
	<i>information</i>	Information level.		
	<i>debug</i>	Debug level.		

Parameter	Description	Type	Size	Default
wtp-event-log	Lowest severity level to log WTP event message.	option	-	notification
	Option	Description		
	<i>emergency</i>	Emergency level.		
	<i>alert</i>	Alert level.		
	<i>critical</i>	Critical level.		
	<i>error</i>	Error level.		
	<i>warning</i>	Warning level.		
	<i>notification</i>	Notification level.		
	<i>information</i>	Information level.		
	<i>debug</i>	Debug level.		

config wireless-controller mpsk-profile

Configure MPSK profile.

```

config wireless-controller mpsk-profile
  Description: Configure MPSK profile.
  edit <name>
    set mpsk-concurrent-clients {integer}
    config mpsk-group
      Description: List of multiple PSK groups.
      edit <name>
        config mpsk-key
          Description: List of multiple PSK entries.
          edit <name>
            set comment {var-string}
            set concurrent-client-limit-type [default|unlimited|...]
            set concurrent-clients {integer}
            set mac {mac-address}
            set mpsk-schedules <name1>, <name2>, ...
            set passphrase {password}
          next
        end
        set vlan-id {integer}
        set vlan-type [no-vlan|fixed-vlan]
      next
    end
  next
end

```

config wireless-controller mpsk-profile

Parameter	Description	Type	Size	Default
mpsk-concurrent-clients	Maximum number of concurrent clients that connect using the same passphrase in multiple PSK authentication (0 - 65535, default = 0, meaning no limitation).	integer	Minimum value: 0 Maximum value: 65535	0
name	MPSK profile name.	string	Maximum length: 35	

config mpsk-group

Parameter	Description	Type	Size	Default						
name	MPSK group name.	string	Maximum length: 35							
vlan-id	Optional VLAN ID.	integer	Minimum value: 1 Maximum value: 4094	0						
vlan-type	MPSK group VLAN options.	option	-	no-vlan						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>no-vlan</td><td>No VLAN.</td></tr><tr><td>fixed-vlan</td><td>Fixed VLAN ID.</td></tr></table>				Option	Description	no-vlan	No VLAN.	fixed-vlan	Fixed VLAN ID.
Option	Description									
no-vlan	No VLAN.									
fixed-vlan	Fixed VLAN ID.									

config mpsk-key

Parameter	Description	Type	Size	Default
comment	Comment.	var-string	Maximum length: 255	
concurrent-client-limit-type	MPSK client limit type options.	option	-	default
	Option	Description		
	default	Using the value in profile configuration.		
	unlimited	Unlimited.		
	specified	Specified value.		

Parameter	Description	Type	Size	Default
concurrent-clients	Number of clients that can connect using this pre-shared key (1 - 65535, default is 256).	integer	Minimum value: 1 Maximum value: 65535	256
mac	MAC address.	mac-address	Not Specified	00:00:00:00:00:00
mpsk-schedules <name>	Firewall schedule for MPSK passphrase. The passphrase will be effective only when at least one schedule is valid. Schedule name.	string	Maximum length: 35	
name	Pre-shared key name.	string	Maximum length: 35	
passphrase	WPA Pre-shared key.	password	Not Specified	

config wireless-controller nac-profile

Configure WiFi network access control (NAC) profiles.

```
config wireless-controller nac-profile
  Description: Configure WiFi network access control (NAC) profiles.
  edit <name>
    set comment {var-string}
    set onboarding-vlan {string}
  next
end
```

config wireless-controller nac-profile

Parameter	Description	Type	Size	Default
comment	Comment.	var-string	Maximum length: 255	
name	Name.	string	Maximum length: 35	
onboarding-vlan	VLAN interface name.	string	Maximum length: 35	

config wireless-controller qos-profile

Configure WiFi quality of service (QoS) profiles.

```
config wireless-controller qos-profile
  Description: Configure WiFi quality of service (QoS) profiles.
  edit <name>
    set bandwidth-admission-control [enable|disable]
    set bandwidth-capacity {integer}
    set burst [enable|disable]
    set call-admission-control [enable|disable]
    set call-capacity {integer}
    set comment {string}
    set downlink {integer}
    set downlink-sta {integer}
    set dscp-wmm-be <id1>, <id2>, ...
    set dscp-wmm-bk <id1>, <id2>, ...
    set dscp-wmm-mapping [enable|disable]
    set dscp-wmm-vi <id1>, <id2>, ...
    set dscp-wmm-vo <id1>, <id2>, ...
    set uplink {integer}
    set uplink-sta {integer}
    set wmm [enable|disable]
    set wmm-be-dscp {integer}
    set wmm-bk-dscp {integer}
    set wmm-dscp-marking [enable|disable]
    set wmm-uapsd [enable|disable]
    set wmm-vi-dscp {integer}
    set wmm-vo-dscp {integer}
  next
end
```

config wireless-controller qos-profile

Parameter	Description	Type	Size	Default
bandwidth-admission-control	Enable/disable WMM bandwidth admission control.	option	-	disable
		Option	Description	
		<i>enable</i>	Enable WMM bandwidth admission control.	
		<i>disable</i>	Disable WMM bandwidth admission control.	

Parameter	Description	Type	Size	Default						
bandwidth-capacity	Maximum bandwidth capacity allowed (1 - 600000 Kbps, default = 2000).	integer	Minimum value: 1 Maximum value: 600000	2000						
burst	Enable/disable client rate burst.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable client rate burst.</td></tr><tr><td><i>disable</i></td><td>Disable client rate burst.</td></tr></table>	Option	Description	<i>enable</i>	Enable client rate burst.	<i>disable</i>	Disable client rate burst.			
Option	Description									
<i>enable</i>	Enable client rate burst.									
<i>disable</i>	Disable client rate burst.									
call-admission-control	Enable/disable WMM call admission control.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable WMM call admission control.</td></tr><tr><td><i>disable</i></td><td>Disable WMM call admission control.</td></tr></table>	Option	Description	<i>enable</i>	Enable WMM call admission control.	<i>disable</i>	Disable WMM call admission control.			
Option	Description									
<i>enable</i>	Enable WMM call admission control.									
<i>disable</i>	Disable WMM call admission control.									
call-capacity	Maximum number of Voice over WLAN (VoWLAN) phones allowed (0 - 60, default = 10).	integer	Minimum value: 0 Maximum value: 60	10						
comment	Comment.	string	Maximum length: 63							
downlink	Maximum downlink bandwidth for Virtual Access Points (VAPs) (0 - 2097152 Kbps, default = 0, 0 means no limit).	integer	Minimum value: 0 Maximum value: 2097152	0						
downlink-sta	Maximum downlink bandwidth for clients (0 - 2097152 Kbps, default = 0, 0 means no limit).	integer	Minimum value: 0 Maximum value: 2097152	0						
dscp-wmm-be <id>	DSCP mapping for best effort access (default = 0 24). DSCP WMM mapping numbers (0 - 63).	integer	Minimum value: 0 Maximum value: 63							

Parameter	Description	Type	Size	Default
dscp-wmm-bk <id>	DSCP mapping for background access (default = 8 16). DSCP WMM mapping numbers (0 - 63).	integer	Minimum value: 0 Maximum value: 63	
dscp-wmm-mapping	Enable/disable Differentiated Services Code Point (DSCP) mapping.	option	-	disable
	Option	Description		
	enable	Enable Differentiated Services Code Point (DSCP) mapping.		
	disable	Disable Differentiated Services Code Point (DSCP) mapping.		
dscp-wmm-vi <id>	DSCP mapping for video access (default = 32 40). DSCP WMM mapping numbers (0 - 63).	integer	Minimum value: 0 Maximum value: 63	
dscp-wmm-vo <id>	DSCP mapping for voice access (default = 48 56). DSCP WMM mapping numbers (0 - 63).	integer	Minimum value: 0 Maximum value: 63	
name	WiFi QoS profile name.	string	Maximum length: 35	
uplink	Maximum uplink bandwidth for Virtual Access Points (VAPs) (0 - 2097152 Kbps, default = 0, 0 means no limit).	integer	Minimum value: 0 Maximum value: 2097152	0
uplink-sta	Maximum uplink bandwidth for clients (0 - 2097152 Kbps, default = 0, 0 means no limit).	integer	Minimum value: 0 Maximum value: 2097152	0
wmm	Enable/disable WiFi multi-media (WMM) control.	option	-	enable
	Option	Description		
	enable	Enable WiFi multi-media (WMM) control.		
	disable	Disable WiFi multi-media (WMM) control.		
wmm-be-dscp	DSCP marking for best effort access (default = 0).	integer	Minimum value: 0 Maximum value: 63	0

Parameter	Description	Type	Size	Default						
wmm-bk-dscp	DSCP marking for background access (default = 8).	integer	Minimum value: 0 Maximum value: 63	8						
wmm-dscp-marking	Enable/disable WMM Differentiated Services Code Point (DSCP) marking.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable WMM Differentiated Services Code Point (DSCP) marking.</td></tr><tr><td>disable</td><td>Disable WMM Differentiated Services Code Point (DSCP) marking.</td></tr></table>	Option	Description	enable	Enable WMM Differentiated Services Code Point (DSCP) marking.	disable	Disable WMM Differentiated Services Code Point (DSCP) marking.			
Option	Description									
enable	Enable WMM Differentiated Services Code Point (DSCP) marking.									
disable	Disable WMM Differentiated Services Code Point (DSCP) marking.									
wmm-uapsd	Enable/disable WMM Unscheduled Automatic Power Save Delivery (U-APSD) power save mode.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable WMM Unscheduled Automatic Power Save Delivery (U-APSD) power save mode.</td></tr><tr><td>disable</td><td>Disable WMM Unscheduled Automatic Power Save Delivery (U-APSD) power save mode.</td></tr></table>	Option	Description	enable	Enable WMM Unscheduled Automatic Power Save Delivery (U-APSD) power save mode.	disable	Disable WMM Unscheduled Automatic Power Save Delivery (U-APSD) power save mode.			
Option	Description									
enable	Enable WMM Unscheduled Automatic Power Save Delivery (U-APSD) power save mode.									
disable	Disable WMM Unscheduled Automatic Power Save Delivery (U-APSD) power save mode.									
wmm-vi-dscp	DSCP marking for video access (default = 32).	integer	Minimum value: 0 Maximum value: 63	32						
wmm-vo-dscp	DSCP marking for voice access (default = 48).	integer	Minimum value: 0 Maximum value: 63	48						

config wireless-controller region

Configure FortiAP regions (for floor plans and maps).

```
config wireless-controller region
  Description: Configure FortiAP regions (for floor plans and maps).
  edit <name>
    set comments {string}
    set grayscale [enable|disable]
    set opacity {integer}
  next
end
```

config wireless-controller region

Parameter	Description	Type	Size	Default
comments	Comments.	string	Maximum length: 1027	
grayscale	Region image grayscale.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable region image grayscale.		
	<i>disable</i>	Disable region image grayscale.		
name	FortiAP region name.	string	Maximum length: 35	
opacity	Region image opacity (0 - 100).	integer	Minimum value: 0 Maximum value: 100	100

config wireless-controller setting

VDOM wireless controller configuration.

```
config wireless-controller setting
  Description: VDOM wireless controller configuration.
  set account-id {string}
  set country [--|AF|...]
  set darrp-optimize {integer}
  set darrp-optimize-schedules <name1>, <name2>, ...
  set device-holdoff {integer}
  set device-idle {integer}
  set device-weight {integer}
  set duplicate-ssid [enable|disable]
  set fake-ssid-action {option1}, {option2}, ...
  set fapc-compatibility [enable|disable]
  set firmware-provision-on-authorization [enable|disable]
  config offending-ssid
    Description: Configure offending SSID.
    edit <id>
      set action {option1}, {option2}, ...
      set ssid-pattern {string}
    next
  end
  set phishing-ssid-detect [enable|disable]
  set wfa-compatibility [enable|disable]
end
```

config wireless-controller setting

Parameter	Description	Type	Size	Default
account-id	FortiCloud customer account ID.	string	Maximum length: 63	
country	Country or region in which the FortiGate is located. The country determines the 802.11 bands and channels that are available.	option	-	US
	Option		Description	
	--	NO_COUNTRY_SET		
	AF	AFGHANISTAN		
	AL	ALBANIA		
	DZ	ALGERIA		
	AS	AMERICAN SAMOA		
	AO	ANGOLA		
	AR	ARGENTINA		
	AM	ARMENIA		
	AU	AUSTRALIA		
	AT	AUSTRIA		
	AZ	AZERBAIJAN		
	BS	BAHAMAS		
	BH	BAHRAIN		
	BD	BANGLADESH		
	BB	BARBADOS		
	BY	BELARUS		
	BE	BELGIUM		
	BZ	BELIZE		
	BJ	BENIN		
	BM	BERMUDA		
	BT	BHUTAN		
	BO	BOLIVIA		
	BA	BOSNIA AND HERZEGOVINA		

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>BW</i>	BOTSWANA		
	<i>BR</i>	BRAZIL		
	<i>BN</i>	BRUNEI DARUSSALAM		
	<i>BG</i>	BULGARIA		
	<i>BF</i>	BURKINA-FASO		
	<i>KH</i>	CAMBODIA		
	<i>CM</i>	CAMEROON		
	<i>KY</i>	CAYMAN ISLANDS		
	<i>CF</i>	CENTRAL AFRICA REPUBLIC		
	<i>TD</i>	CHAD		
	<i>CL</i>	CHILE		
	<i>CN</i>	CHINA		
	<i>CX</i>	CHRISTMAS ISLAND		
	<i>CO</i>	COLOMBIA		
	<i>CG</i>	CONGO REPUBLIC		
	<i>CD</i>	DEMOCRATIC REPUBLIC OF CONGO		
	<i>CR</i>	COSTA RICA		
	<i>HR</i>	CROATIA		
	<i>CY</i>	CYPRUS		
	<i>CZ</i>	CZECH REPUBLIC		
	<i>DK</i>	DENMARK		
	<i>DJ</i>	DJIBOUTI		
	<i>DM</i>	DOMINICA		
	<i>DO</i>	DOMINICAN REPUBLIC		
	<i>EC</i>	ECUADOR		
	<i>EG</i>	EGYPT		
	<i>SV</i>	EL SALVADOR		
	<i>ET</i>	ETHIOPIA		
	<i>EE</i>	ESTONIA		

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>GF</i>	FRENCH GUIANA		
	<i>PF</i>	FRENCH POLYNESIA		
	<i>FO</i>	FAEROE ISLANDS		
	<i>FJ</i>	FIJI		
	<i>FI</i>	FINLAND		
	<i>FR</i>	FRANCE		
	<i>GA</i>	GABON		
	<i>GE</i>	GEORGIA		
	<i>GM</i>	GAMBIA		
	<i>DE</i>	GERMANY		
	<i>GH</i>	GHANA		
	<i>GI</i>	GIBRALTAR		
	<i>GR</i>	GREECE		
	<i>GL</i>	GREENLAND		
	<i>GD</i>	GRENADA		
	<i>GP</i>	GUADELOUPE		
	<i>GU</i>	GUAM		
	<i>GT</i>	GUATEMALA		
	<i>GY</i>	GUYANA		
	<i>HT</i>	HAITI		
	<i>HN</i>	HONDURAS		
	<i>HK</i>	HONG KONG		
	<i>HU</i>	HUNGARY		
	<i>IS</i>	ICELAND		
	<i>IN</i>	INDIA		
	<i>ID</i>	INDONESIA		
	<i>IQ</i>	IRAQ		
	<i>IE</i>	IRELAND		
	<i>IM</i>	ISLE OF MAN		

Parameter	Description	Type	Size	Default

Option	Description
<i>IL</i>	ISRAEL
<i>IT</i>	ITALY
<i>CI</i>	COTE_D_IVOIRE
<i>JM</i>	JAMAICA
<i>JO</i>	JORDAN
<i>KZ</i>	KAZAKHSTAN
<i>KE</i>	KENYA
<i>KR</i>	KOREA REPUBLIC
<i>KW</i>	KUWAIT
<i>LA</i>	LAOS
<i>LV</i>	LATVIA
<i>LB</i>	LEBANON
<i>LS</i>	LESOTHO
<i>LR</i>	LIBERIA
<i>LY</i>	LIBYA
<i>LI</i>	LIECHTENSTEIN
<i>LT</i>	LITHUANIA
<i>LU</i>	LUXEMBOURG
<i>MO</i>	MACAU SAR
<i>MK</i>	MACEDONIA, FYRO
<i>MG</i>	MADAGASCAR
<i>MW</i>	MALAWI
<i>MY</i>	MALAYSIA
<i>MV</i>	MALDIVES
<i>ML</i>	MALI
<i>MT</i>	MALTA
<i>MH</i>	MARSHALL ISLANDS
<i>MQ</i>	MARTINIQUE
<i>MR</i>	MAURITANIA

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>MU</i>	MAURITIUS		
	<i>YT</i>	MAYOTTE		
	<i>MX</i>	MEXICO		
	<i>FM</i>	MICRONESIA		
	<i>MD</i>	REPUBLIC OF MOLDOVA		
	<i>MC</i>	MONACO		
	<i>MN</i>	MONGOLIA		
	<i>MA</i>	MOROCCO		
	<i>MZ</i>	MOZAMBIQUE		
	<i>MM</i>	MYANMAR		
	<i>NA</i>	NAMIBIA		
	<i>NP</i>	NEPAL		
	<i>NL</i>	NETHERLANDS		
	<i>AN</i>	NETHERLANDS ANTILLES		
	<i>AW</i>	ARUBA		
	<i>NZ</i>	NEW ZEALAND		
	<i>NI</i>	NICARAGUA		
	<i>NE</i>	NIGER		
	<i>NG</i>	NIGERIA		
	<i>NO</i>	NORWAY		
	<i>MP</i>	NORTHERN MARIANA ISLANDS		
	<i>OM</i>	OMAN		
	<i>PK</i>	PAKISTAN		
	<i>PW</i>	PALAU		
	<i>PA</i>	PANAMA		
	<i>PG</i>	PAPUA NEW GUINEA		
	<i>PY</i>	PARAGUAY		
	<i>PE</i>	PERU		
	<i>PH</i>	PHILIPPINES		

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>PL</i>	POLAND		
	<i>PT</i>	PORTUGAL		
	<i>PR</i>	PUERTO RICO		
	<i>QA</i>	QATAR		
	<i>RE</i>	REUNION		
	<i>RO</i>	ROMANIA		
	<i>RU</i>	RUSSIA		
	<i>RW</i>	RWANDA		
	<i>BL</i>	SAINT BARTHELEMY		
	<i>KN</i>	SAINT KITTS AND NEVIS		
	<i>LC</i>	SAINT LUCIA		
	<i>MF</i>	SAINT MARTIN		
	<i>PM</i>	SAINT PIERRE AND MIQUELON		
	<i>VC</i>	SAINT VINCENT AND GRENADIENS		
	<i>SA</i>	SAUDI ARABIA		
	<i>SN</i>	SENEGAL		
	<i>RS</i>	REPUBLIC OF SERBIA		
	<i>ME</i>	MONTENEGRO		
	<i>SL</i>	SIERRA LEONE		
	<i>SG</i>	SINGAPORE		
	<i>SK</i>	SLOVAKIA		
	<i>SI</i>	SLOVENIA		
	<i>SO</i>	SOMALIA		
	<i>ZA</i>	SOUTH AFRICA		
	<i>ES</i>	SPAIN		
	<i>LK</i>	SRI LANKA		
	<i>SR</i>	SURINAME		
	<i>SZ</i>	SWAZILAND		
	<i>SE</i>	SWEDEN		

Parameter	Description	Type	Size	Default

Option	Description
CH	SWITZERLAND
TW	TAIWAN
TZ	TANZANIA
TH	THAILAND
TG	TOGO
TT	TRINIDAD AND TOBAGO
TN	TUNISIA
TR	TURKEY
TM	TURKMENISTAN
AE	UNITED ARAB EMIRATES
TC	TURKS AND CAICOS
UG	UGANDA
UA	UKRAINE
GB	UNITED KINGDOM
US	UNITED STATES2
PS	UNITED STATES (PUBLIC SAFETY)
UY	URUGUAY
UZ	UZBEKISTAN
VU	VANUATU
VE	VENEZUELA
VN	VIET NAM
VI	VIRGIN ISLANDS
WF	WALLIS AND FUTUNA
YE	YEMEN
ZM	ZAMBIA
ZW	ZIMBABWE
JP	JAPAN14
CA	CANADA2

Parameter	Description	Type	Size	Default						
darrp-optimize	Time for running Dynamic Automatic Radio Resource Provisioning (DARRP) optimizations (0 - 86400 sec, default = 86400, 0 = disable).	integer	Minimum value: 0 Maximum value: 86400	86400						
darrp-optimize-schedules <name>	Firewall schedules for DARRP running time. DARRP will run periodically based on darrp-optimize within the schedules. Separate multiple schedule names with a space. Schedule name.	string	Maximum length: 35							
device-holdoff	Lower limit of creation time of device for identification in minutes (0 - 60, default = 5).	integer	Minimum value: 0 Maximum value: 60	5						
device-idle	Upper limit of idle time of device for identification in minutes (0 - 14400, default = 1440).	integer	Minimum value: 0 Maximum value: 14400	1440						
device-weight	Upper limit of confidence of device for identification (0 - 255, default = 1, 0 = disable).	integer	Minimum value: 0 Maximum value: 255	1						
duplicate-ssid	Enable/disable allowing Virtual Access Points (VAPs) to use the same SSID name in the same VDOM.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Allow VAPs to use the same SSID name in the same VDOM.</td></tr><tr><td>disable</td><td>Do not allow VAPs to use the same SSID name in the same VDOM.</td></tr></table>	Option	Description	enable	Allow VAPs to use the same SSID name in the same VDOM.	disable	Do not allow VAPs to use the same SSID name in the same VDOM.			
Option	Description									
enable	Allow VAPs to use the same SSID name in the same VDOM.									
disable	Do not allow VAPs to use the same SSID name in the same VDOM.									
fake-ssid-action	Actions taken for detected fake SSID.	option	-	log						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>log</td><td>Write logs for detected fake SSID.</td></tr><tr><td>suppress</td><td>Suppress detected fake SSID.</td></tr></table>	Option	Description	log	Write logs for detected fake SSID.	suppress	Suppress detected fake SSID.			
Option	Description									
log	Write logs for detected fake SSID.									
suppress	Suppress detected fake SSID.									
fapc-compatibility	Enable/disable FAP-C series compatibility.	option	-	disable						

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>enable</i>	Enable FAP-C series compatibility.		
	<i>disable</i>	Disable FAP-C series compatibility.		
firmware-provision-on-authorization	Enable/disable automatic provisioning of latest firmware on authorization.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable firmware provision on authorization.		
	<i>disable</i>	Disable firmware provision on authorization.		
phishing-ssid-detect	Enable/disable phishing SSID detection.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable phishing SSID detection.		
	<i>disable</i>	Disable phishing SSID detection.		
wfa-compatibility	Enable/disable WFA compatibility.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable Wi-Fi Alliance Certification compatibility.		
	<i>disable</i>	Disable Wi-Fi Alliance Certification compatibility.		

config offending-ssid

Parameter	Description	Type	Size	Default
action	Actions taken for detected offending SSID.	option	-	log
	Option	Description		
	<i>log</i>	Generate logs for detected offending SSID.		
	<i>suppress</i>	Suppress detected offending SSID.		
id	ID.	integer	Minimum value: 0 Maximum value: 65535	0

Parameter	Description	Type	Size	Default
ssid-pattern	Define offending SSID pattern (case insensitive). For example, word, word*, *word, wo*rd.	string	Maximum length: 33	

config wireless-controller snmp

Configure SNMP.

```

config wireless-controller snmp
  Description: Configure SNMP.
  config community
    Description: SNMP Community Configuration.
    edit <id>
      config hosts
        Description: Configure IPv4 SNMP managers (hosts).
        edit <id>
          set ip {user}
        next
      end
      set name {string}
      set query-v1-status [enable|disable]
      set query-v2c-status [enable|disable]
      set status [enable|disable]
      set trap-v1-status [enable|disable]
      set trap-v2c-status [enable|disable]
    next
  end
  set contact-info {string}
  set engine-id {string}
  set trap-high-cpu-threshold {integer}
  set trap-high-mem-threshold {integer}
  config user
    Description: SNMP User Configuration.
    edit <name>
      set auth-proto [md5|sha]
      set auth-pwd {password}
      set notify-hosts {ipv4-address}
      set priv-proto [aes|des|...]
      set priv-pwd {password}
      set queries [enable|disable]
      set security-level [no-auth-no-priv|auth-no-priv|...]
      set status [enable|disable]
      set trap-status [enable|disable]
    next
  end
end

```

config wireless-controller snmp

Parameter	Description	Type	Size	Default
contact-info	Contact Information.	string	Maximum length: 31	
engine-id	AC SNMP engineID string (maximum 24 characters).	string	Maximum length: 23	
trap-high-cpu-threshold	CPU usage when trap is sent.	integer	Minimum value: 10 Maximum value: 100	80
trap-high-mem-threshold	Memory usage when trap is sent.	integer	Minimum value: 10 Maximum value: 100	80

config community

Parameter	Description	Type	Size	Default						
id	Community ID.	integer	Minimum value: 0 0 Maximum value: 4294967295							
name	Community name.	string	Maximum length: 35							
query-v1-status	Enable/disable SNMP v1 queries.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable setting.</td></tr><tr><td>disable</td><td>Disable setting.</td></tr></table>	Option	Description	enable	Enable setting.	disable	Disable setting.			
Option	Description									
enable	Enable setting.									
disable	Disable setting.									
query-v2c-status	Enable/disable SNMP v2c queries.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable setting.</td></tr><tr><td>disable</td><td>Disable setting.</td></tr></table>	Option	Description	enable	Enable setting.	disable	Disable setting.			
Option	Description									
enable	Enable setting.									
disable	Disable setting.									
status	Enable/disable this SNMP community.	option	-	enable						

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		
trap-v1-status	Enable/disable SNMP v1 traps.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		
trap-v2c-status	Enable/disable SNMP v2c traps.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable setting.		
	<i>disable</i>	Disable setting.		

config hosts

Parameter	Description	Type	Size	Default
id	Host entry ID.	integer	Minimum value: 0 Maximum value: 4294967295	0
ip	IPv4 address of the SNMP manager (host).	user	Not Specified	

config user

Parameter	Description	Type	Size	Default
auth-proto	Authentication protocol.	option	-	sha
	Option	Description		
	<i>md5</i>	HMAC-MD5-96 authentication protocol.		
	<i>sha</i>	HMAC-SHA-96 authentication protocol.		
auth-pwd	Password for authentication protocol.	password	Not Specified	
name	SNMP user name.	string	Maximum length: 32	

Parameter	Description	Type	Size	Default
notify-hosts	Configure SNMP User Notify Hosts.	ipv4-address	Not Specified	
priv-proto	Privacy (encryption) protocol.	option	-	aes
	Option	Description		
	aes	CFB128-AES-128 symmetric encryption protocol.		
	des	CBC-DES symmetric encryption protocol.		
	aes256	CFB128-AES-256 symmetric encryption protocol.		
	aes256cisco	CFB128-AES-256 symmetric encryption protocol compatible with CISCO.		
priv-pwd	Password for privacy (encryption) protocol.	password	Not Specified	
queries	Enable/disable SNMP queries for this user.	option	-	enable
	Option	Description		
	enable	Enable setting.		
	disable	Disable setting.		
security-level	Security level for message authentication and encryption.	option	-	no-auth-no-priv
	Option	Description		
	no-auth-no-priv	Message with no authentication and no privacy (encryption).		
	auth-no-priv	Message with authentication but no privacy (encryption).		
	auth-priv	Message with authentication and privacy (encryption).		
status	SNMP user enable.	option	-	enable
	Option	Description		
	enable	Enable setting.		
	disable	Disable setting.		
trap-status	Enable/disable traps for this SNMP user.	option	-	disable
	Option	Description		
	enable	Enable setting.		
	disable	Disable setting.		

config wireless-controller ssid-policy

Configure WiFi SSID policies.

```
config wireless-controller ssid-policy
  Description: Configure WiFi SSID policies.
  edit <name>
    set description {var-string}
    set vlan {string}
  next
end
```

config wireless-controller ssid-policy

Parameter	Description	Type	Size	Default
description	Description.	var-string	Maximum length: 255	
name	Name.	string	Maximum length: 35	
vlan	VLAN interface name.	string	Maximum length: 35	

config wireless-controller syslog-profile

Configure Wireless Termination Points (WTP) system log server profile.

```
config wireless-controller syslog-profile
  Description: Configure Wireless Termination Points (WTP) system log server profile.
  edit <name>
    set comment {var-string}
    set log-level [emergency|alert|...]
    set server-addr-type [fqdn|ip]
    set server-fqdn {string}
    set server-ip {ipv4-address}
    set server-port {integer}
    set server-status [enable|disable]
  next
end
```


config wireless-controller syslog-profile

Parameter	Description	Type	Size	Default
comment	Comment.	var-string	Maximum length: 255	
log-level	Lowest level of log messages that FortiAP units send to this server (default = information).	option	-	information
	Option	Description		
	<i>emergency</i>	Level 0		
	<i>alert</i>	Level 1		
	<i>critical</i>	Level 2		
	<i>error</i>	Level 3		
	<i>warning</i>	Level 4		
	<i>notification</i>	Level 5		
	<i>information</i>	Level 6		
	<i>debugging</i>	Level 7		
name	WTP system log server profile name.	string	Maximum length: 35	
server-addr-type	Syslog server address type (default = ip).	option	-	ip
	Option	Description		
	<i>fqdn</i>	Fully Qualified Domain Name address.		
	<i>ip</i>	IPv4 address.		
server-fqdn	FQDN of syslog server that FortiAP units send log messages to.	string	Maximum length: 63	
server-ip	IP address of syslog server that FortiAP units send log messages to.	ipv4-address	Not Specified	0.0.0.0
server-port	Port number of syslog server that FortiAP units send log messages to (default = 514).	integer	Minimum value: 0 Maximum value: 65535	514
server-status	Enable/disable FortiAP units to send log messages to a syslog server (default = enable).	option	-	enable

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>enable</i>	Enable syslog server.		
	<i>disable</i>	Disable syslog server.		

config wireless-controller timers

Configure CAPWAP timers.

```

config wireless-controller timers
  Description: Configure CAPWAP timers.
  set auth-timeout {integer}
  set ble-scan-report-intv {integer}
  set client-idle-rehome-timeout {integer}
  set client-idle-timeout {integer}
  set discovery-interval {integer}
  set drma-interval {integer}
  set echo-interval {integer}
  set fake-ap-log {integer}
  set ipsec-intf-cleanup {integer}
  set radio-stats-interval {integer}
  set rogue-ap-cleanup {integer}
  set rogue-ap-log {integer}
  set sta-capability-interval {integer}
  set sta-locate-timer {integer}
  set sta-stats-interval {integer}
  set vap-stats-interval {integer}
end

```

config wireless-controller timers

Parameter	Description	Type	Size	Default
auth-timeout	Time after which a client is considered failed in RADIUS authentication and times out (5 - 30 sec, default = 5).	integer	Minimum value: 5 Maximum value: 30	5
ble-scan-report-intv	Time between running Bluetooth Low Energy (BLE) reports (10 - 3600 sec, default = 30).	integer	Minimum value: 10 Maximum value: 3600	30
client-idle-rehome-timeout	Time after which a client is considered idle and disconnected from the home controller (2 - 3600 sec, default = 20, 0 for no timeout).	integer	Minimum value: 2 Maximum value: 3600	20

Parameter	Description	Type	Size	Default
client-idle-timeout	Time after which a client is considered idle and times out (20 - 3600 sec, default = 300, 0 for no timeout).	integer	Minimum value: 20 Maximum value: 3600	300
discovery-interval	Time between discovery requests (2 - 180 sec, default = 5).	integer	Minimum value: 2 Maximum value: 180	5
drma-interval	Dynamic radio mode assignment (DRMA) schedule interval in minutes (10 - 1440, default = 60).	integer	Minimum value: 1 Maximum value: 1440	60
echo-interval	Time between echo requests sent by the managed WTP, AP, or FortiAP (1 - 255 sec, default = 30).	integer	Minimum value: 1 Maximum value: 255	30
fake-ap-log	Time between recording logs about fake APs if periodic fake AP logging is configured (0 - 1440 min, default = 1).	integer	Minimum value: 1 Maximum value: 1440	1
ipsec-intf-cleanup	Time period to keep IPsec VPN interfaces up after WTP sessions are disconnected (30 - 3600 sec, default = 120).	integer	Minimum value: 30 Maximum value: 3600	120
radio-stats-interval	Time between running radio reports (1 - 255 sec, default = 15).	integer	Minimum value: 1 Maximum value: 255	15
rogue-ap-cleanup	Time period in minutes to keep rogue AP after it is gone (default = 0).	integer	Minimum value: 0 Maximum value: 4294967295	0
rogue-ap-log	Time between logging rogue AP messages if periodic rogue AP logging is configured (0 - 1440 min, default = 0).	integer	Minimum value: 0 Maximum value: 1440	0
sta-capability-interval	Time between running station capability reports (1 - 255 sec, default = 30).	integer	Minimum value: 1 Maximum value: 255	30
sta-locate-timer	Time between running client presence flushes to remove clients that are listed but no longer present (0 - 86400 sec, default = 1800).	integer	Minimum value: 0 Maximum value: 86400	1800
sta-stats-interval	Time between running client (station) reports (1 - 255 sec, default = 1).	integer	Minimum value: 1 Maximum value: 255	1
vap-stats-interval	Time between running Virtual Access Point (VAP) reports (1 - 255 sec, default = 15).	integer	Minimum value: 1 Maximum value: 255	15

config wireless-controller vap

Configure Virtual Access Points (VAPs).

```
config wireless-controller vap
  Description: Configure Virtual Access Points (VAPs).
  edit <name>
    set access-control-list {string}
    set additional-akms {option1}, {option2}, ...
    set address-group {string}
    set address-group-policy [disable|allow|...]
    set antivirus-profile {string}
    set application-detection-engine [enable|disable]
    set application-dscp-marking [enable|disable]
    set application-list {string}
    set application-report-intv {integer}
    set atf-weight {integer}
    set auth [psk|radius|...]
    set auth-cert {string}
    set auth-portal-addr {string}
    set beacon-advertising {option1}, {option2}, ...
    set broadcast-ssid [enable|disable]
    set broadcast-suppression {option1}, {option2}, ...
    set bss-color-partial [enable|disable]
    set bstm-disassociation-imminent [enable|disable]
    set bstm-load-balancing-disassoc-timer {integer}
    set bstm-rssi-disassoc-timer {integer}
    set captive-portal-ac-name {string}
    set captive-portal-auth-timeout {integer}
    set captive-portal-fw-accounting [enable|disable]
    set dhcp-address-enforcement [enable|disable]
    set dhcp-lease-time {integer}
    set dhcp-option43-insertion [enable|disable]
    set dhcp-option82-circuit-id-insertion [style-1|style-2|...]
    set dhcp-option82-insertion [enable|disable]
    set dhcp-option82-remote-id-insertion [style-1|disable]
    set dynamic-vlan [enable|disable]
    set eap-reauth [enable|disable]
    set eap-reauth-intv {integer}
    set eapol-key-retries [disable|enable]
    set encrypt [TKIP|AES|...]
    set external-fast-roaming [enable|disable]
    set external-logout {string}
    set external-web {var-string}
    set external-web-format [auto-detect|no-query-string|...]
    set fast-bss-transition [disable|enable]
    set fast-roaming [enable|disable]
    set ft-mobility-domain {integer}
    set ft-over-ds [disable|enable]
    set ft-r0-key-lifetime {integer}
    set gas-comeback-delay {integer}
```

```

set gas-fragmentation-limit {integer}
set gtk-rekey [enable|disable]
set gtk-rekey-intv {integer}
set high-efficiency [enable|disable]
set hotspot20-profile {string}
set igmp-snooping [enable|disable]
set intra-vap-privacy [enable|disable]
set ip {ipv4-classnet-host}
set ips-sensor {string}
set ipv6-rules {option1}, {option2}, ...
set key {password}
set keyindex {integer}
set l3-roaming [enable|disable]
set l3-roaming-mode [direct|indirect]
set ldpc [disable|rx|...]
set local-authentication [enable|disable]
set local-bridging [enable|disable]
set local-lan [allow|deny]
set local-standalone [enable|disable]
set local-standalone-dns [enable|disable]
set local-standalone-dns-ip {ipv4-address}
set local-standalone-nat [enable|disable]
set mac-auth-bypass [enable|disable]
set mac-called-station-delimiter [hyphen|single-hyphen|...]
set mac-calling-station-delimiter [hyphen|single-hyphen|...]
set mac-case [uppercase|lowercase]
set mac-filter [enable|disable]
config mac-filter-list
    Description: Create a list of MAC addresses for MAC address filtering.
    edit <id>
        set mac {mac-address}
        set mac-filter-policy [allow|deny]
    next
end
set mac-filter-policy-other [allow|deny]
set mac-password-delimiter [hyphen|single-hyphen|...]
set mac-username-delimiter [hyphen|single-hyphen|...]
set max-clients {integer}
set max-clients-ap {integer}
set mbo [disable|enable]
set mbo-cell-data-conn-pref [excluded|prefer-not|...]
set me-disable-thresh {integer}
set mesh-backhaul [enable|disable]
set mpsk-profile {string}
set mu-mimo [enable|disable]
set multicast-enhance [enable|disable]
set multicast-rate [0|6000|...]
set nac [enable|disable]
set nac-profile {string}
set neighbor-report-dual-band [disable|enable]
set okc [disable|enable]
set osen [enable|disable]

```

```

set owe-groups {option1}, {option2}, ...
set owe-transition [disable|enable]
set owe-transition-ssid {string}
set passphrase {password}
set pmf [disable|enable|...]
set pmf-assoc-comeback-timeout {integer}
set pmf-sa-query-retry-timeout {integer}
set port-macauth [disable|radius|...]
set port-macauth-reauth-timeout {integer}
set port-macauth-timeout {integer}
set portal-message-override-group {string}
config portal-message-overrides
    Description: Individual message overrides.
    set auth-disclaimer-page {string}
    set auth-login-failed-page {string}
    set auth-login-page {string}
    set auth-reject-page {string}
end
set portal-type [auth|auth+disclaimer|...]
set primary-wag-profile {string}
set probe-resp-suppression [enable|disable]
set probe-resp-threshold {string}
set ptk-rekey [enable|disable]
set ptk-rekey-intv {integer}
set qos-profile {string}
set quarantine [enable|disable]
set radio-2g-threshold {string}
set radio-5g-threshold {string}
set radio-sensitivity [enable|disable]
set radius-mac-auth [enable|disable]
set radius-mac-auth-block-interval {integer}
set radius-mac-auth-server {string}
set radius-mac-auth-usergroups <name1>, <name2>, ...
set radius-mac-mpsk-auth [enable|disable]
set radius-mac-mpsk-timeout {integer}
set radius-server {string}
set rates-11a {option1}, {option2}, ...
set rates-11ac-mcs-map {string}
set rates-11ax-mcs-map {string}
set rates-11bg {option1}, {option2}, ...
set rates-11n-ss12 {option1}, {option2}, ...
set rates-11n-ss34 {option1}, {option2}, ...
set sae-groups {option1}, {option2}, ...
set sae-h2e-only [enable|disable]
set sae-password {password}
set sae-pk [enable|disable]
set sae-private-key {string}
set scan-botnet-connections [disable|monitor|...]
set schedule <name1>, <name2>, ...
set secondary-wag-profile {string}
set security [open|captive-portal|...]
set security-exempt-list {string}

```

```

set security-redirect-url {var-string}
set selected-usergroups <name1>, <name2>, ...
set split-tunneling [enable|disable]
set ssid {string}
set sticky-client-remove [enable|disable]
set sticky-client-threshold-2g {string}
set sticky-client-threshold-5g {string}
set sticky-client-threshold-6g {string}
set target-wake-time [enable|disable]
set tkip-counter-measure [enable|disable]
set tunnel-echo-interval {integer}
set tunnel-fallback-interval {integer}
set usergroup <name1>, <name2>, ...
set utm-log [enable|disable]
set utm-profile {string}
set utm-status [enable|disable]
set vlan-auto [enable|disable]
config vlan-name
    Description: Table for mapping VLAN name to VLAN ID.
    edit <name>
        set vlan-id {integer}
    next
end
config vlan-pool
    Description: VLAN pool.
    edit <id>
        set wtp-group {string}
    next
end
set vlan-pooling [wtp-group|round-robin|...]
set vlanid {integer}
set voice-enterprise [disable|enable]
set webfilter-profile {string}
next
end

```

config wireless-controller vap

Parameter	Description	Type	Size	Default
access-control-list	Profile name for access-control-list.	string	Maximum length: 35	
additional-akms	Additional AKMs.	option	-	
	Option	Description		
	akm6	Use AKM suite employing PSK_SHA256.		

Parameter	Description	Type	Size	Default								
address-group	Firewall Address Group Name.	string	Maximum length: 79									
address-group-policy	Configure MAC address filtering policy for MAC addresses that are in the address-group.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Disable MAC address filtering policy for MAC addresses that are in the address-group</td></tr><tr><td>allow</td><td>Allow clients with MAC addresses that are in the address-group.</td></tr><tr><td>deny</td><td>Block clients with MAC addresses that are in the address-group.</td></tr></table>	Option	Description	disable	Disable MAC address filtering policy for MAC addresses that are in the address-group	allow	Allow clients with MAC addresses that are in the address-group.	deny	Block clients with MAC addresses that are in the address-group.			
Option	Description											
disable	Disable MAC address filtering policy for MAC addresses that are in the address-group											
allow	Allow clients with MAC addresses that are in the address-group.											
deny	Block clients with MAC addresses that are in the address-group.											
antivirus-profile	AntiVirus profile name.	string	Maximum length: 35									
application-detection-engine	Enable/disable application detection engine (default = disable).	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable application detection engine.</td></tr><tr><td>disable</td><td>Disable application detection engine.</td></tr></table>	Option	Description	enable	Enable application detection engine.	disable	Disable application detection engine.					
Option	Description											
enable	Enable application detection engine.											
disable	Disable application detection engine.											
application-dscp-marking	Enable/disable application attribute based DSCP marking (default = disable).	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable application based DSCP marking.</td></tr><tr><td>disable</td><td>Disable application based DSCP marking.</td></tr></table>	Option	Description	enable	Enable application based DSCP marking.	disable	Disable application based DSCP marking.					
Option	Description											
enable	Enable application based DSCP marking.											
disable	Disable application based DSCP marking.											
application-list	Application control list name.	string	Maximum length: 35									
application-report-intv	Application report interval (30 - 864000 sec, default = 120).	integer	Minimum value: 30 Maximum value: 864000	120								
atf-weight	Airtime weight in percentage (default = 20).	integer	Minimum value: 0 Maximum value: 100	20								
auth	Authentication protocol.	option	-	psk								

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>psk</i>	Use a single Pre-shard Key (PSK) to authenticate all users.		
	<i>radius</i>	Use a RADIUS server to authenticate clients.		
	<i>usergroup</i>	Use a firewall usergroup to authenticate clients.		
auth-cert	HTTPS server certificate.	string	Maximum length: 35	
auth-portal-addr	Address of captive portal.	string	Maximum length: 63	
beacon-advertising	Fortinet beacon advertising IE data (default = empty).	option	-	
	Option	Description		
	<i>name</i>	AP name.		
	<i>model</i>	AP model abbreviation.		
	<i>serial-number</i>	AP serial number.		
broadcast-ssid	Enable/disable broadcasting the SSID (default = enable).	option	-	enable
	Option	Description		
	<i>enable</i>	Enable broadcasting the SSID.		
	<i>disable</i>	Disable broadcasting the SSID.		
broadcast-suppression	Optional suppression of broadcast messages. For example, you can keep DHCP messages, ARP broadcasts, and so on off of the wireless network.	option	-	dhcp-up dhcp-ucast arp-known
	Option	Description		
	<i>dhcp-up</i>	Suppress broadcast uplink DHCP messages.		
	<i>dhcp-down</i>	Suppress broadcast downlink DHCP messages.		
	<i>dhcp-starvation</i>	Suppress broadcast DHCP starvation req messages.		
	<i>dhcp-ucast</i>	Convert downlink broadcast DHCP messages to unicast messages.		
	<i>arp-known</i>	Suppress broadcast ARP for known wireless clients.		
	<i>arp-unknown</i>	Suppress broadcast ARP for unknown wireless clients.		

Parameter	Description	Type	Size	Default																		
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>arp-reply</i></td><td>Suppress broadcast ARP reply from wireless clients.</td></tr><tr><td><i>arp-poison</i></td><td>Suppress ARP poison messages from wireless clients.</td></tr><tr><td><i>arp-proxy</i></td><td>Reply ARP requests for wireless clients as a proxy.</td></tr><tr><td><i>netbios-ns</i></td><td>Suppress NetBIOS name services packets with UDP port 137.</td></tr><tr><td><i>netbios-ds</i></td><td>Suppress NetBIOS datagram services packets with UDP port 138.</td></tr><tr><td><i>ipv6</i></td><td>Suppress IPv6 packets.</td></tr><tr><td><i>all-other-mc</i></td><td>Suppress all other multicast messages.</td></tr><tr><td><i>all-other-bc</i></td><td>Suppress all other broadcast messages.</td></tr></table>	Option	Description	<i>arp-reply</i>	Suppress broadcast ARP reply from wireless clients.	<i>arp-poison</i>	Suppress ARP poison messages from wireless clients.	<i>arp-proxy</i>	Reply ARP requests for wireless clients as a proxy.	<i>netbios-ns</i>	Suppress NetBIOS name services packets with UDP port 137.	<i>netbios-ds</i>	Suppress NetBIOS datagram services packets with UDP port 138.	<i>ipv6</i>	Suppress IPv6 packets.	<i>all-other-mc</i>	Suppress all other multicast messages.	<i>all-other-bc</i>	Suppress all other broadcast messages.			
	Option	Description																				
	<i>arp-reply</i>	Suppress broadcast ARP reply from wireless clients.																				
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	<i>arp-proxy</i>	Reply ARP requests for wireless clients as a proxy.																				
	<i>netbios-ns</i>	Suppress NetBIOS name services packets with UDP port 137.																				
	<i>netbios-ds</i>	Suppress NetBIOS datagram services packets with UDP port 138.																				
	<i>ipv6</i>	Suppress IPv6 packets.																				
	<i>all-other-mc</i>	Suppress all other multicast messages.																				
<i>all-other-bc</i>	Suppress all other broadcast messages.																					
bss-color-partial	Enable/disable 802.11ax partial BSS color (default = enable).	option	-	enable																		
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable 802.11ax partial BSS color.</td></tr><tr><td><i>disable</i></td><td>Disable 802.11ax partial BSS color.</td></tr></table>	Option	Description	<i>enable</i>	Enable 802.11ax partial BSS color.	<i>disable</i>	Disable 802.11ax partial BSS color.															
	Option	Description																				
	<i>enable</i>	Enable 802.11ax partial BSS color.																				
<i>disable</i>	Disable 802.11ax partial BSS color.																					
bstm-disassociation-imminent	Enable/disable forcing of disassociation after the BSTM request timer has been reached (default = enable).	option	-	enable																		
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable BSTM disassociation imminent.</td></tr><tr><td><i>disable</i></td><td>Disable BSTM disassociation imminent.</td></tr></table>	Option	Description	<i>enable</i>	Enable BSTM disassociation imminent.	<i>disable</i>	Disable BSTM disassociation imminent.															
	Option	Description																				
	<i>enable</i>	Enable BSTM disassociation imminent.																				
<i>disable</i>	Disable BSTM disassociation imminent.																					
bstm-load-balancing-disassoc-timer	Time interval for client to voluntarily leave AP before forcing a disassociation due to AP load-balancing (0 to 30, default = 10).	integer	Minimum value: 10 Maximum value: 30																			
bstm-rssi-disassoc-timer	Time interval for client to voluntarily leave AP before forcing a disassociation due to low RSSI (0 to 2000, default = 200).	integer	Minimum value: 200 Maximum value: 2000																			
captive-portal-ac-name	Local-bridging captive portal ac-name.	string	Maximum length: 35																			
captive-portal-auth-timeout	Hard timeout - AP will always clear the session after timeout regardless of traffic (0 - 864000 sec, default = 0).	integer	Minimum value: 0 Maximum value: 864000																			

Parameter	Description	Type	Size	Default
captive-portal-fw-accounting	Enable/disable RADIUS accounting for captive portal firewall authentication session.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable RADIUS accounting for captive portal firewall authentication session.		
	<i>disable</i>	Disable RADIUS accounting for captive portal firewall authentication session.		
dhcp-address-enforcement	Enable/disable DHCP address enforcement (default = disable).	option	-	disable
	Option	Description		
	<i>enable</i>	Enable DHCP enforcement, data from clients that have not completed the DHCP process will be blocked.		
	<i>disable</i>	Disable DHCP enforcement, clients can access the network without DHCP process.		
dhcp-lease-time	DHCP lease time in seconds for NAT IP address.	integer	Minimum value: 300 Maximum value: 8640000	2400
dhcp-option43-insertion	Enable/disable insertion of DHCP option 43 (default = enable).	option	-	enable
	Option	Description		
	<i>enable</i>	Enable insertion of DHCP option 43.		
	<i>disable</i>	Disable insertion of DHCP option 43.		
dhcp-option82-circuit-id-insertion	Enable/disable DHCP option 82 circuit-id insert (default = disable).	option	-	disable
	Option	Description		
	<i>style-1</i>	ASCII string composed of AP-MAC;SSID;SSID-TYPE. For example, "xx:xx:xx:xx:xx:xx;wifi;s".		
	<i>style-2</i>	ASCII string composed of AP-MAC. For example, "xx:xx:xx:xx:xx:xx".		

Parameter	Description	Type	Size	Default						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>style-3</td><td>ASCII string composed of NETWORK-TYPE:WTPPROF-NAME:VLAN:SSID:AP-MODEL:AP-HOSTNAME:AP-MAC. For example, "WLAN:FAPS221E-default:100:wifi:PS221E:FortiAP-S221E:xx:xx:xx:xx:xx:xx".</td></tr><tr><td>disable</td><td>Disable DHCP option 82 circuit-id insert.</td></tr></table>	Option	Description	style-3	ASCII string composed of NETWORK-TYPE:WTPPROF-NAME:VLAN:SSID:AP-MODEL:AP-HOSTNAME:AP-MAC. For example, "WLAN:FAPS221E-default:100:wifi:PS221E:FortiAP-S221E:xx:xx:xx:xx:xx:xx".	disable	Disable DHCP option 82 circuit-id insert.			
	Option	Description								
	style-3	ASCII string composed of NETWORK-TYPE:WTPPROF-NAME:VLAN:SSID:AP-MODEL:AP-HOSTNAME:AP-MAC. For example, "WLAN:FAPS221E-default:100:wifi:PS221E:FortiAP-S221E:xx:xx:xx:xx:xx:xx".								
disable	Disable DHCP option 82 circuit-id insert.									
dhcp-option82-insertion	Enable/disable DHCP option 82 insert (default = disable).	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable DHCP option 82 insert.</td></tr><tr><td>disable</td><td>Disable DHCP option 82 insert.</td></tr></table>	Option	Description	enable	Enable DHCP option 82 insert.	disable	Disable DHCP option 82 insert.			
	Option	Description								
	enable	Enable DHCP option 82 insert.								
disable	Disable DHCP option 82 insert.									
dhcp-option82-remote-id-insertion	Enable/disable DHCP option 82 remote-id insert (default = disable).	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>style-1</td><td>ASCII string in the format "xx:xx:xx:xx:xx:xx" containing MAC address of client device.</td></tr><tr><td>disable</td><td>Disable DHCP option 82 remote-id insert.</td></tr></table>	Option	Description	style-1	ASCII string in the format "xx:xx:xx:xx:xx:xx" containing MAC address of client device.	disable	Disable DHCP option 82 remote-id insert.			
	Option	Description								
	style-1	ASCII string in the format "xx:xx:xx:xx:xx:xx" containing MAC address of client device.								
disable	Disable DHCP option 82 remote-id insert.									
dynamic-vlan	Enable/disable dynamic VLAN assignment.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable dynamic VLAN assignment.</td></tr><tr><td>disable</td><td>Disable dynamic VLAN assignment.</td></tr></table>	Option	Description	enable	Enable dynamic VLAN assignment.	disable	Disable dynamic VLAN assignment.			
	Option	Description								
	enable	Enable dynamic VLAN assignment.								
disable	Disable dynamic VLAN assignment.									
eap-reauth	Enable/disable EAP re-authentication for WPA-Enterprise security.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable EAP re-authentication for WPA-Enterprise security.</td></tr><tr><td>disable</td><td>Disable EAP re-authentication for WPA-Enterprise security.</td></tr></table>	Option	Description	enable	Enable EAP re-authentication for WPA-Enterprise security.	disable	Disable EAP re-authentication for WPA-Enterprise security.			
	Option	Description								
	enable	Enable EAP re-authentication for WPA-Enterprise security.								
disable	Disable EAP re-authentication for WPA-Enterprise security.									
eap-reauth-intv	EAP re-authentication interval (1800 - 864000 sec, default = 86400).	integer	Minimum value: 1800 Maximum value: 864000	86400						

Parameter	Description	Type	Size	Default								
eapol-key-retries	Enable/disable retransmission of EAPOL-Key frames (message 3/4 and group message 1/2) (default = enable).	option	-	enable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>disable</i></td><td>Disable retransmission of EAPOL-Key frames (message 3/4 and group message 1/2).</td></tr><tr><td><i>enable</i></td><td>Enable retransmission of EAPOL-Key frames (message 3/4 and group message 1/2).</td></tr></table>	Option	Description	<i>disable</i>	Disable retransmission of EAPOL-Key frames (message 3/4 and group message 1/2).	<i>enable</i>	Enable retransmission of EAPOL-Key frames (message 3/4 and group message 1/2).					
Option	Description											
<i>disable</i>	Disable retransmission of EAPOL-Key frames (message 3/4 and group message 1/2).											
<i>enable</i>	Enable retransmission of EAPOL-Key frames (message 3/4 and group message 1/2).											
encrypt	Encryption protocol to use (only available when security is set to a WPA type).	option	-	AES								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>TKIP</i></td><td>Use TKIP encryption.</td></tr><tr><td><i>AES</i></td><td>Use AES encryption.</td></tr><tr><td><i>TKIP-AES</i></td><td>Use TKIP and AES encryption.</td></tr></table>	Option	Description	<i>TKIP</i>	Use TKIP encryption.	<i>AES</i>	Use AES encryption.	<i>TKIP-AES</i>	Use TKIP and AES encryption.			
Option	Description											
<i>TKIP</i>	Use TKIP encryption.											
<i>AES</i>	Use AES encryption.											
<i>TKIP-AES</i>	Use TKIP and AES encryption.											
external-fast-roaming	Enable/disable fast roaming or pre-authentication with external APs not managed by the FortiGate (default = disable).	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable fast roaming or pre-authentication with external APs.</td></tr><tr><td><i>disable</i></td><td>Disable fast roaming or pre-authentication with external APs.</td></tr></table>	Option	Description	<i>enable</i>	Enable fast roaming or pre-authentication with external APs.	<i>disable</i>	Disable fast roaming or pre-authentication with external APs.					
Option	Description											
<i>enable</i>	Enable fast roaming or pre-authentication with external APs.											
<i>disable</i>	Disable fast roaming or pre-authentication with external APs.											
external-logout	URL of external authentication logout server.	string	Maximum length: 127									
external-web	URL of external authentication web server.	var-string	Maximum length: 1023									
external-web-format	URL query parameter detection (default = auto-detect).	option	-	auto-detect								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>auto-detect</i></td><td>Automatically detect if "external-web" URL has any query parameter.</td></tr><tr><td><i>no-query-string</i></td><td>"external-web" URL does not have any query parameter.</td></tr><tr><td><i>partial-query-string</i></td><td>"external-web" URL has some query parameters.</td></tr></table>	Option	Description	<i>auto-detect</i>	Automatically detect if "external-web" URL has any query parameter.	<i>no-query-string</i>	"external-web" URL does not have any query parameter.	<i>partial-query-string</i>	"external-web" URL has some query parameters.			
Option	Description											
<i>auto-detect</i>	Automatically detect if "external-web" URL has any query parameter.											
<i>no-query-string</i>	"external-web" URL does not have any query parameter.											
<i>partial-query-string</i>	"external-web" URL has some query parameters.											

Parameter	Description	Type	Size	Default						
fast-bss-transition	Enable/disable 802.11r Fast BSS Transition (FT) (default = disable).	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Disable 802.11r Fast BSS Transition (FT).</td></tr><tr><td>enable</td><td>Enable 802.11r Fast BSS Transition (FT).</td></tr></table>	Option	Description	disable	Disable 802.11r Fast BSS Transition (FT).	enable	Enable 802.11r Fast BSS Transition (FT).			
Option	Description									
disable	Disable 802.11r Fast BSS Transition (FT).									
enable	Enable 802.11r Fast BSS Transition (FT).									
fast-roaming	Enable/disable fast-roaming, or pre-authentication, where supported by clients (default = disable).	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable fast-roaming, or pre-authentication.</td></tr><tr><td>disable</td><td>Disable fast-roaming, or pre-authentication.</td></tr></table>	Option	Description	enable	Enable fast-roaming, or pre-authentication.	disable	Disable fast-roaming, or pre-authentication.			
Option	Description									
enable	Enable fast-roaming, or pre-authentication.									
disable	Disable fast-roaming, or pre-authentication.									
ft-mobility-domain	Mobility domain identifier in FT (1 - 65535, default = 1000).	integer	Minimum value: 1 Maximum value: 65535	1000						
ft-over-ds	Enable/disable FT over the Distribution System (DS).	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Disable FT over the Distribution System (DS).</td></tr><tr><td>enable</td><td>Enable FT over the Distribution System (DS).</td></tr></table>	Option	Description	disable	Disable FT over the Distribution System (DS).	enable	Enable FT over the Distribution System (DS).			
Option	Description									
disable	Disable FT over the Distribution System (DS).									
enable	Enable FT over the Distribution System (DS).									
ft-r0-key-lifetime	Lifetime of the PMK-R0 key in FT, 1-65535 minutes.	integer	Minimum value: 1 Maximum value: 65535	480						
gas-comeback-delay	GAS comeback delay (0 or 100 - 10000 milliseconds, default = 500).	integer	Minimum value: 100 Maximum value: 10000	500						
gas-fragmentation-limit	GAS fragmentation limit (512 - 4096, default = 1024).	integer	Minimum value: 512 Maximum value: 4096	1024						
gtk-rekey	Enable/disable GTK rekey for WPA security.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable GTK rekey for WPA security.</td></tr><tr><td>disable</td><td>Disable GTK rekey for WPA security.</td></tr></table>	Option	Description	enable	Enable GTK rekey for WPA security.	disable	Disable GTK rekey for WPA security.			
Option	Description									
enable	Enable GTK rekey for WPA security.									
disable	Disable GTK rekey for WPA security.									

Parameter	Description	Type	Size	Default
gtk-rekey-intv	GTK rekey interval (1800 - 864000 sec, default = 86400).	integer	Minimum value: 1800 Maximum value: 864000	86400
high-efficiency	Enable/disable 802.11ax high efficiency (default = enable).	option	-	enable
	Option	Description		
	enable	Enable 802.11ax high efficiency.		
	disable	Disable 802.11ax high efficiency.		
hotspot20-profile	Hotspot 2.0 profile name.	string	Maximum length: 35	
igmp-snooping	Enable/disable IGMP snooping.	option	-	disable
	Option	Description		
	enable	Enable IGMP snooping.		
	disable	Disable IGMP snooping.		
intra-vap-privacy	Enable/disable blocking communication between clients on the same SSID (called intra-SSID privacy) (default = disable).	option	-	disable
	Option	Description		
	enable	Enable intra-SSID privacy.		
	disable	Disable intra-SSID privacy.		
ip	IP address and subnet mask for the local standalone NAT subnet.	ipv4-classnet-host	Not Specified	0.0.0.0 0.0.0.0
ips-sensor	IPS sensor name.	string	Maximum length: 35	

Parameter	Description	Type	Size	Default																				
ipv6-rules	Optional rules of IPv6 packets. For example, you can keep RA, RS and so on off of the wireless network.	option	-	drop-icmp6ra drop-icmp6rs drop-llmnr6 drop-icmp6mld2 drop-dhcp6s drop-dhcp6c ndp-proxy drop-ns-dad																				
<table><tr><th>Option</th><th>Description</th></tr><tr><td>drop-icmp6ra</td><td>Drop ICMP6 Router Advertisement (RA) packets that originate from wireless clients.</td></tr><tr><td>drop-icmp6rs</td><td>Drop ICMP6 Router Solicitation (RS) packets to be sent to wireless clients.</td></tr><tr><td>drop-llmnr6</td><td>Drop Link-Local Multicast Name Resolution (LLMNR) packets</td></tr><tr><td>drop-icmp6mld2</td><td>Drop ICMP6 Multicast Listener Report V2 (MLD2) packets</td></tr><tr><td>drop-dhcp6s</td><td>Drop DHCP6 server generated packets that originate from wireless clients.</td></tr><tr><td>drop-dhcp6c</td><td>Drop DHCP6 client generated packets to be sent to wireless clients.</td></tr><tr><td>ndp-proxy</td><td>Enable IPv6 ndp proxy - send back na on behalf of the client and drop the ns.</td></tr><tr><td>drop-ns-dad</td><td>Drop ICMP6 NS-DAD when target address is not found in ndp proxy cache.</td></tr><tr><td>drop-ns-nondad</td><td>Drop ICMP6 NS-NonDAD when target address is not found in ndp proxy cache.</td></tr></table>					Option	Description	drop-icmp6ra	Drop ICMP6 Router Advertisement (RA) packets that originate from wireless clients.	drop-icmp6rs	Drop ICMP6 Router Solicitation (RS) packets to be sent to wireless clients.	drop-llmnr6	Drop Link-Local Multicast Name Resolution (LLMNR) packets	drop-icmp6mld2	Drop ICMP6 Multicast Listener Report V2 (MLD2) packets	drop-dhcp6s	Drop DHCP6 server generated packets that originate from wireless clients.	drop-dhcp6c	Drop DHCP6 client generated packets to be sent to wireless clients.	ndp-proxy	Enable IPv6 ndp proxy - send back na on behalf of the client and drop the ns.	drop-ns-dad	Drop ICMP6 NS-DAD when target address is not found in ndp proxy cache.	drop-ns-nondad	Drop ICMP6 NS-NonDAD when target address is not found in ndp proxy cache.
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drop-icmp6ra	Drop ICMP6 Router Advertisement (RA) packets that originate from wireless clients.																							
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drop-llmnr6	Drop Link-Local Multicast Name Resolution (LLMNR) packets																							
drop-icmp6mld2	Drop ICMP6 Multicast Listener Report V2 (MLD2) packets																							
drop-dhcp6s	Drop DHCP6 server generated packets that originate from wireless clients.																							
drop-dhcp6c	Drop DHCP6 client generated packets to be sent to wireless clients.																							
ndp-proxy	Enable IPv6 ndp proxy - send back na on behalf of the client and drop the ns.																							
drop-ns-dad	Drop ICMP6 NS-DAD when target address is not found in ndp proxy cache.																							
drop-ns-nondad	Drop ICMP6 NS-NonDAD when target address is not found in ndp proxy cache.																							
key	WEP Key.	password	Not Specified																					
keyindex	WEP key index (1 - 4).	integer	Minimum value: 1 Maximum value: 4																					
l3-roaming	Enable/disable layer 3 roaming (default = disable).	option	-	disable																				
<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable layer 3 roaming.</td></tr><tr><td>disable</td><td>Disable layer 3 roaming.</td></tr></table>					Option	Description	enable	Enable layer 3 roaming.	disable	Disable layer 3 roaming.														
Option	Description																							
enable	Enable layer 3 roaming.																							
disable	Disable layer 3 roaming.																							

Parameter	Description	Type	Size	Default										
l3-roaming-mode	Select the way that layer 3 roaming traffic is passed (default = direct).	option	-	direct										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>direct</i></td><td>Layer 3 roaming traffic is passed between home AP and guest AP directly.</td></tr><tr><td><i>indirect</i></td><td>Layer 3 roaming traffic is passed between home AP and guest AP through controllers.</td></tr></table>	Option	Description	<i>direct</i>	Layer 3 roaming traffic is passed between home AP and guest AP directly.	<i>indirect</i>	Layer 3 roaming traffic is passed between home AP and guest AP through controllers.							
Option	Description													
<i>direct</i>	Layer 3 roaming traffic is passed between home AP and guest AP directly.													
<i>indirect</i>	Layer 3 roaming traffic is passed between home AP and guest AP through controllers.													
ldpc	VAP low-density parity-check (LDPC) coding configuration.	option	-	rxtx										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>disable</i></td><td>Disable LDPC.</td></tr><tr><td><i>rx</i></td><td>Enable LDPC when receiving traffic.</td></tr><tr><td><i>tx</i></td><td>Enable LDPC when transmitting traffic.</td></tr><tr><td><i>rxtx</i></td><td>Enable LDPC when both receiving and transmitting traffic.</td></tr></table>	Option	Description	<i>disable</i>	Disable LDPC.	<i>rx</i>	Enable LDPC when receiving traffic.	<i>tx</i>	Enable LDPC when transmitting traffic.	<i>rxtx</i>	Enable LDPC when both receiving and transmitting traffic.			
Option	Description													
<i>disable</i>	Disable LDPC.													
<i>rx</i>	Enable LDPC when receiving traffic.													
<i>tx</i>	Enable LDPC when transmitting traffic.													
<i>rxtx</i>	Enable LDPC when both receiving and transmitting traffic.													
local-authentication	Enable/disable AP local authentication.	option	-	disable										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable AP local authentication.</td></tr><tr><td><i>disable</i></td><td>Disable AP local authentication.</td></tr></table>	Option	Description	<i>enable</i>	Enable AP local authentication.	<i>disable</i>	Disable AP local authentication.							
Option	Description													
<i>enable</i>	Enable AP local authentication.													
<i>disable</i>	Disable AP local authentication.													
local-bridging	Enable/disable bridging of wireless and Ethernet interfaces on the FortiAP (default = disable).	option	-	disable										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable AP local VAP to Ethernet bridging.</td></tr><tr><td><i>disable</i></td><td>Disable AP local VAP to Ethernet bridging.</td></tr></table>	Option	Description	<i>enable</i>	Enable AP local VAP to Ethernet bridging.	<i>disable</i>	Disable AP local VAP to Ethernet bridging.							
Option	Description													
<i>enable</i>	Enable AP local VAP to Ethernet bridging.													
<i>disable</i>	Disable AP local VAP to Ethernet bridging.													
local-lan	Allow/deny traffic destined for a Class A, B, or C private IP address (default = allow).	option	-	allow										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>allow</i></td><td>Allow traffic destined for a Class A, B, or C private IP address.</td></tr><tr><td><i>deny</i></td><td>Deny traffic destined for a Class A, B, or C private IP address.</td></tr></table>	Option	Description	<i>allow</i>	Allow traffic destined for a Class A, B, or C private IP address.	<i>deny</i>	Deny traffic destined for a Class A, B, or C private IP address.							
Option	Description													
<i>allow</i>	Allow traffic destined for a Class A, B, or C private IP address.													
<i>deny</i>	Deny traffic destined for a Class A, B, or C private IP address.													

Parameter	Description	Type	Size	Default										
local-standalone	Enable/disable AP local standalone (default = disable).	option	-	disable										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable AP local standalone.</td></tr><tr><td><i>disable</i></td><td>Disable AP local standalone.</td></tr></table>	Option	Description	<i>enable</i>	Enable AP local standalone.	<i>disable</i>	Disable AP local standalone.							
Option	Description													
<i>enable</i>	Enable AP local standalone.													
<i>disable</i>	Disable AP local standalone.													
local-standalone-dns	Enable/disable AP local standalone DNS.	option	-	disable										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable AP local standalone DNS.</td></tr><tr><td><i>disable</i></td><td>Disable AP local standalone DNS.</td></tr></table>	Option	Description	<i>enable</i>	Enable AP local standalone DNS.	<i>disable</i>	Disable AP local standalone DNS.							
Option	Description													
<i>enable</i>	Enable AP local standalone DNS.													
<i>disable</i>	Disable AP local standalone DNS.													
local-standalone-dns-ip	IPv4 addresses for the local standalone DNS.	ipv4-address	Not Specified											
local-standalone-nat	Enable/disable AP local standalone NAT mode.	option	-	disable										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable AP local standalone NAT mode.</td></tr><tr><td><i>disable</i></td><td>Disable AP local standalone NAT mode.</td></tr></table>	Option	Description	<i>enable</i>	Enable AP local standalone NAT mode.	<i>disable</i>	Disable AP local standalone NAT mode.							
Option	Description													
<i>enable</i>	Enable AP local standalone NAT mode.													
<i>disable</i>	Disable AP local standalone NAT mode.													
mac-auth-bypass	Enable/disable MAC authentication bypass.	option	-	disable										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable MAC authentication bypass.</td></tr><tr><td><i>disable</i></td><td>Disable MAC authentication bypass.</td></tr></table>	Option	Description	<i>enable</i>	Enable MAC authentication bypass.	<i>disable</i>	Disable MAC authentication bypass.							
Option	Description													
<i>enable</i>	Enable MAC authentication bypass.													
<i>disable</i>	Disable MAC authentication bypass.													
mac-called-station-delimiter	MAC called station delimiter (default = hyphen).	option	-	hyphen										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>hyphen</i></td><td>Use hyphen as delimiter for called station.</td></tr><tr><td><i>single-hyphen</i></td><td>Use single hyphen as delimiter for called station.</td></tr><tr><td><i>colon</i></td><td>Use colon as delimiter for called station.</td></tr><tr><td><i>none</i></td><td>No delimiter for called station.</td></tr></table>	Option	Description	<i>hyphen</i>	Use hyphen as delimiter for called station.	<i>single-hyphen</i>	Use single hyphen as delimiter for called station.	<i>colon</i>	Use colon as delimiter for called station.	<i>none</i>	No delimiter for called station.			
Option	Description													
<i>hyphen</i>	Use hyphen as delimiter for called station.													
<i>single-hyphen</i>	Use single hyphen as delimiter for called station.													
<i>colon</i>	Use colon as delimiter for called station.													
<i>none</i>	No delimiter for called station.													

Parameter	Description	Type	Size	Default										
mac-calling-station-delimiter	MAC calling station delimiter (default = hyphen).	option	-	hyphen										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>hyphen</td><td>Use hyphen as delimiter for calling station.</td></tr><tr><td>single-hyphen</td><td>Use single hyphen as delimiter for calling station.</td></tr><tr><td>colon</td><td>Use colon as delimiter for calling station.</td></tr><tr><td>none</td><td>No delimiter for calling station.</td></tr></table>	Option	Description	hyphen	Use hyphen as delimiter for calling station.	single-hyphen	Use single hyphen as delimiter for calling station.	colon	Use colon as delimiter for calling station.	none	No delimiter for calling station.			
Option	Description													
hyphen	Use hyphen as delimiter for calling station.													
single-hyphen	Use single hyphen as delimiter for calling station.													
colon	Use colon as delimiter for calling station.													
none	No delimiter for calling station.													
mac-case	MAC case (default = uppercase).	option	-	uppercase										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>uppercase</td><td>Use uppercase MAC.</td></tr><tr><td>lowercase</td><td>Use lowercase MAC.</td></tr></table>	Option	Description	uppercase	Use uppercase MAC.	lowercase	Use lowercase MAC.							
Option	Description													
uppercase	Use uppercase MAC.													
lowercase	Use lowercase MAC.													
mac-filter	Enable/disable MAC filtering to block wireless clients by mac address.	option	-	disable										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable MAC filtering.</td></tr><tr><td>disable</td><td>Disable MAC filtering.</td></tr></table>	Option	Description	enable	Enable MAC filtering.	disable	Disable MAC filtering.							
Option	Description													
enable	Enable MAC filtering.													
disable	Disable MAC filtering.													
mac-filter-policy-other	Allow or block clients with MAC addresses that are not in the filter list.	option	-	allow										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>allow</td><td>Allow clients with MAC addresses that are not in the filter list.</td></tr><tr><td>deny</td><td>Block clients with MAC addresses that are not in the filter list.</td></tr></table>	Option	Description	allow	Allow clients with MAC addresses that are not in the filter list.	deny	Block clients with MAC addresses that are not in the filter list.							
Option	Description													
allow	Allow clients with MAC addresses that are not in the filter list.													
deny	Block clients with MAC addresses that are not in the filter list.													
mac-password-delimiter	MAC authentication password delimiter (default = hyphen).	option	-	hyphen										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>hyphen</td><td>Use hyphen as delimiter for MAC auth password.</td></tr><tr><td>single-hyphen</td><td>Use single hyphen as delimiter for MAC auth password.</td></tr><tr><td>colon</td><td>Use colon as delimiter for MAC auth password.</td></tr><tr><td>none</td><td>No delimiter for MAC auth password.</td></tr></table>	Option	Description	hyphen	Use hyphen as delimiter for MAC auth password.	single-hyphen	Use single hyphen as delimiter for MAC auth password.	colon	Use colon as delimiter for MAC auth password.	none	No delimiter for MAC auth password.			
Option	Description													
hyphen	Use hyphen as delimiter for MAC auth password.													
single-hyphen	Use single hyphen as delimiter for MAC auth password.													
colon	Use colon as delimiter for MAC auth password.													
none	No delimiter for MAC auth password.													
mac-username-delimiter	MAC authentication username delimiter (default = hyphen).	option	-	hyphen										

Parameter	Description	Type	Size	Default										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>hyphen</td><td>Use hyphen as delimiter for MAC auth username.</td></tr><tr><td>single-hyphen</td><td>Use single hyphen as delimiter for MAC auth username.</td></tr><tr><td>colon</td><td>Use colon as delimiter for MAC auth username.</td></tr><tr><td>none</td><td>No delimiter for MAC auth username.</td></tr></table>	Option	Description	hyphen	Use hyphen as delimiter for MAC auth username.	single-hyphen	Use single hyphen as delimiter for MAC auth username.	colon	Use colon as delimiter for MAC auth username.	none	No delimiter for MAC auth username.			
	Option	Description												
	hyphen	Use hyphen as delimiter for MAC auth username.												
	single-hyphen	Use single hyphen as delimiter for MAC auth username.												
	colon	Use colon as delimiter for MAC auth username.												
none	No delimiter for MAC auth username.													
max-clients	Maximum number of clients that can connect simultaneously to the VAP (default = 0, meaning no limitation).	integer	Minimum value: 0 Maximum value: 4294967295	0										
max-clients-ap	Maximum number of clients that can connect simultaneously to the VAP per AP radio (default = 0, meaning no limitation).	integer	Minimum value: 0 Maximum value: 4294967295	0										
mbo	Enable/disable Multiband Operation (default = disable).	option	-	disable										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Disable Multiband Operation (MBO).</td></tr><tr><td>enable</td><td>Enable Multiband Operation (MBO).</td></tr></table>	Option	Description	disable	Disable Multiband Operation (MBO).	enable	Enable Multiband Operation (MBO).							
	Option	Description												
	disable	Disable Multiband Operation (MBO).												
enable	Enable Multiband Operation (MBO).													
mbo-cell-data-conn-pref	MBO cell data connection preference (0, 1, or 255, default = 1).	option	-	prefer-not										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>excluded</td><td>Wi-Fi Agile Multiband AP does not want the Wi-Fi Agile Multiband STA to use the cellular data connection.</td></tr><tr><td>prefer-not</td><td>Wi-Fi Agile Multiband AP prefers the Wi-Fi Agile Multiband STA should not use cellular data connection.</td></tr><tr><td>prefer-use</td><td>Wi-Fi Agile Multiband AP prefers the Wi-Fi Agile Multiband STA should use cellular data connection.</td></tr></table>	Option	Description	excluded	Wi-Fi Agile Multiband AP does not want the Wi-Fi Agile Multiband STA to use the cellular data connection.	prefer-not	Wi-Fi Agile Multiband AP prefers the Wi-Fi Agile Multiband STA should not use cellular data connection.	prefer-use	Wi-Fi Agile Multiband AP prefers the Wi-Fi Agile Multiband STA should use cellular data connection.					
	Option	Description												
	excluded	Wi-Fi Agile Multiband AP does not want the Wi-Fi Agile Multiband STA to use the cellular data connection.												
	prefer-not	Wi-Fi Agile Multiband AP prefers the Wi-Fi Agile Multiband STA should not use cellular data connection.												
prefer-use	Wi-Fi Agile Multiband AP prefers the Wi-Fi Agile Multiband STA should use cellular data connection.													
me-disable-thresh	Disable multicast enhancement when this many clients are receiving multicast traffic.	integer	Minimum value: 32 Maximum value: 256	32										
mesh-backhaul	Enable/disable using this VAP as a WiFi mesh backhaul (default = disable). This entry is only available when security is set to a WPA type or open.	option	-	disable										

Parameter	Description	Type	Size	Default
	Option Description			
	<i>enable</i>	Enable mesh backhaul.		
	<i>disable</i>	Disable mesh backhaul.		
mpsk-profile	MPSK profile name.	string	Maximum length: 35	
mu-mimo	Enable/disable Multi-user MIMO (default = enable).	option	-	enable
	Option Description			
	<i>enable</i>	Enable Multi-user MIMO.		
	<i>disable</i>	Disable Multi-user MIMO.		
multicast-enhance	Enable/disable converting multicast to unicast to improve performance (default = disable).	option	-	disable
	Option Description			
	<i>enable</i>	Enable multicast enhancement.		
	<i>disable</i>	Disable multicast enhancement.		
multicast-rate	Multicast rate (0, 6000, 12000, or 24000 kbps, default = 0).	option	-	0
	Option Description			
	<i>0</i>	Use the default multicast rate.		
	<i>6000</i>	6 Mbps.		
	<i>12000</i>	12 Mbps.		
	<i>24000</i>	24 Mbps.		
nac	Enable/disable network access control.	option	-	disable
	Option Description			
	<i>enable</i>	Enable network access control.		
	<i>disable</i>	Disable network access control.		
nac-profile	NAC profile name.	string	Maximum length: 35	

Parameter	Description	Type	Size	Default								
name	Virtual AP name.	string	Maximum length: 15									
neighbor-report-dual-band	Enable/disable dual-band neighbor report (default = disable).	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Disable dual-band neighbor report.</td></tr><tr><td>enable</td><td>Enable dual-band neighbor report.</td></tr></table>	Option	Description	disable	Disable dual-band neighbor report.	enable	Enable dual-band neighbor report.					
Option	Description											
disable	Disable dual-band neighbor report.											
enable	Enable dual-band neighbor report.											
okc	Enable/disable Opportunistic Key Caching (OKC) (default = enable).	option	-	enable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Disable Opportunistic Key Caching (OKC).</td></tr><tr><td>enable</td><td>Enable Opportunistic Key Caching (OKC).</td></tr></table>	Option	Description	disable	Disable Opportunistic Key Caching (OKC).	enable	Enable Opportunistic Key Caching (OKC).					
Option	Description											
disable	Disable Opportunistic Key Caching (OKC).											
enable	Enable Opportunistic Key Caching (OKC).											
osen	Enable/disable OSEN as part of key management (default = disable).	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable OSEN auth.</td></tr><tr><td>disable</td><td>Disable OSEN auth.</td></tr></table>	Option	Description	enable	Enable OSEN auth.	disable	Disable OSEN auth.					
Option	Description											
enable	Enable OSEN auth.											
disable	Disable OSEN auth.											
owe-groups	OWE-Groups.	option	-									
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>19</td><td>DH Group 19.</td></tr><tr><td>20</td><td>DH Group 20.</td></tr><tr><td>21</td><td>DH Group 21.</td></tr></table>	Option	Description	19	DH Group 19.	20	DH Group 20.	21	DH Group 21.			
Option	Description											
19	DH Group 19.											
20	DH Group 20.											
21	DH Group 21.											
owe-transition	Enable/disable OWE transition mode support.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Disable OWE transition mode support.</td></tr><tr><td>enable</td><td>Enable OWE transition mode support.</td></tr></table>	Option	Description	disable	Disable OWE transition mode support.	enable	Enable OWE transition mode support.					
Option	Description											
disable	Disable OWE transition mode support.											
enable	Enable OWE transition mode support.											
owe-transition-ssid	OWE transition mode peer SSID.	string	Maximum length: 32									

Parameter	Description	Type	Size	Default								
passphrase	WPA pre-shared key (PSK) to be used to authenticate WiFi users.	password	Not Specified									
pmf	Protected Management Frames (PMF) support (default = disable).	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Disable PMF completely.</td></tr><tr><td>enable</td><td>Enable PMF but deny clients without PMF.</td></tr><tr><td>optional</td><td>Enable PMF and allow clients without PMF.</td></tr></table>				Option	Description	disable	Disable PMF completely.	enable	Enable PMF but deny clients without PMF.	optional	Enable PMF and allow clients without PMF.
	Option	Description										
	disable	Disable PMF completely.										
	enable	Enable PMF but deny clients without PMF.										
optional	Enable PMF and allow clients without PMF.											
pmf-assoc-comeback-timeout	Protected Management Frames (PMF) comeback maximum timeout (1-20 sec).	integer	Minimum value: 1 1 Maximum value: 20									
pmf-sa-query-retry-timeout	Protected Management Frames (PMF) SA query retry timeout interval (1 - 5 100s of msec).	integer	Minimum value: 2 1 Maximum value: 5									
port-macauth	Enable/disable LAN port MAC authentication (default = disable).	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Disable LAN port MAC authentication.</td></tr><tr><td>radius</td><td>Enable LAN port RADIUS-based MAC authentication.</td></tr><tr><td>address-group</td><td>Enable LAN port address-group based MAC authentication.</td></tr></table>				Option	Description	disable	Disable LAN port MAC authentication.	radius	Enable LAN port RADIUS-based MAC authentication.	address-group	Enable LAN port address-group based MAC authentication.
	Option	Description										
	disable	Disable LAN port MAC authentication.										
	radius	Enable LAN port RADIUS-based MAC authentication.										
address-group	Enable LAN port address-group based MAC authentication.											
port-macauth-reauth-timeout	LAN port MAC authentication re-authentication timeout value (default = 7200 sec).	integer	Minimum value: 120 Maximum value: 65535	7200								
port-macauth-timeout	LAN port MAC authentication idle timeout value (default = 600 sec).	integer	Minimum value: 60 Maximum value: 65535	600								
portal-message-override-group	Replacement message group for this VAP (only available when security is set to a captive portal type).	string	Maximum length: 35									
portal-type	Captive portal functionality. Configure how the captive portal authenticates users and whether it includes a disclaimer.	option	-	auth								

Parameter	Description	Type	Size	Default																				
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>auth</i></td><td>Portal for authentication.</td></tr><tr><td><i>auth+disclaimer</i></td><td>Portal for authentication and disclaimer.</td></tr><tr><td><i>disclaimer</i></td><td>Portal for disclaimer.</td></tr><tr><td><i>email-collect</i></td><td>Portal for email collection.</td></tr><tr><td><i>cmcc</i></td><td>Portal for CMCC.</td></tr><tr><td><i>cmcc-macauth</i></td><td>Portal for CMCC and MAC authentication.</td></tr><tr><td><i>auth-mac</i></td><td>Portal for authentication and MAC authentication.</td></tr><tr><td><i>external-auth</i></td><td>Portal for external portal authentication.</td></tr><tr><td><i>external-macauth</i></td><td>Portal for external portal MAC authentication.</td></tr></table>	Option	Description	<i>auth</i>	Portal for authentication.	<i>auth+disclaimer</i>	Portal for authentication and disclaimer.	<i>disclaimer</i>	Portal for disclaimer.	<i>email-collect</i>	Portal for email collection.	<i>cmcc</i>	Portal for CMCC.	<i>cmcc-macauth</i>	Portal for CMCC and MAC authentication.	<i>auth-mac</i>	Portal for authentication and MAC authentication.	<i>external-auth</i>	Portal for external portal authentication.	<i>external-macauth</i>	Portal for external portal MAC authentication.			
	Option	Description																						
	<i>auth</i>	Portal for authentication.																						
	<i>auth+disclaimer</i>	Portal for authentication and disclaimer.																						
	<i>disclaimer</i>	Portal for disclaimer.																						
	<i>email-collect</i>	Portal for email collection.																						
	<i>cmcc</i>	Portal for CMCC.																						
	<i>cmcc-macauth</i>	Portal for CMCC and MAC authentication.																						
	<i>auth-mac</i>	Portal for authentication and MAC authentication.																						
	<i>external-auth</i>	Portal for external portal authentication.																						
<i>external-macauth</i>	Portal for external portal MAC authentication.																							
primary-wag-profile	Primary wireless access gateway profile name.	string	Maximum length: 35																					
probe-resp-suppression	Enable/disable probe response suppression (to ignore weak signals) (default = disable).	option	-	disable																				
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable probe response suppression.</td></tr><tr><td><i>disable</i></td><td>Disable probe response suppression.</td></tr></table>	Option	Description	<i>enable</i>	Enable probe response suppression.	<i>disable</i>	Disable probe response suppression.																	
	Option	Description																						
	<i>enable</i>	Enable probe response suppression.																						
<i>disable</i>	Disable probe response suppression.																							
probe-resp-threshold	Minimum signal level/threshold in dBm required for the AP response to probe requests (-95 to -20, default = -80).	string	Maximum length: 7	-80																				
ptk-rekey	Enable/disable PTK rekey for WPA-Enterprise security.	option	-	disable																				
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable PTK rekey for WPA-Enterprise security.</td></tr><tr><td><i>disable</i></td><td>Disable PTK rekey for WPA-Enterprise security.</td></tr></table>	Option	Description	<i>enable</i>	Enable PTK rekey for WPA-Enterprise security.	<i>disable</i>	Disable PTK rekey for WPA-Enterprise security.																	
	Option	Description																						
	<i>enable</i>	Enable PTK rekey for WPA-Enterprise security.																						
<i>disable</i>	Disable PTK rekey for WPA-Enterprise security.																							
ptk-rekey-intv	PTK rekey interval (1800 - 864000 sec, default = 86400).	integer	Minimum value: 1800 Maximum value: 864000	86400																				
qos-profile	Quality of service profile name.	string	Maximum length: 35																					

Parameter	Description	Type	Size	Default						
quarantine	Enable/disable station quarantine (default = enable).	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable station quarantine.</td></tr><tr><td><i>disable</i></td><td>Disable station quarantine.</td></tr></table>	Option	Description	<i>enable</i>	Enable station quarantine.	<i>disable</i>	Disable station quarantine.			
Option	Description									
<i>enable</i>	Enable station quarantine.									
<i>disable</i>	Disable station quarantine.									
radio-2g-threshold	Minimum signal level/threshold in dBm required for the AP response to receive a packet in 2.4G band (-95 to -20, default = -79).	string	Maximum length: 7	-79						
radio-5g-threshold	Minimum signal level/threshold in dBm required for the AP response to receive a packet in 5G band(-95 to -20, default = -76).	string	Maximum length: 7	-76						
radio-sensitivity	Enable/disable software radio sensitivity (to ignore weak signals) (default = disable).	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable software radio sensitivity.</td></tr><tr><td><i>disable</i></td><td>Disable software radio sensitivity.</td></tr></table>	Option	Description	<i>enable</i>	Enable software radio sensitivity.	<i>disable</i>	Disable software radio sensitivity.			
Option	Description									
<i>enable</i>	Enable software radio sensitivity.									
<i>disable</i>	Disable software radio sensitivity.									
radius-mac-auth	Enable/disable RADIUS-based MAC authentication of clients (default = disable).	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable RADIUS-based MAC authentication.</td></tr><tr><td><i>disable</i></td><td>Disable RADIUS-based MAC authentication.</td></tr></table>	Option	Description	<i>enable</i>	Enable RADIUS-based MAC authentication.	<i>disable</i>	Disable RADIUS-based MAC authentication.			
Option	Description									
<i>enable</i>	Enable RADIUS-based MAC authentication.									
<i>disable</i>	Disable RADIUS-based MAC authentication.									
radius-mac-auth-block-interval	Don't send RADIUS MAC auth request again if the client has been rejected within specific interval (0 or 30 - 864000 seconds, default = 0, 0 to disable blocking).	integer	Minimum value: 0 30 Maximum value: 864000							
radius-mac-auth-server	RADIUS-based MAC authentication server.	string	Maximum length: 35							
radius-mac-auth-usergroups <name>	Selective user groups that are permitted for RADIUS mac authentication. User group name.	string	Maximum length: 79							

Parameter	Description	Type	Size	Default																																						
radius-mac-mpsk-auth	Enable/disable RADIUS-based MAC authentication of clients for MPSK authentication (default = disable).	option	-	disable																																						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable RADIUS-based MAC authentication for MPSK authentication.</td></tr><tr><td><i>disable</i></td><td>Disable RADIUS-based MAC authentication for MPSK authentication.</td></tr></table>	Option	Description	<i>enable</i>	Enable RADIUS-based MAC authentication for MPSK authentication.	<i>disable</i>	Disable RADIUS-based MAC authentication for MPSK authentication.																																			
Option	Description																																									
<i>enable</i>	Enable RADIUS-based MAC authentication for MPSK authentication.																																									
<i>disable</i>	Disable RADIUS-based MAC authentication for MPSK authentication.																																									
radius-mac-mpsk-timeout	RADIUS MAC MPSK cache timeout interval (0 or 300 - 864000, default = 86400, 0 to disable caching).	integer	Minimum value: 300 Maximum value: 864000	86400																																						
radius-server	RADIUS server to be used to authenticate WiFi users.	string	Maximum length: 35																																							
rates-11a	Allowed data rates for 802.11a.	option	-																																							
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>1</i></td><td>1 Mbps supported rate.</td></tr><tr><td><i>1-basic</i></td><td>1 Mbps BSS basic rate.</td></tr><tr><td><i>2</i></td><td>2 Mbps supported rate.</td></tr><tr><td><i>2-basic</i></td><td>2 Mbps BSS basic rate.</td></tr><tr><td><i>5.5</i></td><td>5.5 Mbps supported rate.</td></tr><tr><td><i>5.5-basic</i></td><td>5.5 Mbps BSS basic rate.</td></tr><tr><td><i>11</i></td><td>11 Mbps supported rate.</td></tr><tr><td><i>11-basic</i></td><td>11 Mbps BSS basic rate.</td></tr><tr><td><i>6</i></td><td>6 Mbps supported rate.</td></tr><tr><td><i>6-basic</i></td><td>6 Mbps BSS basic rate.</td></tr><tr><td><i>9</i></td><td>9 Mbps supported rate.</td></tr><tr><td><i>9-basic</i></td><td>9 Mbps BSS basic rate.</td></tr><tr><td><i>12</i></td><td>12 Mbps supported rate.</td></tr><tr><td><i>12-basic</i></td><td>12 Mbps BSS basic rate.</td></tr><tr><td><i>18</i></td><td>18 Mbps supported rate.</td></tr><tr><td><i>18-basic</i></td><td>18 Mbps BSS basic rate.</td></tr><tr><td><i>24</i></td><td>24 Mbps supported rate.</td></tr><tr><td><i>24-basic</i></td><td>24 Mbps BSS basic rate.</td></tr></table>	Option	Description	<i>1</i>	1 Mbps supported rate.	<i>1-basic</i>	1 Mbps BSS basic rate.	<i>2</i>	2 Mbps supported rate.	<i>2-basic</i>	2 Mbps BSS basic rate.	<i>5.5</i>	5.5 Mbps supported rate.	<i>5.5-basic</i>	5.5 Mbps BSS basic rate.	<i>11</i>	11 Mbps supported rate.	<i>11-basic</i>	11 Mbps BSS basic rate.	<i>6</i>	6 Mbps supported rate.	<i>6-basic</i>	6 Mbps BSS basic rate.	<i>9</i>	9 Mbps supported rate.	<i>9-basic</i>	9 Mbps BSS basic rate.	<i>12</i>	12 Mbps supported rate.	<i>12-basic</i>	12 Mbps BSS basic rate.	<i>18</i>	18 Mbps supported rate.	<i>18-basic</i>	18 Mbps BSS basic rate.	<i>24</i>	24 Mbps supported rate.	<i>24-basic</i>	24 Mbps BSS basic rate.			
Option	Description																																									
<i>1</i>	1 Mbps supported rate.																																									
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<i>5.5</i>	5.5 Mbps supported rate.																																									
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Parameter	Description	Type	Size	Default																																				
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>36</td><td>36 Mbps supported rate.</td></tr><tr><td>36-basic</td><td>36 Mbps BSS basic rate.</td></tr><tr><td>48</td><td>48 Mbps supported rate.</td></tr><tr><td>48-basic</td><td>48 Mbps BSS basic rate.</td></tr><tr><td>54</td><td>54 Mbps supported rate.</td></tr><tr><td>54-basic</td><td>54 Mbps BSS basic rate.</td></tr></table>	Option	Description	36	36 Mbps supported rate.	36-basic	36 Mbps BSS basic rate.	48	48 Mbps supported rate.	48-basic	48 Mbps BSS basic rate.	54	54 Mbps supported rate.	54-basic	54 Mbps BSS basic rate.																									
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	36-basic	36 Mbps BSS basic rate.																																						
	48	48 Mbps supported rate.																																						
	48-basic	48 Mbps BSS basic rate.																																						
	54	54 Mbps supported rate.																																						
54-basic	54 Mbps BSS basic rate.																																							
rates-11ac-mcs-map	Comma separated list of max supported VHT MCS for spatial streams 1 through 8.	string	Maximum length: 63																																					
rates-11ax-mcs-map	Comma separated list of max supported HE MCS for spatial streams 1 through 8.	string	Maximum length: 63																																					
rates-11bg	Allowed data rates for 802.11b/g.	option	-																																					
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>1</td><td>1 Mbps supported rate.</td></tr><tr><td>1-basic</td><td>1 Mbps BSS basic rate.</td></tr><tr><td>2</td><td>2 Mbps supported rate.</td></tr><tr><td>2-basic</td><td>2 Mbps BSS basic rate.</td></tr><tr><td>5.5</td><td>5.5 Mbps supported rate.</td></tr><tr><td>5.5-basic</td><td>5.5 Mbps BSS basic rate.</td></tr><tr><td>11</td><td>11 Mbps supported rate.</td></tr><tr><td>11-basic</td><td>11 Mbps BSS basic rate.</td></tr><tr><td>6</td><td>6 Mbps supported rate.</td></tr><tr><td>6-basic</td><td>6 Mbps BSS basic rate.</td></tr><tr><td>9</td><td>9 Mbps supported rate.</td></tr><tr><td>9-basic</td><td>9 Mbps BSS basic rate.</td></tr><tr><td>12</td><td>12 Mbps supported rate.</td></tr><tr><td>12-basic</td><td>12 Mbps BSS basic rate.</td></tr><tr><td>18</td><td>18 Mbps supported rate.</td></tr><tr><td>18-basic</td><td>18 Mbps BSS basic rate.</td></tr><tr><td>24</td><td>24 Mbps supported rate.</td></tr></table>	Option	Description	1	1 Mbps supported rate.	1-basic	1 Mbps BSS basic rate.	2	2 Mbps supported rate.	2-basic	2 Mbps BSS basic rate.	5.5	5.5 Mbps supported rate.	5.5-basic	5.5 Mbps BSS basic rate.	11	11 Mbps supported rate.	11-basic	11 Mbps BSS basic rate.	6	6 Mbps supported rate.	6-basic	6 Mbps BSS basic rate.	9	9 Mbps supported rate.	9-basic	9 Mbps BSS basic rate.	12	12 Mbps supported rate.	12-basic	12 Mbps BSS basic rate.	18	18 Mbps supported rate.	18-basic	18 Mbps BSS basic rate.	24	24 Mbps supported rate.			
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Parameter	Description	Type	Size	Default																																		
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>24-basic</td><td>24 Mbps BSS basic rate.</td></tr><tr><td>36</td><td>36 Mbps supported rate.</td></tr><tr><td>36-basic</td><td>36 Mbps BSS basic rate.</td></tr><tr><td>48</td><td>48 Mbps supported rate.</td></tr><tr><td>48-basic</td><td>48 Mbps BSS basic rate.</td></tr><tr><td>54</td><td>54 Mbps supported rate.</td></tr><tr><td>54-basic</td><td>54 Mbps BSS basic rate.</td></tr></table>	Option	Description	24-basic	24 Mbps BSS basic rate.	36	36 Mbps supported rate.	36-basic	36 Mbps BSS basic rate.	48	48 Mbps supported rate.	48-basic	48 Mbps BSS basic rate.	54	54 Mbps supported rate.	54-basic	54 Mbps BSS basic rate.																					
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	48-basic	48 Mbps BSS basic rate.																																				
	54	54 Mbps supported rate.																																				
54-basic	54 Mbps BSS basic rate.																																					
rates-11n-ss12	Allowed data rates for 802.11n with 1 or 2 spatial streams.	option	-																																			
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>mcs0/1</td><td>Data rate for MCS index 0 with 1 spatial stream.</td></tr><tr><td>mcs1/1</td><td>Data rate for MCS index 1 with 1 spatial stream.</td></tr><tr><td>mcs2/1</td><td>Data rate for MCS index 2 with 1 spatial stream.</td></tr><tr><td>mcs3/1</td><td>Data rate for MCS index 3 with 1 spatial stream.</td></tr><tr><td>mcs4/1</td><td>Data rate for MCS index 4 with 1 spatial stream.</td></tr><tr><td>mcs5/1</td><td>Data rate for MCS index 5 with 1 spatial stream.</td></tr><tr><td>mcs6/1</td><td>Data rate for MCS index 6 with 1 spatial stream.</td></tr><tr><td>mcs7/1</td><td>Data rate for MCS index 7 with 1 spatial stream.</td></tr><tr><td>mcs8/2</td><td>Data rate for MCS index 8 with 2 spatial streams.</td></tr><tr><td>mcs9/2</td><td>Data rate for MCS index 9 with 2 spatial streams.</td></tr><tr><td>mcs10/2</td><td>Data rate for MCS index 10 with 2 spatial streams.</td></tr><tr><td>mcs11/2</td><td>Data rate for MCS index 11 with 2 spatial streams.</td></tr><tr><td>mcs12/2</td><td>Data rate for MCS index 12 with 2 spatial streams.</td></tr><tr><td>mcs13/2</td><td>Data rate for MCS index 13 with 2 spatial streams.</td></tr><tr><td>mcs14/2</td><td>Data rate for MCS index 14 with 2 spatial streams.</td></tr><tr><td>mcs15/2</td><td>Data rate for MCS index 15 with 2 spatial streams.</td></tr></table>	Option	Description	mcs0/1	Data rate for MCS index 0 with 1 spatial stream.	mcs1/1	Data rate for MCS index 1 with 1 spatial stream.	mcs2/1	Data rate for MCS index 2 with 1 spatial stream.	mcs3/1	Data rate for MCS index 3 with 1 spatial stream.	mcs4/1	Data rate for MCS index 4 with 1 spatial stream.	mcs5/1	Data rate for MCS index 5 with 1 spatial stream.	mcs6/1	Data rate for MCS index 6 with 1 spatial stream.	mcs7/1	Data rate for MCS index 7 with 1 spatial stream.	mcs8/2	Data rate for MCS index 8 with 2 spatial streams.	mcs9/2	Data rate for MCS index 9 with 2 spatial streams.	mcs10/2	Data rate for MCS index 10 with 2 spatial streams.	mcs11/2	Data rate for MCS index 11 with 2 spatial streams.	mcs12/2	Data rate for MCS index 12 with 2 spatial streams.	mcs13/2	Data rate for MCS index 13 with 2 spatial streams.	mcs14/2	Data rate for MCS index 14 with 2 spatial streams.	mcs15/2	Data rate for MCS index 15 with 2 spatial streams.			
	Option	Description																																				
	mcs0/1	Data rate for MCS index 0 with 1 spatial stream.																																				
	mcs1/1	Data rate for MCS index 1 with 1 spatial stream.																																				
	mcs2/1	Data rate for MCS index 2 with 1 spatial stream.																																				
	mcs3/1	Data rate for MCS index 3 with 1 spatial stream.																																				
	mcs4/1	Data rate for MCS index 4 with 1 spatial stream.																																				
	mcs5/1	Data rate for MCS index 5 with 1 spatial stream.																																				
	mcs6/1	Data rate for MCS index 6 with 1 spatial stream.																																				
	mcs7/1	Data rate for MCS index 7 with 1 spatial stream.																																				
	mcs8/2	Data rate for MCS index 8 with 2 spatial streams.																																				
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	mcs13/2	Data rate for MCS index 13 with 2 spatial streams.																																				
mcs14/2	Data rate for MCS index 14 with 2 spatial streams.																																					
mcs15/2	Data rate for MCS index 15 with 2 spatial streams.																																					
rates-11n-ss34	Allowed data rates for 802.11n with 3 or 4 spatial streams.	option	-																																			

Parameter	Description	Type	Size	Default																																		
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>mcs16/3</i></td><td>Data rate for MCS index 16 with 3 spatial streams.</td></tr><tr><td><i>mcs17/3</i></td><td>Data rate for MCS index 17 with 3 spatial streams.</td></tr><tr><td><i>mcs18/3</i></td><td>Data rate for MCS index 18 with 3 spatial streams.</td></tr><tr><td><i>mcs19/3</i></td><td>Data rate for MCS index 19 with 3 spatial streams.</td></tr><tr><td><i>mcs20/3</i></td><td>Data rate for MCS index 20 with 3 spatial streams.</td></tr><tr><td><i>mcs21/3</i></td><td>Data rate for MCS index 21 with 3 spatial streams.</td></tr><tr><td><i>mcs22/3</i></td><td>Data rate for MCS index 22 with 3 spatial streams.</td></tr><tr><td><i>mcs23/3</i></td><td>Data rate for MCS index 23 with 3 spatial streams.</td></tr><tr><td><i>mcs24/4</i></td><td>Data rate for MCS index 24 with 4 spatial streams.</td></tr><tr><td><i>mcs25/4</i></td><td>Data rate for MCS index 25 with 4 spatial streams.</td></tr><tr><td><i>mcs26/4</i></td><td>Data rate for MCS index 26 with 4 spatial streams.</td></tr><tr><td><i>mcs27/4</i></td><td>Data rate for MCS index 27 with 4 spatial streams.</td></tr><tr><td><i>mcs28/4</i></td><td>Data rate for MCS index 28 with 4 spatial streams.</td></tr><tr><td><i>mcs29/4</i></td><td>Data rate for MCS index 29 with 4 spatial streams.</td></tr><tr><td><i>mcs30/4</i></td><td>Data rate for MCS index 30 with 4 spatial streams.</td></tr><tr><td><i>mcs31/4</i></td><td>Data rate for MCS index 31 with 4 spatial streams.</td></tr></table>	Option	Description	<i>mcs16/3</i>	Data rate for MCS index 16 with 3 spatial streams.	<i>mcs17/3</i>	Data rate for MCS index 17 with 3 spatial streams.	<i>mcs18/3</i>	Data rate for MCS index 18 with 3 spatial streams.	<i>mcs19/3</i>	Data rate for MCS index 19 with 3 spatial streams.	<i>mcs20/3</i>	Data rate for MCS index 20 with 3 spatial streams.	<i>mcs21/3</i>	Data rate for MCS index 21 with 3 spatial streams.	<i>mcs22/3</i>	Data rate for MCS index 22 with 3 spatial streams.	<i>mcs23/3</i>	Data rate for MCS index 23 with 3 spatial streams.	<i>mcs24/4</i>	Data rate for MCS index 24 with 4 spatial streams.	<i>mcs25/4</i>	Data rate for MCS index 25 with 4 spatial streams.	<i>mcs26/4</i>	Data rate for MCS index 26 with 4 spatial streams.	<i>mcs27/4</i>	Data rate for MCS index 27 with 4 spatial streams.	<i>mcs28/4</i>	Data rate for MCS index 28 with 4 spatial streams.	<i>mcs29/4</i>	Data rate for MCS index 29 with 4 spatial streams.	<i>mcs30/4</i>	Data rate for MCS index 30 with 4 spatial streams.	<i>mcs31/4</i>	Data rate for MCS index 31 with 4 spatial streams.			
	Option	Description																																				
	<i>mcs16/3</i>	Data rate for MCS index 16 with 3 spatial streams.																																				
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	<i>mcs18/3</i>	Data rate for MCS index 18 with 3 spatial streams.																																				
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	<i>mcs28/4</i>	Data rate for MCS index 28 with 4 spatial streams.																																				
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<i>mcs31/4</i>	Data rate for MCS index 31 with 4 spatial streams.																																					
sae-groups	SAE-Groups.	option	-																																			
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>19</td><td>DH Group 19.</td></tr><tr><td>20</td><td>DH Group 20.</td></tr><tr><td>21</td><td>DH Group 21.</td></tr></table>	Option	Description	19	DH Group 19.	20	DH Group 20.	21	DH Group 21.																													
	Option	Description																																				
	19	DH Group 19.																																				
	20	DH Group 20.																																				
21	DH Group 21.																																					
sae-h2e-only	Use hash-to-element-only mechanism for PWE derivation (default = disable).	option	-	disable																																		
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable WAP3 SAE-H2E-only.</td></tr><tr><td><i>disable</i></td><td>Disable WPA3 SAE-H2E-only.</td></tr></table>	Option	Description	<i>enable</i>	Enable WAP3 SAE-H2E-only.	<i>disable</i>	Disable WPA3 SAE-H2E-only.																															
	Option	Description																																				
	<i>enable</i>	Enable WAP3 SAE-H2E-only.																																				
<i>disable</i>	Disable WPA3 SAE-H2E-only.																																					
sae-password	WPA3 SAE password to be used to authenticate WiFi users.	password	Not Specified																																			

Parameter	Description	Type	Size	Default																
sae-pk	Enable/disable WPA3 SAE-PK (default = disable).	option	-	disable																
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable WAP3 SAE-PK.</td></tr><tr><td><i>disable</i></td><td>Disable WPA3 SAE-PK.</td></tr></table>	Option	Description	<i>enable</i>	Enable WAP3 SAE-PK.	<i>disable</i>	Disable WPA3 SAE-PK.													
Option	Description																			
<i>enable</i>	Enable WAP3 SAE-PK.																			
<i>disable</i>	Disable WPA3 SAE-PK.																			
sae-private-key	Private key used for WPA3 SAE-PK authentication.	string	Maximum length: 359																	
scan-botnet-connections	Block or monitor connections to Botnet servers or disable Botnet scanning.	option	-	monitor																
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>disable</i></td><td>Do not scan connections to botnet servers.</td></tr><tr><td><i>monitor</i></td><td>Log connections to botnet servers.</td></tr><tr><td><i>block</i></td><td>Block connections to botnet servers.</td></tr></table>	Option	Description	<i>disable</i>	Do not scan connections to botnet servers.	<i>monitor</i>	Log connections to botnet servers.	<i>block</i>	Block connections to botnet servers.											
Option	Description																			
<i>disable</i>	Do not scan connections to botnet servers.																			
<i>monitor</i>	Log connections to botnet servers.																			
<i>block</i>	Block connections to botnet servers.																			
schedule <name>	Firewall schedules for enabling this VAP on the FortiAP. This VAP will be enabled when at least one of the schedules is valid. Separate multiple schedule names with a space. Schedule name.	string	Maximum length: 35																	
secondary-wag-profile	Secondary wireless access gateway profile name.	string	Maximum length: 35																	
security	Security mode for the wireless interface (default = wpa2-only-personal).	option	-	wpa2-only-personal																
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>open</i></td><td>Open.</td></tr><tr><td><i>captive-portal</i></td><td>Captive portal.</td></tr><tr><td><i>wep64</i></td><td>WEP 64-bit.</td></tr><tr><td><i>wep128</i></td><td>WEP 128-bit.</td></tr><tr><td><i>wpa-personal</i></td><td>WPA/WPA2 personal.</td></tr><tr><td><i>wpa-personal+captive-portal</i></td><td>WPA/WPA2 personal with captive portal.</td></tr><tr><td><i>wpa-enterprise</i></td><td>WPA/WPA2 enterprise.</td></tr></table>	Option	Description	<i>open</i>	Open.	<i>captive-portal</i>	Captive portal.	<i>wep64</i>	WEP 64-bit.	<i>wep128</i>	WEP 128-bit.	<i>wpa-personal</i>	WPA/WPA2 personal.	<i>wpa-personal+captive-portal</i>	WPA/WPA2 personal with captive portal.	<i>wpa-enterprise</i>	WPA/WPA2 enterprise.			
Option	Description																			
<i>open</i>	Open.																			
<i>captive-portal</i>	Captive portal.																			
<i>wep64</i>	WEP 64-bit.																			
<i>wep128</i>	WEP 128-bit.																			
<i>wpa-personal</i>	WPA/WPA2 personal.																			
<i>wpa-personal+captive-portal</i>	WPA/WPA2 personal with captive portal.																			
<i>wpa-enterprise</i>	WPA/WPA2 enterprise.																			

Parameter	Description	Type	Size	Default																												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>wpa-only-personal</i></td><td>WPA personal.</td></tr><tr><td><i>wpa-only-personal+captive-portal</i></td><td>WPA personal with captive portal.</td></tr><tr><td><i>wpa-only-enterprise</i></td><td>WPA enterprise.</td></tr><tr><td><i>wpa2-only-personal</i></td><td>WPA2 personal.</td></tr><tr><td><i>wpa2-only-personal+captive-portal</i></td><td>WPA2 personal with captive portal.</td></tr><tr><td><i>wpa2-only-enterprise</i></td><td>WPA2 enterprise.</td></tr><tr><td><i>wpa3-enterprise</i></td><td>WPA3 enterprise with 192-bit encryption and PMF mandatory.</td></tr><tr><td><i>wpa3-only-enterprise</i></td><td>WPA3 enterprise with PMF mandatory.</td></tr><tr><td><i>wpa3-enterprise-transition</i></td><td>WPA3 enterprise with PMF optional.</td></tr><tr><td><i>wpa3-sae</i></td><td>WPA3 SAE.</td></tr><tr><td><i>wpa3-sae-transition</i></td><td>WPA3 SAE transition.</td></tr><tr><td><i>owe</i></td><td>Opportunistic wireless encryption.</td></tr><tr><td><i>osen</i></td><td>OSEN.</td></tr></table>	Option	Description	<i>wpa-only-personal</i>	WPA personal.	<i>wpa-only-personal+captive-portal</i>	WPA personal with captive portal.	<i>wpa-only-enterprise</i>	WPA enterprise.	<i>wpa2-only-personal</i>	WPA2 personal.	<i>wpa2-only-personal+captive-portal</i>	WPA2 personal with captive portal.	<i>wpa2-only-enterprise</i>	WPA2 enterprise.	<i>wpa3-enterprise</i>	WPA3 enterprise with 192-bit encryption and PMF mandatory.	<i>wpa3-only-enterprise</i>	WPA3 enterprise with PMF mandatory.	<i>wpa3-enterprise-transition</i>	WPA3 enterprise with PMF optional.	<i>wpa3-sae</i>	WPA3 SAE.	<i>wpa3-sae-transition</i>	WPA3 SAE transition.	<i>owe</i>	Opportunistic wireless encryption.	<i>osen</i>	OSEN.			
	Option	Description																														
	<i>wpa-only-personal</i>	WPA personal.																														
	<i>wpa-only-personal+captive-portal</i>	WPA personal with captive portal.																														
	<i>wpa-only-enterprise</i>	WPA enterprise.																														
	<i>wpa2-only-personal</i>	WPA2 personal.																														
	<i>wpa2-only-personal+captive-portal</i>	WPA2 personal with captive portal.																														
	<i>wpa2-only-enterprise</i>	WPA2 enterprise.																														
	<i>wpa3-enterprise</i>	WPA3 enterprise with 192-bit encryption and PMF mandatory.																														
	<i>wpa3-only-enterprise</i>	WPA3 enterprise with PMF mandatory.																														
	<i>wpa3-enterprise-transition</i>	WPA3 enterprise with PMF optional.																														
	<i>wpa3-sae</i>	WPA3 SAE.																														
	<i>wpa3-sae-transition</i>	WPA3 SAE transition.																														
	<i>owe</i>	Opportunistic wireless encryption.																														
<i>osen</i>	OSEN.																															
security-exempt-list	Optional security exempt list for captive portal authentication.	string	Maximum length: 35																													
security-redirect-url	Optional URL for redirecting users after they pass captive portal authentication.	var-string	Maximum length: 1023																													
selected-usergroups<name>	Selective user groups that are permitted to authenticate. User group name.	string	Maximum length: 79																													
split-tunneling	Enable/disable split tunneling (default = disable).	option	-	disable																												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable split tunneling.</td></tr><tr><td><i>disable</i></td><td>Disable split tunneling.</td></tr></table>	Option	Description	<i>enable</i>	Enable split tunneling.	<i>disable</i>	Disable split tunneling.																									
	Option	Description																														
	<i>enable</i>	Enable split tunneling.																														
<i>disable</i>	Disable split tunneling.																															

Parameter	Description	Type	Size	Default						
ssid	IEEE 802.11 service set identifier (SSID) for the wireless interface. Users who wish to use the wireless network must configure their computers to access this SSID name.	string	Maximum length: 32	fortinet						
sticky-client-remove	Enable/disable sticky client remove to maintain good signal level clients in SSID (default = disable).	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable sticky client remove.</td></tr><tr><td>disable</td><td>Disable sticky client remove.</td></tr></table>	Option	Description	enable	Enable sticky client remove.	disable	Disable sticky client remove.			
Option	Description									
enable	Enable sticky client remove.									
disable	Disable sticky client remove.									
sticky-client-threshold-2g	Minimum signal level/threshold in dBm required for the 2G client to be serviced by the AP (-95 to -20, default = -79).	string	Maximum length: 7	-79						
sticky-client-threshold-5g	Minimum signal level/threshold in dBm required for the 5G client to be serviced by the AP (-95 to -20, default = -76).	string	Maximum length: 7	-76						
sticky-client-threshold-6g	Minimum signal level/threshold in dBm required for the 6G client to be serviced by the AP (-95 to -20, default = -76).	string	Maximum length: 7	-76						
target-wake-time	Enable/disable 802.11ax target wake time (default = enable).	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable 802.11ax target wake time.</td></tr><tr><td>disable</td><td>Disable 802.11ax target wake time.</td></tr></table>	Option	Description	enable	Enable 802.11ax target wake time.	disable	Disable 802.11ax target wake time.			
Option	Description									
enable	Enable 802.11ax target wake time.									
disable	Disable 802.11ax target wake time.									
tkip-counter-measure	Enable/disable TKIP counter measure.	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable TKIP counter measure.</td></tr><tr><td>disable</td><td>Disable TKIP counter measure.</td></tr></table>	Option	Description	enable	Enable TKIP counter measure.	disable	Disable TKIP counter measure.			
Option	Description									
enable	Enable TKIP counter measure.									
disable	Disable TKIP counter measure.									
tunnel-echo-interval	The time interval to send echo to both primary and secondary tunnel peers (1 - 65535 sec, default = 300).	integer	Minimum value: 300 1 Maximum value: 65535							

Parameter	Description	Type	Size	Default										
tunnel-fallback-interval	The time interval for secondary tunnel to fall back to primary tunnel (0 - 65535 sec, default = 7200).	integer	Minimum value: 0 Maximum value: 65535	7200										
usergroup <name>	Firewall user group to be used to authenticate WiFi users. User group name.	string	Maximum length: 79											
utm-log	Enable/disable UTM logging.	option	-	enable										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable UTM logging.</td></tr><tr><td>disable</td><td>Disable UTM logging.</td></tr></table>	Option	Description	enable	Enable UTM logging.	disable	Disable UTM logging.							
Option	Description													
enable	Enable UTM logging.													
disable	Disable UTM logging.													
utm-profile	UTM profile name.	string	Maximum length: 35											
utm-status	Enable to add one or more security profiles (AV, IPS, etc.) to the VAP.	option	-	disable										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable setting.</td></tr><tr><td>disable</td><td>Disable setting.</td></tr></table>	Option	Description	enable	Enable setting.	disable	Disable setting.							
Option	Description													
enable	Enable setting.													
disable	Disable setting.													
vlan-auto	Enable/disable automatic management of SSID VLAN interface.	option	-	disable										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable automatic management of SSID VLAN interface.</td></tr><tr><td>disable</td><td>Disable automatic management of SSID VLAN interface.</td></tr></table>	Option	Description	enable	Enable automatic management of SSID VLAN interface.	disable	Disable automatic management of SSID VLAN interface.							
Option	Description													
enable	Enable automatic management of SSID VLAN interface.													
disable	Disable automatic management of SSID VLAN interface.													
vlan-pooling	Enable/disable VLAN pooling, to allow grouping of multiple wireless controller VLANs into VLAN pools (default = disable). When set to wtp-group, VLAN pooling occurs with VLAN assignment by wtp-group.	option	-	disable										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>wtp-group</td><td>Enable VLAN pooling with VLAN assignment by wtp-group.</td></tr><tr><td>round-robin</td><td>Enable VLAN pooling with round-robin VLAN assignment.</td></tr><tr><td>hash</td><td>Enable VLAN pooling with hash-based VLAN assignment.</td></tr><tr><td>disable</td><td>Disable VLAN pooling.</td></tr></table>	Option	Description	wtp-group	Enable VLAN pooling with VLAN assignment by wtp-group.	round-robin	Enable VLAN pooling with round-robin VLAN assignment.	hash	Enable VLAN pooling with hash-based VLAN assignment.	disable	Disable VLAN pooling.			
Option	Description													
wtp-group	Enable VLAN pooling with VLAN assignment by wtp-group.													
round-robin	Enable VLAN pooling with round-robin VLAN assignment.													
hash	Enable VLAN pooling with hash-based VLAN assignment.													
disable	Disable VLAN pooling.													

Parameter	Description	Type	Size	Default
vlanid	Optional VLAN ID.	integer	Minimum value: 0 0 Maximum value: 4094	0
voice-enterprise	Enable/disable 802.11k and 802.11v assisted Voice-Enterprise roaming (default = disable).	option	-	enable
	Option	Description		
	disable	Disable 802.11k and 802.11v assisted Voice-Enterprise roaming.		
	enable	Enable 802.11k and 802.11v assisted Voice-Enterprise roaming.		
webfilter-profile	WebFilter profile name.	string	Maximum length: 35	

config mac-filter-list

Parameter	Description	Type	Size	Default						
id	ID.	integer	Minimum value: 0 Maximum value: 4294967295	0						
mac	MAC address.	mac-address	Not Specified	00:00:00:00:00:00						
mac-filter-policy	Deny or allow the client with this MAC address.	option	-	deny						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>allow</i></td><td>Allow the client with this MAC address.</td></tr><tr><td><i>deny</i></td><td>Block the client with this MAC address.</td></tr></table>	Option	Description	<i>allow</i>	Allow the client with this MAC address.	<i>deny</i>	Block the client with this MAC address.			
Option	Description									
<i>allow</i>	Allow the client with this MAC address.									
<i>deny</i>	Block the client with this MAC address.									

config portal-message-overrides

Parameter	Description	Type	Size	Default
auth-disclaimer-page	Override auth-disclaimer-page message with message from portal-message-overrides group.	string	Maximum length: 35	
auth-login-failed-page	Override auth-login-failed-page message with message from portal-message-overrides group.	string	Maximum length: 35	

Parameter	Description	Type	Size	Default
auth-login-page	Override auth-login-page message with message from portal-message-overrides group.	string	Maximum length: 35	
auth-reject-page	Override auth-reject-page message with message from portal-message-overrides group.	string	Maximum length: 35	

config vlan-name

Parameter	Description	Type	Size	Default
name	VLAN name.	string	Maximum length: 35	
vlan-id	VLAN ID.	integer	Minimum value: 0 Maximum value: 4094	0

config vlan-pool

Parameter	Description	Type	Size	Default
id	ID.	integer	Minimum value: 0 Maximum value: 4094	0
wtp-group	WTP group name.	string	Maximum length: 35	

config wireless-controller vap-group

Configure virtual Access Point (VAP) groups.

```

config wireless-controller vap-group
  Description: Configure virtual Access Point (VAP) groups.
  edit <name>
    set comment {var-string}
    set vaps <name1>, <name2>, ...
  next
end

```

config wireless-controller vap-group

Parameter	Description	Type	Size	Default
comment	Comment.	var-string	Maximum length: 255	
name	Group Name.	string	Maximum length: 35	
vaps <name>	List of SSIDs to be included in the VAP group. VAP name.	string	Maximum length: 35	

config wireless-controller wag-profile

Configure wireless access gateway (WAG) profiles used for tunnels on AP.

```
config wireless-controller wag-profile
  Description: Configure wireless access gateway (WAG) profiles used for tunnels on AP.
  edit <name>
    set comment {var-string}
    set dhcp-ip-addr {ipv4-address}
    set ping-interval {integer}
    set ping-number {integer}
    set return-packet-timeout {integer}
    set tunnel-type [l2tpv3|gre]
    set wag-ip {ipv4-address}
    set wag-port {integer}
  next
end
```

config wireless-controller wag-profile

Parameter	Description	Type	Size	Default
comment	Comment.	var-string	Maximum length: 255	
dhcp-ip-addr	IP address of the monitoring DHCP request packet sent through the tunnel.	ipv4-address	Not Specified	0.0.0.0
name	Tunnel profile name.	string	Maximum length: 35	

Parameter	Description	Type	Size	Default						
ping-interval	Interval between two tunnel monitoring echo packets (1 - 65535 sec, default = 1).	integer	Minimum value: 1 Maximum value: 65535	1						
ping-number	Number of the tunnel monitoring echo packets (1 - 65535, default = 5).	integer	Minimum value: 1 Maximum value: 65535	5						
return-packet-timeout	Window of time for the return packets from the tunnel's remote end (1 - 65535 sec, default = 160).	integer	Minimum value: 1 Maximum value: 65535	160						
tunnel-type	Tunnel type.	option	-	l2tpv3						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>l2tpv3</i></td><td>L2TPV3 Ethernet Pseudowire.</td></tr><tr><td><i>gre</i></td><td>GRE Ethernet tunnel.</td></tr></table>				Option	Description	<i>l2tpv3</i>	L2TPV3 Ethernet Pseudowire.	<i>gre</i>	GRE Ethernet tunnel.
Option	Description									
<i>l2tpv3</i>	L2TPV3 Ethernet Pseudowire.									
<i>gre</i>	GRE Ethernet tunnel.									
wag-ip	IP Address of the wireless access gateway.	ipv4-address	Not Specified	0.0.0.0						
wag-port	UDP port of the wireless access gateway.	integer	Minimum value: 0 Maximum value: 65535	1701						

config wireless-controller wids-profile

Configure wireless intrusion detection system (WIDS) profiles.

```

config wireless-controller wids-profile
  Description: Configure wireless intrusion detection system (WIDS) profiles.
  edit <name>
    set ap-auto-suppress [enable|disable]
    set ap-bgscan-disable-schedules <name1>, <name2>, ...
    set ap-bgscan-duration {integer}
    set ap-bgscan-idle {integer}
    set ap-bgscan-intv {integer}
    set ap-bgscan-period {integer}
    set ap-bgscan-report-intv {integer}
  
```

```

set ap-fgscan-report-intv {integer}
set ap-scan [disable|enable]
set ap-scan-passive [enable|disable]
set ap-scan-threshold {string}
set asleep-attack [enable|disable]
set assoc-flood-thresh {integer}
set assoc-flood-time {integer}
set assoc-frame-flood [enable|disable]
set auth-flood-thresh {integer}
set auth-flood-time {integer}
set auth-frame-flood [enable|disable]
set comment {string}
set deauth-broadcast [enable|disable]
set deauth-unknown-src-thresh {integer}
set eapol-fail-flood [enable|disable]
set eapol-fail-intv {integer}
set eapol-fail-thresh {integer}
set eapol-logoff-flood [enable|disable]
set eapol-logoff-intv {integer}
set eapol-logoff-thresh {integer}
set eapol-pre-fail-flood [enable|disable]
set eapol-pre-fail-intv {integer}
set eapol-pre-fail-thresh {integer}
set eapol-pre-succ-flood [enable|disable]
set eapol-pre-succ-intv {integer}
set eapol-pre-succ-thresh {integer}
set eapol-start-flood [enable|disable]
set eapol-start-intv {integer}
set eapol-start-thresh {integer}
set eapol-succ-flood [enable|disable]
set eapol-succ-intv {integer}
set eapol-succ-thresh {integer}
set invalid-mac-oui [enable|disable]
set long-duration-attack [enable|disable]
set long-duration-thresh {integer}
set null-ssid-probe-resp [enable|disable]
set sensor-mode [disable|foreign|...]
set spoofed-deauth [enable|disable]
set weak-wep-iv [enable|disable]
set wireless-bridge [enable|disable]

next
end

```

config wireless-controller wids-profile

Parameter	Description	Type	Size	Default
ap-auto-suppress	Enable/disable on-wire rogue AP auto-suppression (default = disable).	option	-	disable

Parameter	Description	Type	Size	Default						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable on-wire rogue AP auto-suppression.</td></tr><tr><td><i>disable</i></td><td>Disable on-wire rogue AP auto-suppression.</td></tr></table>	Option	Description	<i>enable</i>	Enable on-wire rogue AP auto-suppression.	<i>disable</i>	Disable on-wire rogue AP auto-suppression.			
	Option	Description								
	<i>enable</i>	Enable on-wire rogue AP auto-suppression.								
<i>disable</i>	Disable on-wire rogue AP auto-suppression.									
ap-bgscan-disable-schedules <name>	Firewall schedules for turning off FortiAP radio background scan. Background scan will be disabled when at least one of the schedules is valid. Separate multiple schedule names with a space. Schedule name.	string	Maximum length: 35							
ap-bgscan-duration	Listen time on scanning a channel (10 - 1000 msec, default = 30).	integer	Minimum value: 10 Maximum value: 1000	30						
ap-bgscan-idle	Wait time for channel inactivity before scanning this channel (0 - 1000 msec, default = 20).	integer	Minimum value: 0 Maximum value: 1000	20						
ap-bgscan-intv	Period between successive channel scans (1 - 600 sec, default = 3).	integer	Minimum value: 1 Maximum value: 600	3						
ap-bgscan-period	Period between background scans (10 - 3600 sec, default = 600).	integer	Minimum value: 10 Maximum value: 3600	600						
ap-bgscan-report-intv	Period between background scan reports (15 - 600 sec, default = 30).	integer	Minimum value: 15 Maximum value: 600	30						
ap-fgscan-report-intv	Period between foreground scan reports (15 - 600 sec, default = 15).	integer	Minimum value: 15 Maximum value: 600	15						
ap-scan	Enable/disable rogue AP detection.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>disable</i></td><td>Disable rogue AP detection.</td></tr><tr><td><i>enable</i></td><td>Enable rogue AP detection.</td></tr></table>	Option	Description	<i>disable</i>	Disable rogue AP detection.	<i>enable</i>	Enable rogue AP detection.			
	Option	Description								
	<i>disable</i>	Disable rogue AP detection.								
<i>enable</i>	Enable rogue AP detection.									

Parameter	Description	Type	Size	Default
ap-scan-passive	Enable/disable passive scanning. Enable means do not send probe request on any channels (default = disable).	option	-	disable
	Option	Description		
	enable	Passive scanning on all channels.		
	disable	Passive scanning only on DFS channels.		
ap-scan-threshold	Minimum signal level/threshold in dBm required for the AP to report detected rogue AP (-95 to -20, default = -90).	string	Maximum length: 7	-90
asleep-attack	Enable/disable asleep attack detection (default = disable).	option	-	disable
	Option	Description		
	enable	Enable asleep attack detection.		
	disable	Disable asleep attack detection.		
assoc-flood-thresh	The threshold value for association frame flooding.	integer	Minimum value: 1 Maximum value: 100	30
assoc-flood-time	Number of seconds after which a station is considered not connected.	integer	Minimum value: 5 Maximum value: 120	10
assoc-frame-flood	Enable/disable association frame flooding detection (default = disable).	option	-	disable
	Option	Description		
	enable	Enable association frame flooding detection.		
	disable	Disable association frame flooding detection.		
auth-flood-thresh	The threshold value for authentication frame flooding.	integer	Minimum value: 1 Maximum value: 100	30
auth-flood-time	Number of seconds after which a station is considered not connected.	integer	Minimum value: 5 Maximum value: 120	10

Parameter	Description	Type	Size	Default
auth-frame-flood	Enable/disable authentication frame flooding detection (default = disable).	option	-	disable
	Option	Description		
	<i>enable</i>	Enable authentication frame flooding detection.		
	<i>disable</i>	Disable authentication frame flooding detection.		
comment	Comment.	string	Maximum length: 63	
deauth-broadcast	Enable/disable broadcasting de-authentication detection (default = disable).	option	-	disable
	Option	Description		
	<i>enable</i>	Enable broadcast de-authentication detection.		
	<i>disable</i>	Disable broadcast de-authentication detection.		
deauth-unknown-src-thresh	Threshold value per second to deauth unknown src for DoS attack (0: no limit).	integer	Minimum value: 0 Maximum value: 65535	10
eapol-fail-flood	Enable/disable EAPOL-Failure flooding (to AP) detection (default = disable).	option	-	disable
	Option	Description		
	<i>enable</i>	Enable EAPOL-Failure flooding detection.		
	<i>disable</i>	Disable EAPOL-Failure flooding detection.		
eapol-fail-intv	The detection interval for EAPOL-Failure flooding (1 - 3600 sec).	integer	Minimum value: 1 Maximum value: 3600	1
eapol-fail-thresh	The threshold value for EAPOL-Failure flooding in specified interval.	integer	Minimum value: 2 Maximum value: 100	10
eapol-logoff-flood	Enable/disable EAPOL-Logoff flooding (to AP) detection (default = disable).	option	-	disable

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>enable</i>	Enable EAPOL-Logoff flooding detection.		
	<i>disable</i>	Disable EAPOL-Logoff flooding detection.		
eapol-logoff-intv	The detection interval for EAPOL-Logoff flooding (1 - 3600 sec).	integer	Minimum value: 1 Maximum value: 3600	1
eapol-logoff-thresh	The threshold value for EAPOL-Logoff flooding in specified interval.	integer	Minimum value: 2 Maximum value: 100	10
eapol-pre-fail-flood	Enable/disable premature EAPOL-Failure flooding (to STA) detection (default = disable).	option	-	disable
	Option	Description		
	<i>enable</i>	Enable premature EAPOL-Failure flooding detection.		
	<i>disable</i>	Disable premature EAPOL-Failure flooding detection.		
eapol-pre-fail-intv	The detection interval for premature EAPOL-Failure flooding (1 - 3600 sec).	integer	Minimum value: 1 Maximum value: 3600	1
eapol-pre-fail-thresh	The threshold value for premature EAPOL-Failure flooding in specified interval.	integer	Minimum value: 2 Maximum value: 100	10
eapol-pre-succ-flood	Enable/disable premature EAPOL-Success flooding (to STA) detection (default = disable).	option	-	disable
	Option	Description		
	<i>enable</i>	Enable premature EAPOL-Success flooding detection.		
	<i>disable</i>	Disable premature EAPOL-Success flooding detection.		
eapol-pre-succ-intv	The detection interval for premature EAPOL-Success flooding (1 - 3600 sec).	integer	Minimum value: 1 Maximum value: 3600	1

Parameter	Description	Type	Size	Default						
eapol-pre-succ-thresh	The threshold value for premature EAPOL-Success flooding in specified interval.	integer	Minimum value: 2 Maximum value: 100	10						
eapol-start-flood	Enable/disable EAPOL-Start flooding (to AP) detection (default = disable).	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable EAPOL-Start flooding detection.</td></tr><tr><td><i>disable</i></td><td>Disable EAPOL-Start flooding detection.</td></tr></table>	Option	Description	<i>enable</i>	Enable EAPOL-Start flooding detection.	<i>disable</i>	Disable EAPOL-Start flooding detection.			
Option	Description									
<i>enable</i>	Enable EAPOL-Start flooding detection.									
<i>disable</i>	Disable EAPOL-Start flooding detection.									
eapol-start-intv	The detection interval for EAPOL-Start flooding (1 - 3600 sec).	integer	Minimum value: 1 Maximum value: 3600	1						
eapol-start-thresh	The threshold value for EAPOL-Start flooding in specified interval.	integer	Minimum value: 2 Maximum value: 100	10						
eapol-succ-flood	Enable/disable EAPOL-Success flooding (to AP) detection (default = disable).	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable EAPOL-Success flooding detection.</td></tr><tr><td><i>disable</i></td><td>Disable EAPOL-Success flooding detection.</td></tr></table>	Option	Description	<i>enable</i>	Enable EAPOL-Success flooding detection.	<i>disable</i>	Disable EAPOL-Success flooding detection.			
Option	Description									
<i>enable</i>	Enable EAPOL-Success flooding detection.									
<i>disable</i>	Disable EAPOL-Success flooding detection.									
eapol-succ-intv	The detection interval for EAPOL-Success flooding (1 - 3600 sec).	integer	Minimum value: 1 Maximum value: 3600	1						
eapol-succ-thresh	The threshold value for EAPOL-Success flooding in specified interval.	integer	Minimum value: 2 Maximum value: 100	10						
invalid-mac-oui	Enable/disable invalid MAC OUI detection.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable invalid MAC OUI detection.</td></tr><tr><td><i>disable</i></td><td>Disable invalid MAC OUI detection.</td></tr></table>	Option	Description	<i>enable</i>	Enable invalid MAC OUI detection.	<i>disable</i>	Disable invalid MAC OUI detection.			
Option	Description									
<i>enable</i>	Enable invalid MAC OUI detection.									
<i>disable</i>	Disable invalid MAC OUI detection.									

Parameter	Description	Type	Size	Default
long-duration-attack	Enable/disable long duration attack detection based on user configured threshold (default = disable).	option	-	disable
	Option	Description		
	<i>enable</i>	Enable long duration attack detection.		
	<i>disable</i>	Disable long duration attack detection.		
long-duration-thresh	Threshold value for long duration attack detection (1000 - 32767 usec, default = 8200).	integer	Minimum value: 1000 Maximum value: 32767	8200
name	WIDS profile name.	string	Maximum length: 35	
null-ssid-probe-resp	Enable/disable null SSID probe response detection (default = disable).	option	-	disable
	Option	Description		
	<i>enable</i>	Enable null SSID probe resp detection.		
	<i>disable</i>	Disable null SSID probe resp detection.		
sensor-mode	Scan nearby WiFi stations (default = disable).	option	-	disable
	Option	Description		
	<i>disable</i>	Disable the scan.		
	<i>foreign</i>	Enable the scan and monitor foreign channels. Foreign channels are all other available channels than the current operating channel.		
spoofed-deauth	Enable/disable spoofed de-authentication attack detection (default = disable).	option	-	disable
	Option	Description		
	<i>enable</i>	Enable spoofed de-authentication attack detection.		
	<i>disable</i>	Disable spoofed de-authentication attack detection.		
weak-wep-iv	Enable/disable weak WEP IV (Initialization Vector) detection (default = disable).	option	-	disable

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>enable</i>	Enable weak WEP IV detection.		
	<i>disable</i>	Disable weak WEP IV detection.		
wireless-bridge	Enable/disable wireless bridge detection (default = disable).	option	-	disable
	Option	Description		
	<i>enable</i>	Enable wireless bridge detection.		
	<i>disable</i>	Disable wireless bridge detection.		

config wireless-controller wtp

Configure Wireless Termination Points (WTPs), that is, FortiAPs or APs to be managed by FortiGate.

```
config wireless-controller wtp
  Description: Configure Wireless Termination Points (WTPs), that is, FortiAPs or APs to be
  managed by FortiGate.
  edit <wtp-id>
    set admin [discovered|disable|...]
    set allowaccess {option1}, {option2}, ...
    set apcfg-profile {string}
    set ble-major-id {integer}
    set ble-minor-id {integer}
    set bonjour-profile {string}
    set coordinate-latitude {string}
    set coordinate-longitude {string}
    set firmware-provision {string}
    set firmware-provision-latest [disable|once]
    set image-download [enable|disable]
    set index {integer}
    set ip-fragment-preventing {option1}, {option2}, ...
  config lan
    Description: WTP LAN port mapping.
    set port-esl-mode [offline|nat-to-wan|...]
    set port-esl-ssid {string}
    set port-mode [offline|nat-to-wan|...]
    set port-ssid {string}
    set port1-mode [offline|nat-to-wan|...]
    set port1-ssid {string}
    set port2-mode [offline|nat-to-wan|...]
    set port2-ssid {string}
    set port3-mode [offline|nat-to-wan|...]
    set port3-ssid {string}
    set port4-mode [offline|nat-to-wan|...]
```

```

    set port4-ssid {string}
    set port5-mode [offline|nat-to-wan|...]
    set port5-ssid {string}
    set port6-mode [offline|nat-to-wan|...]
    set port6-ssid {string}
    set port7-mode [offline|nat-to-wan|...]
    set port7-ssid {string}
    set port8-mode [offline|nat-to-wan|...]
    set port8-ssid {string}
end
set led-state [enable|disable]
set location {string}
set login-passwd {password}
set login-passwd-change [yes|default|...]
set mesh-bridge-enable [default|enable|...]
set name {string}
set override-allowaccess [enable|disable]
set override-ip-fragment [enable|disable]
set override-lan [enable|disable]
set override-led-state [enable|disable]
set override-login-passwd-change [enable|disable]
set override-split-tunnel [enable|disable]
set override-wan-port-mode [enable|disable]
config radio-1
    Description: Configuration options for radio 1.
    set auto-power-high {integer}
    set auto-power-level [enable|disable]
    set auto-power-low {integer}
    set auto-power-target {string}
    set band [802.11a|802.11b|...]
    set channel <chan1>, <chan2>, ...
    set drma-manual-mode [ap|monitor|...]
    set override-band [enable|disable]
    set override-channel [enable|disable]
    set override-txpower [enable|disable]
    set override-vaps [enable|disable]
    set power-level {integer}
    set power-mode [dBm|percentage]
    set power-value {integer}
    set vap-all [tunnel|bridge|...]
    set vaps <name1>, <name2>, ...
end
config radio-2
    Description: Configuration options for radio 2.
    set auto-power-high {integer}
    set auto-power-level [enable|disable]
    set auto-power-low {integer}
    set auto-power-target {string}
    set band [802.11a|802.11b|...]
    set channel <chan1>, <chan2>, ...
    set drma-manual-mode [ap|monitor|...]
    set override-band [enable|disable]

```

```

    set override-channel [enable|disable]
    set override-txpower [enable|disable]
    set override-vaps [enable|disable]
    set power-level {integer}
    set power-mode [dBm|percentage]
    set power-value {integer}
    set vap-all [tunnel|bridge|...]
    set vaps <name1>, <name2>, ...
end
config radio-3
    Description: Configuration options for radio 3.
    set auto-power-high {integer}
    set auto-power-level [enable|disable]
    set auto-power-low {integer}
    set auto-power-target {string}
    set band [802.11a|802.11b|...]
    set channel <chan1>, <chan2>, ...
    set drma-manual-mode [ap|monitor|...]
    set override-band [enable|disable]
    set override-channel [enable|disable]
    set override-txpower [enable|disable]
    set override-vaps [enable|disable]
    set power-level {integer}
    set power-mode [dBm|percentage]
    set power-value {integer}
    set vap-all [tunnel|bridge|...]
    set vaps <name1>, <name2>, ...
end
config radio-4
    Description: Configuration options for radio 4.
    set auto-power-high {integer}
    set auto-power-level [enable|disable]
    set auto-power-low {integer}
    set auto-power-target {string}
    set band [802.11a|802.11b|...]
    set channel <chan1>, <chan2>, ...
    set drma-manual-mode [ap|monitor|...]
    set override-band [enable|disable]
    set override-channel [enable|disable]
    set override-txpower [enable|disable]
    set override-vaps [enable|disable]
    set power-level {integer}
    set power-mode [dBm|percentage]
    set power-value {integer}
    set vap-all [tunnel|bridge|...]
    set vaps <name1>, <name2>, ...
end
set region {string}
set region-x {string}
set region-y {string}
config split-tunneling-acl
    Description: Split tunneling ACL filter list.

```

```

        edit <id>
            set dest-ip {ipv4-classnet}
        next
    end
    set split-tunneling-acl-local-ap-subnet [enable|disable]
    set split-tunneling-acl-path [tunnel|local]
    set tun-mtu-downlink {integer}
    set tun-mtu-uplink {integer}
    set uuid {uuid}
    set wan-port-mode [wan-lan|wan-only]
    set wtp-profile {string}
next
end

```

config wireless-controller wtp

Parameter	Description	Type	Size	Default								
admin	Configure how the FortiGate operating as a wireless controller discovers and manages this WTP, AP or FortiAP.	option	-	enable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>discovered</i></td><td>FortiGate wireless controller discovers the WTP, AP, or FortiAP though discovery or join request messages.</td></tr><tr><td><i>disable</i></td><td>FortiGate wireless controller is configured to not provide service to this WTP.</td></tr><tr><td><i>enable</i></td><td>FortiGate wireless controller is configured to provide service to this WTP.</td></tr></table>	Option	Description	<i>discovered</i>	FortiGate wireless controller discovers the WTP, AP, or FortiAP though discovery or join request messages.	<i>disable</i>	FortiGate wireless controller is configured to not provide service to this WTP.	<i>enable</i>	FortiGate wireless controller is configured to provide service to this WTP.			
Option	Description											
<i>discovered</i>	FortiGate wireless controller discovers the WTP, AP, or FortiAP though discovery or join request messages.											
<i>disable</i>	FortiGate wireless controller is configured to not provide service to this WTP.											
<i>enable</i>	FortiGate wireless controller is configured to provide service to this WTP.											
allowaccess	Control management access to the managed WTP, FortiAP, or AP. Separate entries with a space.	option	-									
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>https</i></td><td>HTTPS access.</td></tr><tr><td><i>ssh</i></td><td>SSH access.</td></tr><tr><td><i>snmp</i></td><td>SNMP access.</td></tr></table>	Option	Description	<i>https</i>	HTTPS access.	<i>ssh</i>	SSH access.	<i>snmp</i>	SNMP access.			
Option	Description											
<i>https</i>	HTTPS access.											
<i>ssh</i>	SSH access.											
<i>snmp</i>	SNMP access.											
apcfg-profile	AP local configuration profile name.	string	Maximum length: 35									
ble-major-id	Override BLE Major ID.	integer	Minimum value: 0 0 Maximum value: 65535									

Parameter	Description	Type	Size	Default
ble-minor-id	Override BLE Minor ID.	integer	Minimum value: 0 Maximum value: 65535	0
bonjour-profile	Bonjour profile name.	string	Maximum length: 35	
coordinate-latitude	WTP latitude coordinate.	string	Maximum length: 19	
coordinate-longitude	WTP longitude coordinate.	string	Maximum length: 19	
firmware-provision	Firmware version to provision to this FortiAP on bootup (major.minor.build, i.e. 6.2.1234).	string	Maximum length: 35	
firmware-provision-latest	Enable/disable one-time automatic provisioning of the latest firmware version.	option	-	disable
	Option		Description	
	<i>disable</i>		Do not automatically provision the latest available firmware.	
	<i>once</i>		Automatically attempt a one-time upgrade to the latest available firmware version.	
image-download	Enable/disable WTP image download.	option	-	enable
	Option		Description	
	<i>enable</i>		Enable WTP image download at join time.	
	<i>disable</i>		Disable WTP image download at join time.	
index	Index (0 - 4294967295). Read-only.	integer	Minimum value: 0 Maximum value: 4294967295	0
ip-fragment-preventing	Method(s) by which IP fragmentation is prevented for control and data packets through CAPWAP tunnel (default = tcp-mss-adjust).	option	-	tcp-mss-adjust
	Option		Description	
	<i>tcp-mss-adjust</i>		TCP maximum segment size adjustment.	
	<i>icmp-unreachable</i>		Drop packet and send ICMP Destination Unreachable	

Parameter	Description	Type	Size	Default								
led-state	Enable to allow the FortiAPs LEDs to light. Disable to keep the LEDs off. You may want to keep the LEDs off so they are not distracting in low light areas etc.	option	-	enable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Allow the LEDs on this FortiAP to light.</td></tr><tr><td>disable</td><td>Keep the LEDs on this FortiAP off.</td></tr></table>	Option	Description	enable	Allow the LEDs on this FortiAP to light.	disable	Keep the LEDs on this FortiAP off.					
Option	Description											
enable	Allow the LEDs on this FortiAP to light.											
disable	Keep the LEDs on this FortiAP off.											
location	Field for describing the physical location of the WTP, AP or FortiAP.	string	Maximum length: 35									
login-passwd	Set the managed WTP, FortiAP, or AP's administrator password.	password	Not Specified									
login-passwd-change	Change or reset the administrator password of a managed WTP, FortiAP or AP (yes, default, or no, default = no).	option	-	no								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>yes</td><td>Change the managed WTP, FortiAP or AP's administrator password. Use the login-password option to set the password.</td></tr><tr><td>default</td><td>Keep the managed WTP, FortiAP or AP's administrator password set to the factory default.</td></tr><tr><td>no</td><td>Do not change the managed WTP, FortiAP or AP's administrator password.</td></tr></table>	Option	Description	yes	Change the managed WTP, FortiAP or AP's administrator password. Use the login-password option to set the password.	default	Keep the managed WTP, FortiAP or AP's administrator password set to the factory default.	no	Do not change the managed WTP, FortiAP or AP's administrator password.			
Option	Description											
yes	Change the managed WTP, FortiAP or AP's administrator password. Use the login-password option to set the password.											
default	Keep the managed WTP, FortiAP or AP's administrator password set to the factory default.											
no	Do not change the managed WTP, FortiAP or AP's administrator password.											
mesh-bridge-enable	Enable/disable mesh Ethernet bridge when WTP is configured as a mesh branch/leaf AP.	option	-	default								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>default</td><td>Use mesh Ethernet bridge local setting on the WTP.</td></tr><tr><td>enable</td><td>Turn on mesh Ethernet bridge on the WTP.</td></tr><tr><td>disable</td><td>Turn off mesh Ethernet bridge on the WTP.</td></tr></table>	Option	Description	default	Use mesh Ethernet bridge local setting on the WTP.	enable	Turn on mesh Ethernet bridge on the WTP.	disable	Turn off mesh Ethernet bridge on the WTP.			
Option	Description											
default	Use mesh Ethernet bridge local setting on the WTP.											
enable	Turn on mesh Ethernet bridge on the WTP.											
disable	Turn off mesh Ethernet bridge on the WTP.											
name	WTP, AP or FortiAP configuration name.	string	Maximum length: 35									
override-allowaccess	Enable to override the WTP profile management access configuration.	option	-	disable								

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>enable</i>	Override the WTP profile management access configuration.		
	<i>disable</i>	Use the WTP profile management access configuration.		
override-ip-fragment	Enable/disable overriding the WTP profile IP fragment prevention setting.	option	-	disable
	Option	Description		
	<i>enable</i>	Override the WTP profile IP fragment prevention setting.		
	<i>disable</i>	Use the WTP profile IP fragment prevention setting.		
override-lan	Enable to override the WTP profile LAN port setting.	option	-	disable
	Option	Description		
	<i>enable</i>	Override the WTP profile LAN port setting.		
	<i>disable</i>	Use the WTP profile LAN port setting.		
override-led-state	Enable to override the profile LED state setting for this FortiAP. You must enable this option to use the led-state command to turn off the FortiAP's LEDs.	option	-	disable
	Option	Description		
	<i>enable</i>	Override the WTP profile LED state.		
	<i>disable</i>	Use the WTP profile LED state.		
override-login-passwd-change	Enable to override the WTP profile login-password (administrator password) setting.	option	-	disable
	Option	Description		
	<i>enable</i>	Override the WTP profile login-password (administrator password) setting.		
	<i>disable</i>	Use the the WTP profile login-password (administrator password) setting.		
override-split-tunnel	Enable/disable overriding the WTP profile split tunneling setting.	option	-	disable

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>enable</i>	Override the WTP profile split tunneling setting.		
	<i>disable</i>	Use the WTP profile split tunneling setting.		
override-wan-port-mode	Enable/disable overriding the wan-port-mode in the WTP profile.	option	-	disable
	Option	Description		
	<i>enable</i>	Override the WTP profile wan-port-mode.		
	<i>disable</i>	Use the wan-port-mode in the WTP profile.		
region	Region name WTP is associated with.	string	Maximum length: 35	
region-x	Relative horizontal region coordinate (between 0 and 1).	string	Maximum length: 15	0
region-y	Relative vertical region coordinate (between 0 and 1).	string	Maximum length: 15	0
split-tunneling-acl-local-ap-subnet	Enable/disable automatically adding local subnetwork of FortiAP to split-tunneling ACL (default = disable).	option	-	disable
	Option	Description		
	<i>enable</i>	Enable automatically adding local subnetwork of FortiAP to split-tunneling ACL.		
	<i>disable</i>	Disable automatically adding local subnetwork of FortiAP to split-tunneling ACL.		
split-tunneling-acl-path	Split tunneling ACL path is local/tunnel.	option	-	local
	Option	Description		
	<i>tunnel</i>	Split tunneling ACL list traffic will be tunnel.		
	<i>local</i>	Split tunneling ACL list traffic will be local NATed.		
tun-mtu-downlink	The MTU of downlink CAPWAP tunnel (576 - 1500 bytes or 0; 0 means the local MTU of FortiAP; default = 0).	integer	Minimum value: 576 Maximum value: 1500	0

Parameter	Description	Type	Size	Default
tun-mtu-uplink	The maximum transmission unit (MTU) of uplink CAPWAP tunnel (576 - 1500 bytes or 0; 0 means the local MTU of FortiAP; default = 0).	integer	Minimum value: 576 Maximum value: 1500	0
uuid	Universally Unique Identifier (UUID; automatically assigned but can be manually reset).	uuid	Not Specified	00000000-0000-0000-0000-000000000000
wan-port-mode	Enable/disable using the FortiAP WAN port as a LAN port.	option	-	wan-only
	Option		Description	
	<i>wan-lan</i>		Use the FortiAP WAN port as a LAN port.	
	<i>wan-only</i>		Do not use the WAN port as a LAN port.	
wtp-id	WTP ID.	string	Maximum length: 35	
wtp-profile	WTP profile name to apply to this WTP, AP or FortiAP.	string	Maximum length: 35	

config lan

Parameter	Description	Type	Size	Default
port-esl-mode	ESL port mode.	option	-	offline
	Option		Description	
	<i>offline</i>		Offline.	
	<i>nat-to-wan</i>		NAT WTP ESL port to WTP WAN port.	
	<i>bridge-to-wan</i>		Bridge WTP ESL port to WTP WAN port.	
	<i>bridge-to-ssid</i>		Bridge WTP ESL port to SSID.	
port-esl-ssid	Bridge ESL port to SSID.	string	Maximum length: 15	
port-mode	LAN port mode.	option	-	offline
	Option		Description	
	<i>offline</i>		Offline.	
	<i>nat-to-wan</i>		NAT WTP LAN port to WTP WAN port.	

Parameter	Description	Type	Size	Default										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>bridge-to-wan</i></td><td>Bridge WTP LAN port to WTP WAN port.</td></tr><tr><td><i>bridge-to-ssid</i></td><td>Bridge WTP LAN port to SSID.</td></tr></table>	Option	Description	<i>bridge-to-wan</i>	Bridge WTP LAN port to WTP WAN port.	<i>bridge-to-ssid</i>	Bridge WTP LAN port to SSID.							
	Option	Description												
	<i>bridge-to-wan</i>	Bridge WTP LAN port to WTP WAN port.												
<i>bridge-to-ssid</i>	Bridge WTP LAN port to SSID.													
port-ssid	Bridge LAN port to SSID.	string	Maximum length: 15											
port1-mode	LAN port 1 mode.	option	-	offline										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>offline</i></td><td>Offline.</td></tr><tr><td><i>nat-to-wan</i></td><td>NAT WTP LAN port to WTP WAN port.</td></tr><tr><td><i>bridge-to-wan</i></td><td>Bridge WTP LAN port to WTP WAN port.</td></tr><tr><td><i>bridge-to-ssid</i></td><td>Bridge WTP LAN port to SSID.</td></tr></table>	Option	Description	<i>offline</i>	Offline.	<i>nat-to-wan</i>	NAT WTP LAN port to WTP WAN port.	<i>bridge-to-wan</i>	Bridge WTP LAN port to WTP WAN port.	<i>bridge-to-ssid</i>	Bridge WTP LAN port to SSID.			
	Option	Description												
	<i>offline</i>	Offline.												
	<i>nat-to-wan</i>	NAT WTP LAN port to WTP WAN port.												
	<i>bridge-to-wan</i>	Bridge WTP LAN port to WTP WAN port.												
<i>bridge-to-ssid</i>	Bridge WTP LAN port to SSID.													
port1-ssid	Bridge LAN port 1 to SSID.	string	Maximum length: 15											
port2-mode	LAN port 2 mode.	option	-	offline										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>offline</i></td><td>Offline.</td></tr><tr><td><i>nat-to-wan</i></td><td>NAT WTP LAN port to WTP WAN port.</td></tr><tr><td><i>bridge-to-wan</i></td><td>Bridge WTP LAN port to WTP WAN port.</td></tr><tr><td><i>bridge-to-ssid</i></td><td>Bridge WTP LAN port to SSID.</td></tr></table>	Option	Description	<i>offline</i>	Offline.	<i>nat-to-wan</i>	NAT WTP LAN port to WTP WAN port.	<i>bridge-to-wan</i>	Bridge WTP LAN port to WTP WAN port.	<i>bridge-to-ssid</i>	Bridge WTP LAN port to SSID.			
	Option	Description												
	<i>offline</i>	Offline.												
	<i>nat-to-wan</i>	NAT WTP LAN port to WTP WAN port.												
	<i>bridge-to-wan</i>	Bridge WTP LAN port to WTP WAN port.												
<i>bridge-to-ssid</i>	Bridge WTP LAN port to SSID.													
port2-ssid	Bridge LAN port 2 to SSID.	string	Maximum length: 15											
port3-mode	LAN port 3 mode.	option	-	offline										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>offline</i></td><td>Offline.</td></tr><tr><td><i>nat-to-wan</i></td><td>NAT WTP LAN port to WTP WAN port.</td></tr><tr><td><i>bridge-to-wan</i></td><td>Bridge WTP LAN port to WTP WAN port.</td></tr><tr><td><i>bridge-to-ssid</i></td><td>Bridge WTP LAN port to SSID.</td></tr></table>	Option	Description	<i>offline</i>	Offline.	<i>nat-to-wan</i>	NAT WTP LAN port to WTP WAN port.	<i>bridge-to-wan</i>	Bridge WTP LAN port to WTP WAN port.	<i>bridge-to-ssid</i>	Bridge WTP LAN port to SSID.			
	Option	Description												
	<i>offline</i>	Offline.												
	<i>nat-to-wan</i>	NAT WTP LAN port to WTP WAN port.												
	<i>bridge-to-wan</i>	Bridge WTP LAN port to WTP WAN port.												
<i>bridge-to-ssid</i>	Bridge WTP LAN port to SSID.													
port3-ssid	Bridge LAN port 3 to SSID.	string	Maximum length: 15											
port4-mode	LAN port 4 mode.	option	-	offline										

Parameter	Description	Type	Size	Default
	Option	Description		
	offline	Offline.		
	nat-to-wan	NAT WTP LAN port to WTP WAN port.		
	bridge-to-wan	Bridge WTP LAN port to WTP WAN port.		
	bridge-to-ssid	Bridge WTP LAN port to SSID.		
port4-ssid	Bridge LAN port 4 to SSID.	string	Maximum length: 15	
port5-mode	LAN port 5 mode.	option	-	offline
	Option	Description		
	offline	Offline.		
	nat-to-wan	NAT WTP LAN port to WTP WAN port.		
	bridge-to-wan	Bridge WTP LAN port to WTP WAN port.		
	bridge-to-ssid	Bridge WTP LAN port to SSID.		
port5-ssid	Bridge LAN port 5 to SSID.	string	Maximum length: 15	
port6-mode	LAN port 6 mode.	option	-	offline
	Option	Description		
	offline	Offline.		
	nat-to-wan	NAT WTP LAN port to WTP WAN port.		
	bridge-to-wan	Bridge WTP LAN port to WTP WAN port.		
	bridge-to-ssid	Bridge WTP LAN port to SSID.		
port6-ssid	Bridge LAN port 6 to SSID.	string	Maximum length: 15	
port7-mode	LAN port 7 mode.	option	-	offline
	Option	Description		
	offline	Offline.		
	nat-to-wan	NAT WTP LAN port to WTP WAN port.		
	bridge-to-wan	Bridge WTP LAN port to WTP WAN port.		
	bridge-to-ssid	Bridge WTP LAN port to SSID.		

Parameter	Description	Type	Size	Default
port7-ssid	Bridge LAN port 7 to SSID.	string	Maximum length: 15	
port8-mode	LAN port 8 mode.	option	-	offline
	Option Description			
	<i>offline</i>	Offline.		
	<i>nat-to-wan</i>	NAT WTP LAN port to WTP WAN port.		
	<i>bridge-to-wan</i>	Bridge WTP LAN port to WTP WAN port.		
	<i>bridge-to-ssid</i>	Bridge WTP LAN port to SSID.		
port8-ssid	Bridge LAN port 8 to SSID.	string	Maximum length: 15	

config radio-1

Parameter	Description	Type	Size	Default						
auto-power-high	The upper bound of automatic transmit power adjustment in dBm (the actual range of transmit power depends on the AP platform type).	integer	Minimum value: 0 Maximum value: 4294967295	17						
auto-power-level	Enable/disable automatic power-level adjustment to prevent co-channel interference (default = enable).	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable automatic transmit power adjustment.</td></tr><tr><td>disable</td><td>Disable automatic transmit power adjustment.</td></tr></table>	Option	Description	enable	Enable automatic transmit power adjustment.	disable	Disable automatic transmit power adjustment.			
Option	Description									
enable	Enable automatic transmit power adjustment.									
disable	Disable automatic transmit power adjustment.									
auto-power-low	The lower bound of automatic transmit power adjustment in dBm (the actual range of transmit power depends on the AP platform type).	integer	Minimum value: 0 Maximum value: 4294967295	10						
auto-power-target	Target of automatic transmit power adjustment in dBm (-95 to -20, default = -70).	string	Maximum length: 7	-70						
band	WiFi band that Radio 1 operates on.	option	-							
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>802.11a</td><td>802.11a.</td></tr></table>	Option	Description	802.11a	802.11a.					
Option	Description									
802.11a	802.11a.									

Parameter	Description	Type	Size	Default																																													
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>802.11b</td><td>802.11b.</td></tr><tr><td>802.11g</td><td>802.11g/b.</td></tr><tr><td>802.11n</td><td>802.11n/g/b at 2.4GHz.</td></tr><tr><td>802.11n-5G</td><td>802.11n/a at 5GHz.</td></tr><tr><td>802.11ac</td><td>802.11ac/n/a.</td></tr><tr><td>802.11ax-5G</td><td>802.11ax/ac/n/a at 5GHz.</td></tr><tr><td>802.11ax</td><td>802.11ax/n/g/b at 2.4GHz.</td></tr><tr><td>802.11ac-2G</td><td>802.11ac at 2.4GHz.</td></tr><tr><td>802.11ax-6G</td><td>802.11ax at 6GHz.</td></tr><tr><td>802.11n,g-only</td><td>802.11n/g at 2.4GHz.</td></tr><tr><td>802.11g-only</td><td>802.11g.</td></tr><tr><td>802.11n-only</td><td>802.11n at 2.4GHz.</td></tr><tr><td>802.11n-5G-only</td><td>802.11n at 5GHz.</td></tr><tr><td>802.11ac,n-only</td><td>802.11ac/n.</td></tr><tr><td>802.11ac-only</td><td>802.11ac.</td></tr><tr><td>802.11ax,ac-only</td><td>802.11ax/ac at 5GHz.</td></tr><tr><td>802.11ax,ac,n-only</td><td>802.11ax/ac/n at 5GHz.</td></tr><tr><td>802.11ax-5G-only</td><td>802.11ax at 5GHz.</td></tr><tr><td>802.11ax,n-only</td><td>802.11ax/n at 2.4GHz.</td></tr><tr><td>802.11ax,n,g-only</td><td>802.11ax/n/g at 2.4GHz.</td></tr><tr><td>802.11ax-only</td><td>802.11ax at 2.4GHz.</td></tr></table>	Option	Description	802.11b	802.11b.	802.11g	802.11g/b.	802.11n	802.11n/g/b at 2.4GHz.	802.11n-5G	802.11n/a at 5GHz.	802.11ac	802.11ac/n/a.	802.11ax-5G	802.11ax/ac/n/a at 5GHz.	802.11ax	802.11ax/n/g/b at 2.4GHz.	802.11ac-2G	802.11ac at 2.4GHz.	802.11ax-6G	802.11ax at 6GHz.	802.11n,g-only	802.11n/g at 2.4GHz.	802.11g-only	802.11g.	802.11n-only	802.11n at 2.4GHz.	802.11n-5G-only	802.11n at 5GHz.	802.11ac,n-only	802.11ac/n.	802.11ac-only	802.11ac.	802.11ax,ac-only	802.11ax/ac at 5GHz.	802.11ax,ac,n-only	802.11ax/ac/n at 5GHz.	802.11ax-5G-only	802.11ax at 5GHz.	802.11ax,n-only	802.11ax/n at 2.4GHz.	802.11ax,n,g-only	802.11ax/n/g at 2.4GHz.	802.11ax-only	802.11ax at 2.4GHz.				
	Option	Description																																															
	802.11b	802.11b.																																															
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	802.11ac,n-only	802.11ac/n.																																															
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	802.11ax,ac-only	802.11ax/ac at 5GHz.																																															
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802.11ax-only	802.11ax at 2.4GHz.																																																
channel <chan>	Selected list of wireless radio channels. Channel number.	string	Maximum length: 3																																														
drma- manual-mode	Radio mode to be used for DRMA manual mode (default = ncf).	option	-	ncf																																													
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>ap</td><td>Set the radio to AP mode.</td></tr><tr><td>monitor</td><td>Set the radio to monitor mode</td></tr><tr><td>ncf</td><td>Select and set the radio mode based on NCF score.</td></tr></table>	Option	Description	ap	Set the radio to AP mode.	monitor	Set the radio to monitor mode	ncf	Select and set the radio mode based on NCF score.																																								
	Option	Description																																															
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ncf	Select and set the radio mode based on NCF score.																																																

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>ncf-peek</i>	Select the radio mode based on NCF score, but do not apply.		
override-band	Enable to override the WTP profile band setting.	option	-	disable
	Option	Description		
	<i>enable</i>	Override the WTP profile band setting.		
	<i>disable</i>	Use the WTP profile band setting.		
override-channel	Enable to override WTP profile channel settings.	option	-	disable
	Option	Description		
	<i>enable</i>	Override WTP profile channel settings.		
	<i>disable</i>	Use WTP profile channel settings.		
override-txpower	Enable to override the WTP profile power level configuration.	option	-	disable
	Option	Description		
	<i>enable</i>	Override the WTP profile power level configuration.		
	<i>disable</i>	Use the WTP profile power level configuration.		
override-vaps	Enable to override WTP profile Virtual Access Point (VAP) settings.	option	-	disable
	Option	Description		
	<i>enable</i>	Override WTP profile VAP settings.		
	<i>disable</i>	Use WTP profile VAP settings.		
power-level	Radio EIRP power level as a percentage of the maximum EIRP power (0 - 100, default = 100).	integer	Minimum value: 0 Maximum value: 100	100
power-mode	Set radio effective isotropic radiated power (EIRP) in dBm or by a percentage of the maximum EIRP (default = percentage). This power takes into account both radio transmit power and antenna gain. Higher power level settings may be constrained by local regulatory requirements and AP capabilities.	option	-	percentage

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>dBm</i>	Set radio EIRP power in dBm.		
	<i>percentage</i>	Set radio EIRP power by percentage.		
power-value	Radio EIRP power in dBm (1 - 33, default = 27).	integer	Minimum value: 1 Maximum value: 33	27
vap-all	Configure method for assigning SSIDs to this FortiAP (default = automatically assign tunnel SSIDs).	option	-	tunnel
	Option	Description		
	<i>tunnel</i>	Automatically select tunnel SSIDs.		
	<i>bridge</i>	Automatically select local-bridging SSIDs.		
	<i>manual</i>	Manually select SSIDs.		
vaps <name>	Manually selected list of Virtual Access Points (VAPs). Virtual Access Point (VAP) name.	string	Maximum length: 35	

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Parameter	Description	Type	Size	Default
auto-power-high	The upper bound of automatic transmit power adjustment in dBm (the actual range of transmit power depends on the AP platform type).	integer	Minimum value: 0 Maximum value: 4294967295	17
auto-power-level	Enable/disable automatic power-level adjustment to prevent co-channel interference (default = enable).	option	-	disable
	Option	Description		
	<i>enable</i>	Enable automatic transmit power adjustment.		
	<i>disable</i>	Disable automatic transmit power adjustment.		
auto-power-low	The lower bound of automatic transmit power adjustment in dBm (the actual range of transmit power depends on the AP platform type).	integer	Minimum value: 0 Maximum value: 4294967295	10

Parameter	Description	Type	Size	Default																																															
auto-power-target	Target of automatic transmit power adjustment in dBm (-95 to -20, default = -70).	string	Maximum length: 7	-70																																															
band	WiFi band that Radio 2 operates on.	option	-																																																
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>802.11a</td><td>802.11a.</td></tr><tr><td>802.11b</td><td>802.11b.</td></tr><tr><td>802.11g</td><td>802.11g/b.</td></tr><tr><td>802.11n</td><td>802.11n/g/b at 2.4GHz.</td></tr><tr><td>802.11n-5G</td><td>802.11n/a at 5GHz.</td></tr><tr><td>802.11ac</td><td>802.11ac/n/a.</td></tr><tr><td>802.11ax-5G</td><td>802.11ax/ac/n/a at 5GHz.</td></tr><tr><td>802.11ax</td><td>802.11ax/n/g/b at 2.4GHz.</td></tr><tr><td>802.11ac-2G</td><td>802.11ac at 2.4GHz.</td></tr><tr><td>802.11ax-6G</td><td>802.11ax at 6GHz.</td></tr><tr><td>802.11n,g-only</td><td>802.11n/g at 2.4GHz.</td></tr><tr><td>802.11g-only</td><td>802.11g.</td></tr><tr><td>802.11n-only</td><td>802.11n at 2.4GHz.</td></tr><tr><td>802.11n-5G-only</td><td>802.11n at 5GHz.</td></tr><tr><td>802.11ac,n-only</td><td>802.11ac/n.</td></tr><tr><td>802.11ac-only</td><td>802.11ac.</td></tr><tr><td>802.11ax,ac-only</td><td>802.11ax/ac at 5GHz.</td></tr><tr><td>802.11ax,ac,n-only</td><td>802.11ax/ac/n at 5GHz.</td></tr><tr><td>802.11ax-5G-only</td><td>802.11ax at 5GHz.</td></tr><tr><td>802.11ax,n-only</td><td>802.11ax/n at 2.4GHz.</td></tr><tr><td>802.11ax,n,g-only</td><td>802.11ax/n/g at 2.4GHz.</td></tr><tr><td>802.11ax-only</td><td>802.11ax at 2.4GHz.</td></tr></table>		Option	Description	802.11a	802.11a.	802.11b	802.11b.	802.11g	802.11g/b.	802.11n	802.11n/g/b at 2.4GHz.	802.11n-5G	802.11n/a at 5GHz.	802.11ac	802.11ac/n/a.	802.11ax-5G	802.11ax/ac/n/a at 5GHz.	802.11ax	802.11ax/n/g/b at 2.4GHz.	802.11ac-2G	802.11ac at 2.4GHz.	802.11ax-6G	802.11ax at 6GHz.	802.11n,g-only	802.11n/g at 2.4GHz.	802.11g-only	802.11g.	802.11n-only	802.11n at 2.4GHz.	802.11n-5G-only	802.11n at 5GHz.	802.11ac,n-only	802.11ac/n.	802.11ac-only	802.11ac.	802.11ax,ac-only	802.11ax/ac at 5GHz.	802.11ax,ac,n-only	802.11ax/ac/n at 5GHz.	802.11ax-5G-only	802.11ax at 5GHz.	802.11ax,n-only	802.11ax/n at 2.4GHz.	802.11ax,n,g-only	802.11ax/n/g at 2.4GHz.	802.11ax-only	802.11ax at 2.4GHz.			
	Option	Description																																																	
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	802.11g-only	802.11g.																																																	
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802.11ax-only	802.11ax at 2.4GHz.																																																		
channel <chan>	Selected list of wireless radio channels. Channel number.	string	Maximum length: 3																																																
drma-manual-mode	Radio mode to be used for DRMA manual mode (default = ncf).	option	-	ncf																																															

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>ap</i>	Set the radio to AP mode.		
	<i>monitor</i>	Set the radio to monitor mode		
	<i>ncf</i>	Select and set the radio mode based on NCF score.		
	<i>ncf-peek</i>	Select the radio mode based on NCF score, but do not apply.		
override-band	Enable to override the WTP profile band setting.	option	-	disable
	Option	Description		
	<i>enable</i>	Override the WTP profile band setting.		
	<i>disable</i>	Use the WTP profile band setting.		
override-channel	Enable to override WTP profile channel settings.	option	-	disable
	Option	Description		
	<i>enable</i>	Override WTP profile channel settings.		
	<i>disable</i>	Use WTP profile channel settings.		
override-tpower	Enable to override the WTP profile power level configuration.	option	-	disable
	Option	Description		
	<i>enable</i>	Override the WTP profile power level configuration.		
	<i>disable</i>	Use the WTP profile power level configuration.		
override-vaps	Enable to override WTP profile Virtual Access Point (VAP) settings.	option	-	disable
	Option	Description		
	<i>enable</i>	Override WTP profile VAP settings.		
	<i>disable</i>	Use WTP profile VAP settings.		
power-level	Radio EIRP power level as a percentage of the maximum EIRP power (0 - 100, default = 100).	integer	Minimum value: 0 Maximum value: 100	100

Parameter	Description	Type	Size	Default								
power-mode	Set radio effective isotropic radiated power (EIRP) in dBm or by a percentage of the maximum EIRP (default = percentage). This power takes into account both radio transmit power and antenna gain. Higher power level settings may be constrained by local regulatory requirements and AP capabilities.	option	-	percentage								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>dBm</i></td><td>Set radio EIRP power in dBm.</td></tr><tr><td><i>percentage</i></td><td>Set radio EIRP power by percentage.</td></tr></table>	Option	Description	<i>dBm</i>	Set radio EIRP power in dBm.	<i>percentage</i>	Set radio EIRP power by percentage.					
Option	Description											
<i>dBm</i>	Set radio EIRP power in dBm.											
<i>percentage</i>	Set radio EIRP power by percentage.											
power-value	Radio EIRP power in dBm (1 - 33, default = 27).	integer	Minimum value: 1 Maximum value: 33	27								
vap-all	Configure method for assigning SSIDs to this FortiAP (default = automatically assign tunnel SSIDs).	option	-	tunnel								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>tunnel</i></td><td>Automatically select tunnel SSIDs.</td></tr><tr><td><i>bridge</i></td><td>Automatically select local-bridging SSIDs.</td></tr><tr><td><i>manual</i></td><td>Manually select SSIDs.</td></tr></table>	Option	Description	<i>tunnel</i>	Automatically select tunnel SSIDs.	<i>bridge</i>	Automatically select local-bridging SSIDs.	<i>manual</i>	Manually select SSIDs.			
Option	Description											
<i>tunnel</i>	Automatically select tunnel SSIDs.											
<i>bridge</i>	Automatically select local-bridging SSIDs.											
<i>manual</i>	Manually select SSIDs.											
vaps <name>	Manually selected list of Virtual Access Points (VAPs). Virtual Access Point (VAP) name.	string	Maximum length: 35									

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Parameter	Description	Type	Size	Default				
auto-power-high	The upper bound of automatic transmit power adjustment in dBm (the actual range of transmit power depends on the AP platform type).	integer	Minimum value: 0 Maximum value: 4294967295	17				
auto-power-level	Enable/disable automatic power-level adjustment to prevent co-channel interference (default = enable).	option	-	disable				
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable automatic transmit power adjustment.</td></tr></table>				Option	Description	enable	Enable automatic transmit power adjustment.
Option	Description							
enable	Enable automatic transmit power adjustment.							

Parameter	Description	Type	Size	Default																																										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>disable</i></td><td>Disable automatic transmit power adjustment.</td></tr></table>	Option	Description	<i>disable</i>	Disable automatic transmit power adjustment.																																									
	Option	Description																																												
<i>disable</i>	Disable automatic transmit power adjustment.																																													
auto-power-low	The lower bound of automatic transmit power adjustment in dBm (the actual range of transmit power depends on the AP platform type).	integer	Minimum value: 10 0 Maximum value: 4294967295																																											
auto-power-target	Target of automatic transmit power adjustment in dBm (-95 to -20, default = -70).	string	Maximum length: 7	-70																																										
band	WiFi band that Radio 3 operates on.	option	-																																											
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>802.11a</i></td><td>802.11a.</td></tr><tr><td><i>802.11b</i></td><td>802.11b.</td></tr><tr><td><i>802.11g</i></td><td>802.11g/b.</td></tr><tr><td><i>802.11n</i></td><td>802.11n/g/b at 2.4GHz.</td></tr><tr><td><i>802.11n-5G</i></td><td>802.11n/a at 5GHz.</td></tr><tr><td><i>802.11ac</i></td><td>802.11ac/n/a.</td></tr><tr><td><i>802.11ax-5G</i></td><td>802.11ax/ac/n/a at 5GHz.</td></tr><tr><td><i>802.11ax</i></td><td>802.11ax/n/g/b at 2.4GHz.</td></tr><tr><td><i>802.11ac-2G</i></td><td>802.11ac at 2.4GHz.</td></tr><tr><td><i>802.11ax-6G</i></td><td>802.11ax at 6GHz.</td></tr><tr><td><i>802.11n,g-only</i></td><td>802.11n/g at 2.4GHz.</td></tr><tr><td><i>802.11g-only</i></td><td>802.11g.</td></tr><tr><td><i>802.11n-only</i></td><td>802.11n at 2.4GHz.</td></tr><tr><td><i>802.11n-5G-only</i></td><td>802.11n at 5GHz.</td></tr><tr><td><i>802.11ac,n-only</i></td><td>802.11ac/n.</td></tr><tr><td><i>802.11ac-only</i></td><td>802.11ac.</td></tr><tr><td><i>802.11ax,ac-only</i></td><td>802.11ax/ac at 5GHz.</td></tr><tr><td><i>802.11ax,ac,n-only</i></td><td>802.11ax/ac/n at 5GHz.</td></tr><tr><td><i>802.11ax-5G-only</i></td><td>802.11ax at 5GHz.</td></tr><tr><td><i>802.11ax,n-only</i></td><td>802.11ax/n at 2.4GHz.</td></tr></table>	Option	Description	<i>802.11a</i>	802.11a.	<i>802.11b</i>	802.11b.	<i>802.11g</i>	802.11g/b.	<i>802.11n</i>	802.11n/g/b at 2.4GHz.	<i>802.11n-5G</i>	802.11n/a at 5GHz.	<i>802.11ac</i>	802.11ac/n/a.	<i>802.11ax-5G</i>	802.11ax/ac/n/a at 5GHz.	<i>802.11ax</i>	802.11ax/n/g/b at 2.4GHz.	<i>802.11ac-2G</i>	802.11ac at 2.4GHz.	<i>802.11ax-6G</i>	802.11ax at 6GHz.	<i>802.11n,g-only</i>	802.11n/g at 2.4GHz.	<i>802.11g-only</i>	802.11g.	<i>802.11n-only</i>	802.11n at 2.4GHz.	<i>802.11n-5G-only</i>	802.11n at 5GHz.	<i>802.11ac,n-only</i>	802.11ac/n.	<i>802.11ac-only</i>	802.11ac.	<i>802.11ax,ac-only</i>	802.11ax/ac at 5GHz.	<i>802.11ax,ac,n-only</i>	802.11ax/ac/n at 5GHz.	<i>802.11ax-5G-only</i>	802.11ax at 5GHz.	<i>802.11ax,n-only</i>	802.11ax/n at 2.4GHz.			
	Option	Description																																												
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	<i>802.11n-5G</i>	802.11n/a at 5GHz.																																												
	<i>802.11ac</i>	802.11ac/n/a.																																												
	<i>802.11ax-5G</i>	802.11ax/ac/n/a at 5GHz.																																												
	<i>802.11ax</i>	802.11ax/n/g/b at 2.4GHz.																																												
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<i>802.11ax,n-only</i>	802.11ax/n at 2.4GHz.																																													

Parameter	Description	Type	Size	Default										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>802.11ax,n,g-only</i></td><td>802.11ax/n/g at 2.4GHz.</td></tr><tr><td><i>802.11ax-only</i></td><td>802.11ax at 2.4GHz.</td></tr></table>	Option	Description	<i>802.11ax,n,g-only</i>	802.11ax/n/g at 2.4GHz.	<i>802.11ax-only</i>	802.11ax at 2.4GHz.							
	Option	Description												
	<i>802.11ax,n,g-only</i>	802.11ax/n/g at 2.4GHz.												
<i>802.11ax-only</i>	802.11ax at 2.4GHz.													
channel <chan>	Selected list of wireless radio channels. Channel number.	string	Maximum length: 3											
drma- manual-mode	Radio mode to be used for DRMA manual mode (default = ncf).	option	-	ncf										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>ap</i></td><td>Set the radio to AP mode.</td></tr><tr><td><i>monitor</i></td><td>Set the radio to monitor mode</td></tr><tr><td><i>ncf</i></td><td>Select and set the radio mode based on NCF score.</td></tr><tr><td><i>ncf-peek</i></td><td>Select the radio mode based on NCF score, but do not apply.</td></tr></table>	Option	Description	<i>ap</i>	Set the radio to AP mode.	<i>monitor</i>	Set the radio to monitor mode	<i>ncf</i>	Select and set the radio mode based on NCF score.	<i>ncf-peek</i>	Select the radio mode based on NCF score, but do not apply.			
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<i>ncf-peek</i>	Select the radio mode based on NCF score, but do not apply.													
override- band	Enable to override the WTP profile band setting.	option	-	disable										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Override the WTP profile band setting.</td></tr><tr><td><i>disable</i></td><td>Use the WTP profile band setting.</td></tr></table>	Option	Description	<i>enable</i>	Override the WTP profile band setting.	<i>disable</i>	Use the WTP profile band setting.							
	Option	Description												
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override- channel	Enable to override WTP profile channel settings.	option	-	disable										
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	Option	Description												
	<i>enable</i>	Override WTP profile channel settings.												
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override- txpower	Enable to override the WTP profile power level configuration.	option	-	disable										
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	Option	Description												
	<i>enable</i>	Override the WTP profile power level configuration.												
<i>disable</i>	Use the WTP profile power level configuration.													
override- vaps	Enable to override WTP profile Virtual Access Point (VAP) settings.	option	-	disable										

Parameter	Description	Type	Size	Default								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Override WTP profile VAP settings.</td></tr><tr><td><i>disable</i></td><td>Use WTP profile VAP settings.</td></tr></table>	Option	Description	<i>enable</i>	Override WTP profile VAP settings.	<i>disable</i>	Use WTP profile VAP settings.					
	Option	Description										
	<i>enable</i>	Override WTP profile VAP settings.										
<i>disable</i>	Use WTP profile VAP settings.											
power-level	Radio EIRP power level as a percentage of the maximum EIRP power (0 - 100, default = 100).	integer	Minimum value: 0 Maximum value: 100	100								
power-mode	Set radio effective isotropic radiated power (EIRP) in dBm or by a percentage of the maximum EIRP (default = percentage). This power takes into account both radio transmit power and antenna gain. Higher power level settings may be constrained by local regulatory requirements and AP capabilities.	option	-	percentage								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>dBm</i></td><td>Set radio EIRP power in dBm.</td></tr><tr><td><i>percentage</i></td><td>Set radio EIRP power by percentage.</td></tr></table>	Option	Description	<i>dBm</i>	Set radio EIRP power in dBm.	<i>percentage</i>	Set radio EIRP power by percentage.					
	Option	Description										
	<i>dBm</i>	Set radio EIRP power in dBm.										
<i>percentage</i>	Set radio EIRP power by percentage.											
power-value	Radio EIRP power in dBm (1 - 33, default = 27).	integer	Minimum value: 1 Maximum value: 33	27								
vap-all	Configure method for assigning SSIDs to this FortiAP (default = automatically assign tunnel SSIDs).	option	-	tunnel								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>tunnel</i></td><td>Automatically select tunnel SSIDs.</td></tr><tr><td><i>bridge</i></td><td>Automatically select local-bridging SSIDs.</td></tr><tr><td><i>manual</i></td><td>Manually select SSIDs.</td></tr></table>	Option	Description	<i>tunnel</i>	Automatically select tunnel SSIDs.	<i>bridge</i>	Automatically select local-bridging SSIDs.	<i>manual</i>	Manually select SSIDs.			
	Option	Description										
	<i>tunnel</i>	Automatically select tunnel SSIDs.										
	<i>bridge</i>	Automatically select local-bridging SSIDs.										
<i>manual</i>	Manually select SSIDs.											
vaps <name>	Manually selected list of Virtual Access Points (VAPs). Virtual Access Point (VAP) name.	string	Maximum length: 35									

config radio-4

Parameter	Description	Type	Size	Default																												
auto-power-high	The upper bound of automatic transmit power adjustment in dBm (the actual range of transmit power depends on the AP platform type).	integer	Minimum value: 0 Maximum value: 4294967295	17																												
auto-power-level	Enable/disable automatic power-level adjustment to prevent co-channel interference (default = enable).	option	-	disable																												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable automatic transmit power adjustment.</td></tr><tr><td>disable</td><td>Disable automatic transmit power adjustment.</td></tr></table>	Option	Description	enable	Enable automatic transmit power adjustment.	disable	Disable automatic transmit power adjustment.																									
Option	Description																															
enable	Enable automatic transmit power adjustment.																															
disable	Disable automatic transmit power adjustment.																															
auto-power-low	The lower bound of automatic transmit power adjustment in dBm (the actual range of transmit power depends on the AP platform type).	integer	Minimum value: 0 Maximum value: 4294967295	10																												
auto-power-target	Target of automatic transmit power adjustment in dBm (-95 to -20, default = -70).	string	Maximum length: 7	-70																												
band	WiFi band that Radio 4 operates on.	option	-																													
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>802.11a</td><td>802.11a.</td></tr><tr><td>802.11b</td><td>802.11b.</td></tr><tr><td>802.11g</td><td>802.11g/b.</td></tr><tr><td>802.11n</td><td>802.11n/g/b at 2.4GHz.</td></tr><tr><td>802.11n-5G</td><td>802.11n/a at 5GHz.</td></tr><tr><td>802.11ac</td><td>802.11ac/n/a.</td></tr><tr><td>802.11ax-5G</td><td>802.11ax/ac/n/a at 5GHz.</td></tr><tr><td>802.11ax</td><td>802.11ax/n/g/b at 2.4GHz.</td></tr><tr><td>802.11ac-2G</td><td>802.11ac at 2.4GHz.</td></tr><tr><td>802.11ax-6G</td><td>802.11ax at 6GHz.</td></tr><tr><td>802.11n,g-only</td><td>802.11n/g at 2.4GHz.</td></tr><tr><td>802.11g-only</td><td>802.11g.</td></tr><tr><td>802.11n-only</td><td>802.11n at 2.4GHz.</td></tr></table>	Option	Description	802.11a	802.11a.	802.11b	802.11b.	802.11g	802.11g/b.	802.11n	802.11n/g/b at 2.4GHz.	802.11n-5G	802.11n/a at 5GHz.	802.11ac	802.11ac/n/a.	802.11ax-5G	802.11ax/ac/n/a at 5GHz.	802.11ax	802.11ax/n/g/b at 2.4GHz.	802.11ac-2G	802.11ac at 2.4GHz.	802.11ax-6G	802.11ax at 6GHz.	802.11n,g-only	802.11n/g at 2.4GHz.	802.11g-only	802.11g.	802.11n-only	802.11n at 2.4GHz.			
Option	Description																															
802.11a	802.11a.																															
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Parameter	Description	Type	Size	Default																				
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>802.11n-5G-only</td><td>802.11n at 5GHz.</td></tr><tr><td>802.11ac,n-only</td><td>802.11ac/n.</td></tr><tr><td>802.11ac-only</td><td>802.11ac.</td></tr><tr><td>802.11ax,ac-only</td><td>802.11ax/ac at 5GHz.</td></tr><tr><td>802.11ax,ac,n-only</td><td>802.11ax/ac/n at 5GHz.</td></tr><tr><td>802.11ax-5G-only</td><td>802.11ax at 5GHz.</td></tr><tr><td>802.11ax,n-only</td><td>802.11ax/n at 2.4GHz.</td></tr><tr><td>802.11ax,n,g-only</td><td>802.11ax/n/g at 2.4GHz.</td></tr><tr><td>802.11ax-only</td><td>802.11ax at 2.4GHz.</td></tr></table>	Option	Description	802.11n-5G-only	802.11n at 5GHz.	802.11ac,n-only	802.11ac/n.	802.11ac-only	802.11ac.	802.11ax,ac-only	802.11ax/ac at 5GHz.	802.11ax,ac,n-only	802.11ax/ac/n at 5GHz.	802.11ax-5G-only	802.11ax at 5GHz.	802.11ax,n-only	802.11ax/n at 2.4GHz.	802.11ax,n,g-only	802.11ax/n/g at 2.4GHz.	802.11ax-only	802.11ax at 2.4GHz.			
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802.11ax-only	802.11ax at 2.4GHz.																							
channel <chan>	Selected list of wireless radio channels. Channel number.	string	Maximum length: 3																					
drma- manual-mode	Radio mode to be used for DRMA manual mode (default = ncf).	option	-	ncf																				
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override- band	Enable to override the WTP profile band setting.	option	-	disable																				
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override- txpower	Enable to override the WTP profile power level configuration.	option	-	disable																				

Parameter	Description	Type	Size	Default								
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Option	Description											
<i>enable</i>	Override the WTP profile power level configuration.											
<i>disable</i>	Use the WTP profile power level configuration.											
override-vaps	Enable to override WTP profile Virtual Access Point (VAP) settings.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Override WTP profile VAP settings.</td></tr><tr><td><i>disable</i></td><td>Use WTP profile VAP settings.</td></tr></table>	Option	Description	<i>enable</i>	Override WTP profile VAP settings.	<i>disable</i>	Use WTP profile VAP settings.					
Option	Description											
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<i>disable</i>	Use WTP profile VAP settings.											
power-level	Radio EIRP power level as a percentage of the maximum EIRP power (0 - 100, default = 100).	integer	Minimum value: 0 Maximum value: 100	100								
power-mode	Set radio effective isotropic radiated power (EIRP) in dBm or by a percentage of the maximum EIRP (default = percentage). This power takes into account both radio transmit power and antenna gain. Higher power level settings may be constrained by local regulatory requirements and AP capabilities.	option	-	percentage								
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Option	Description											
<i>dBm</i>	Set radio EIRP power in dBm.											
<i>percentage</i>	Set radio EIRP power by percentage.											
power-value	Radio EIRP power in dBm (1 - 33, default = 27).	integer	Minimum value: 1 Maximum value: 33	27								
vap-all	Configure method for assigning SSIDs to this FortiAP (default = automatically assign tunnel SSIDs).	option	-	tunnel								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>tunnel</i></td><td>Automatically select tunnel SSIDs.</td></tr><tr><td><i>bridge</i></td><td>Automatically select local-bridging SSIDs.</td></tr><tr><td><i>manual</i></td><td>Manually select SSIDs.</td></tr></table>	Option	Description	<i>tunnel</i>	Automatically select tunnel SSIDs.	<i>bridge</i>	Automatically select local-bridging SSIDs.	<i>manual</i>	Manually select SSIDs.			
Option	Description											
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<i>bridge</i>	Automatically select local-bridging SSIDs.											
<i>manual</i>	Manually select SSIDs.											
vaps <name>	Manually selected list of Virtual Access Points (VAPs). Virtual Access Point (VAP) name.	string	Maximum length: 35									

config split-tunneling-acl

Parameter	Description	Type	Size	Default
dest-ip	Destination IP and mask for the split-tunneling subnet.	ipv4-classnet	Not Specified	0.0.0.0 0.0.0.0
id	ID.	integer	Minimum value: 0 0 Maximum value: 4294967295	0

config wireless-controller wtp-group

Configure WTP groups.

```
config wireless-controller wtp-group
  Description: Configure WTP groups.
  edit <name>
    set ble-major-id {integer}
    set platform-type [AP-11N|220B|...]
    set wtps <wtp-id1>, <wtp-id2>, ...
  next
end
```

config wireless-controller wtp-group

Parameter	Description	Type	Size	Default								
ble-major-id	Override BLE Major ID.	integer	Minimum value: 0 Maximum value: 65535	0								
name	WTP group name.	string	Maximum length: 35									
platform-type	FortiAP models to define the WTP group platform type.	option	-									
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>AP-11N</td><td>Default 11n AP.</td></tr><tr><td>220B</td><td>FAP220B/221B.</td></tr><tr><td>210B</td><td>FAP210B.</td></tr></table>				Option	Description	AP-11N	Default 11n AP.	220B	FAP220B/221B.	210B	FAP210B.
Option	Description											
AP-11N	Default 11n AP.											
220B	FAP220B/221B.											
210B	FAP210B.											

Parameter	Description	Type	Size	Default
	Option	Description		
	222B	FAP222B.		
	112B	FAP112B.		
	320B	FAP320B.		
	11C	FAP11C.		
	14C	FAP14C.		
	223B	FAP223B.		
	28C	FAP28C.		
	320C	FAP320C.		
	221C	FAP221C.		
	25D	FAP25D.		
	222C	FAP222C.		
	224D	FAP224D.		
	214B	FK214B.		
	21D	FAP21D.		
	24D	FAP24D.		
	112D	FAP112D.		
	223C	FAP223C.		
	321C	FAP321C.		
	C220C	FAPC220C.		
	C225C	FAPC225C.		
	C23JD	FAPC23JD.		
	C24JE	FAPC24JE.		
	S321C	FAPS321C.		
	S322C	FAPS322C.		
	S323C	FAPS323C.		
	S311C	FAPS311C.		
	S313C	FAPS313C.		
	S321CR	FAPS321CR.		
	S322CR	FAPS322CR.		

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>S323CR</i>	FAPS323CR.		
	<i>S421E</i>	FAPS421E.		
	<i>S422E</i>	FAPS422E.		
	<i>S423E</i>	FAPS423E.		
	<i>421E</i>	FAP421E.		
	<i>423E</i>	FAP423E.		
	<i>221E</i>	FAP221E.		
	<i>222E</i>	FAP222E.		
	<i>223E</i>	FAP223E.		
	<i>224E</i>	FAP224E.		
	<i>231E</i>	FAP231E.		
	<i>S221E</i>	FAPS221E.		
	<i>S223E</i>	FAPS223E.		
	<i>321E</i>	FAP321E.		
	<i>431F</i>	FAP431F.		
	<i>431FL</i>	FAP431FL.		
	<i>432F</i>	FAP432F.		
	<i>432FR</i>	FAP432FR.		
	<i>433F</i>	FAP433F.		
	<i>433FL</i>	FAP433FL.		
	<i>231F</i>	FAP231F.		
	<i>231FL</i>	FAP231FL.		
	<i>234F</i>	FAP234F.		
	<i>23JF</i>	FAP23JF.		
	<i>831F</i>	FAP831F.		
	<i>231G</i>	FAP231G.		
	<i>233G</i>	FAP233G.		
	<i>234G</i>	FAP234G.		
	<i>431G</i>	FAP431G.		

Parameter	Description	Type	Size	Default																																				
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>432G</td><td>FAP432G.</td></tr><tr><td>433G</td><td>FAP433G.</td></tr><tr><td>U421E</td><td>FAPU421EV.</td></tr><tr><td>U422EV</td><td>FAPU422EV.</td></tr><tr><td>U423E</td><td>FAPU423EV.</td></tr><tr><td>U221EV</td><td>FAPU221EV.</td></tr><tr><td>U223EV</td><td>FAPU223EV.</td></tr><tr><td>U24JEV</td><td>FAPU24JEV.</td></tr><tr><td>U321EV</td><td>FAPU321EV.</td></tr><tr><td>U323EV</td><td>FAPU323EV.</td></tr><tr><td>U431F</td><td>FAPU431F.</td></tr><tr><td>U433F</td><td>FAPU433F.</td></tr><tr><td>U231F</td><td>FAPU231F.</td></tr><tr><td>U234F</td><td>FAPU234F.</td></tr><tr><td>U432F</td><td>FAPU432F.</td></tr><tr><td>U231G</td><td>FAPU231G.</td></tr><tr><td>U441G</td><td>FAPU441G.</td></tr></table>	Option	Description	432G	FAP432G.	433G	FAP433G.	U421E	FAPU421EV.	U422EV	FAPU422EV.	U423E	FAPU423EV.	U221EV	FAPU221EV.	U223EV	FAPU223EV.	U24JEV	FAPU24JEV.	U321EV	FAPU321EV.	U323EV	FAPU323EV.	U431F	FAPU431F.	U433F	FAPU433F.	U231F	FAPU231F.	U234F	FAPU234F.	U432F	FAPU432F.	U231G	FAPU231G.	U441G	FAPU441G.			
	Option	Description																																						
	432G	FAP432G.																																						
	433G	FAP433G.																																						
	U421E	FAPU421EV.																																						
	U422EV	FAPU422EV.																																						
	U423E	FAPU423EV.																																						
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	U234F	FAPU234F.																																						
	U432F	FAPU432F.																																						
	U231G	FAPU231G.																																						
U441G	FAPU441G.																																							
wtps <wtp-id>	WTP list. WTP ID.	string	Maximum length: 35																																					

config wireless-controller wtp-profile

Configure WTP profiles or FortiAP profiles that define radio settings for manageable FortiAP platforms.

```
config wireless-controller wtp-profile
  Description: Configure WTP profiles or FortiAP profiles that define radio settings for
manageable FortiAP platforms.
  edit <name>
    set allowaccess {option1}, {option2}, ...
    set ap-country [--|AF|...]
    set ap-handoff [enable|disable]
    set apcfg-profile {string}
    set ble-profile {string}
    set comment {var-string}
    set console-login [enable|disable]
```



```

set control-message-offload {option1}, {option2}, ...
config deny-mac-list
    Description: List of MAC addresses that are denied access to this WTP, FortiAP, or AP.
    edit <id>
        set mac {mac-address}
    next
end
set dtls-in-kernel [enable|disable]
set dtls-policy {option1}, {option2}, ...
set energy-efficient-ethernet [enable|disable]
config esl-ses-dongle
    Description: ESL SES-imagotag dongle configuration.
    set apc-addr-type [fqdn|ip]
    set apc-fqdn {string}
    set apc-ip {ipv4-address}
    set apc-port {integer}
    set coex-level {option}
    set compliance-level {option}
    set esl-channel [-1|0|...]
    set output-power [a|b|...]
    set scd-enable [enable|disable]
    set tls-cert-verification [enable|disable]
    set tls-fqdn-verification [enable|disable]
end
set ext-info-enable [enable|disable]
set frequency-handoff [enable|disable]
set handoff-roaming [enable|disable]
set handoff-rssi {integer}
set handoff-sta-thresh {integer}
set indoor-outdoor-deployment [platform-determined|outdoor|...]
set ip-fragment-preventing {option1}, {option2}, ...
config lan
    Description: WTP LAN port mapping.
    set port-esl-mode [offline|nat-to-wan|...]
    set port-esl-ssid {string}
    set port-mode [offline|nat-to-wan|...]
    set port-ssid {string}
    set port1-mode [offline|nat-to-wan|...]
    set port1-ssid {string}
    set port2-mode [offline|nat-to-wan|...]
    set port2-ssid {string}
    set port3-mode [offline|nat-to-wan|...]
    set port3-ssid {string}
    set port4-mode [offline|nat-to-wan|...]
    set port4-ssid {string}
    set port5-mode [offline|nat-to-wan|...]
    set port5-ssid {string}
    set port6-mode [offline|nat-to-wan|...]
    set port6-ssid {string}
    set port7-mode [offline|nat-to-wan|...]
    set port7-ssid {string}
    set port8-mode [offline|nat-to-wan|...]

```

```

    set port8-ssid {string}
end
config lbs
    Description: Set various location based service (LBS) options.
    set aeroscout [enable|disable]
    set aeroscout-ap-mac [bssid|board-mac]
    set aeroscout-mmu-report [enable|disable]
    set aeroscout-mu [enable|disable]
    set aeroscout-mu-factor {integer}
    set aeroscout-mu-timeout {integer}
    set aeroscout-server-ip {ipv4-address-any}
    set aeroscout-server-port {integer}
    set ekahau-blink-mode [enable|disable]
    set ekahau-tag {mac-address}
    set erc-server-ip {ipv4-address-any}
    set erc-server-port {integer}
    set fortipresence [foreign|both|...]
    set fortipresence-ble [enable|disable]
    set fortipresence-frequency {integer}
    set fortipresence-port {integer}
    set fortipresence-project {string}
    set fortipresence-rogue [enable|disable]
    set fortipresence-secret {password}
    set fortipresence-server {ipv4-address-any}
    set fortipresence-server-addr-type [ipv4|fqdn]
    set fortipresence-server-fqdn {string}
    set fortipresence-unassoc [enable|disable]
    set station-locate [enable|disable]
end
set led-schedules <name1>, <name2>, ...
set led-state [enable|disable]
set lldp [enable|disable]
set login-passwd {password}
set login-passwd-change [yes|default|...]
set max-clients {integer}
config platform
    Description: WTP, FortiAP, or AP platform.
    set ddscan [enable|disable]
    set mode [single-5G|dual-5G]
    set type [AP-11N|220B|...]
end
set poe-mode [auto|8023af|...]
config radio-1
    Description: Configuration options for radio 1.
    set 80211d [enable|disable]
    set airtime-fairness [enable|disable]
    set amsdu [enable|disable]
    set ap-sniffer-addr {mac-address}
    set ap-sniffer-bufsize {integer}
    set ap-sniffer-chan {integer}
    set ap-sniffer-ctl [enable|disable]
    set ap-sniffer-data [enable|disable]

```

```
set ap-sniffer-mgmt-beacon [enable|disable]
set ap-sniffer-mgmt-other [enable|disable]
set ap-sniffer-mgmt-probe [enable|disable]
set arp-profile {string}
set auto-power-high {integer}
set auto-power-level [enable|disable]
set auto-power-low {integer}
set auto-power-target {string}
set band [802.11a|802.11b|...]
set band-5g-type [5g-full|5g-high|...]
set bandwidth-admission-control [enable|disable]
set bandwidth-capacity {integer}
set beacon-interval {integer}
set bss-color {integer}
set bss-color-mode [auto|static]
set call-admission-control [enable|disable]
set call-capacity {integer}
set channel <chan1>, <chan2>, ...
set channel-bonding [160MHz|80MHz|...]
set channel-utilization [enable|disable]
set coexistence [enable|disable]
set darrp [enable|disable]
set drma [disable|enable]
set drma-sensitivity [low|medium|...]
set dtim {integer}
set frag-threshold {integer}
set iperf-protocol [udp|tcp]
set iperf-server-port {integer}
set max-clients {integer}
set max-distance {integer}
set mode [disabled|ap|...]
set optional-antenna [none|FANT-04ABGN-0606-O-N|...]
set power-level {integer}
set power-mode [dBm|percentage]
set power-value {integer}
set powersave-optimize {option1}, {option2}, ...
set protection-mode [rtscts|ctsonly|...]
set rts-threshold {integer}
set sam-bssid {mac-address}
set sam-captive-portal [enable|disable]
set sam-cwp-failure-string {string}
set sam-cwp-match-string {string}
set sam-cwp-password {password}
set sam-cwp-success-string {string}
set sam-cwp-test-url {string}
set sam-cwp-username {string}
set sam-password {password}
set sam-report-intv {integer}
set sam-security-type [open|wpa-personal|...]
set sam-server-fqdn {string}
set sam-server-ip {ipv4-address}
set sam-server-type [ip|fqdn]
```

```

set sam-ssid {string}
set sam-test [ping|iperf]
set sam-username {string}
set short-guard-interval [enable|disable]
set transmit-optimize {option1}, {option2}, ...
set vap-all [tunnel|bridge|...]
set vaps <name1>, <name2>, ...
set wids-profile {string}
set zero-wait-dfs [enable|disable]
end
config radio-2
  Description: Configuration options for radio 2.
  set 80211d [enable|disable]
  set airtime-fairness [enable|disable]
  set amsdu [enable|disable]
  set ap-sniffer-addr {mac-address}
  set ap-sniffer-bufsize {integer}
  set ap-sniffer-chan {integer}
  set ap-sniffer-ctl [enable|disable]
  set ap-sniffer-data [enable|disable]
  set ap-sniffer-mgmt-beacon [enable|disable]
  set ap-sniffer-mgmt-other [enable|disable]
  set ap-sniffer-mgmt-probe [enable|disable]
  set arnp-profile {string}
  set auto-power-high {integer}
  set auto-power-level [enable|disable]
  set auto-power-low {integer}
  set auto-power-target {string}
  set band [802.11a|802.11b|...]
  set band-5g-type [5g-full|5g-high|...]
  set bandwidth-admission-control [enable|disable]
  set bandwidth-capacity {integer}
  set beacon-interval {integer}
  set bss-color {integer}
  set bss-color-mode [auto|static]
  set call-admission-control [enable|disable]
  set call-capacity {integer}
  set channel <chan1>, <chan2>, ...
  set channel-bonding [160MHz|80MHz|...]
  set channel-utilization [enable|disable]
  set coexistence [enable|disable]
  set darrp [enable|disable]
  set drma [disable|enable]
  set drma-sensitivity [low|medium|...]
  set dtim {integer}
  set frag-threshold {integer}
  set iperf-protocol [udp|tcp]
  set iperf-server-port {integer}
  set max-clients {integer}
  set max-distance {integer}
  set mode [disabled|ap|...]
  set optional-antenna [none|FANT-04ABGN-0606-O-N|...]

```

```

set power-level {integer}
set power-mode [dBm|percentage]
set power-value {integer}
set powersave-optimize {option1}, {option2}, ...
set protection-mode [rtscts|ctsonly|...]
set rts-threshold {integer}
set sam-bssid {mac-address}
set sam-captive-portal [enable|disable]
set sam-cwp-failure-string {string}
set sam-cwp-match-string {string}
set sam-cwp-password {password}
set sam-cwp-success-string {string}
set sam-cwp-test-url {string}
set sam-cwp-username {string}
set sam-password {password}
set sam-report-intv {integer}
set sam-security-type [open|wpa-personal|...]
set sam-server-fqdn {string}
set sam-server-ip {ipv4-address}
set sam-server-type [ip|fqdn]
set sam-ssid {string}
set sam-test [ping|iperf]
set sam-username {string}
set short-guard-interval [enable|disable]
set transmit-optimize {option1}, {option2}, ...
set vap-all [tunnel|bridge|...]
set vaps <name1>, <name2>, ...
set wids-profile {string}
set zero-wait-dfs [enable|disable]
end
config radio-3
  Description: Configuration options for radio 3.
  set 80211d [enable|disable]
  set airtime-fairness [enable|disable]
  set amsdu [enable|disable]
  set ap-sniffer-addr {mac-address}
  set ap-sniffer-bufsize {integer}
  set ap-sniffer-chan {integer}
  set ap-sniffer-ctl [enable|disable]
  set ap-sniffer-data [enable|disable]
  set ap-sniffer-mgmt-beacon [enable|disable]
  set ap-sniffer-mgmt-other [enable|disable]
  set ap-sniffer-mgmt-probe [enable|disable]
  set arrp-profile {string}
  set auto-power-high {integer}
  set auto-power-level [enable|disable]
  set auto-power-low {integer}
  set auto-power-target {string}
  set band [802.11a|802.11b|...]
  set band-5g-type [5g-full|5g-high|...]
  set bandwidth-admission-control [enable|disable]
  set bandwidth-capacity {integer}

```

```

set beacon-interval {integer}
set bss-color {integer}
set bss-color-mode [auto|static]
set call-admission-control [enable|disable]
set call-capacity {integer}
set channel <chan1>, <chan2>, ...
set channel-bonding [160MHz|80MHz|...]
set channel-utilization [enable|disable]
set coexistence [enable|disable]
set darrp [enable|disable]
set drma [disable|enable]
set drma-sensitivity [low|medium|...]
set dtim {integer}
set frag-threshold {integer}
set iperf-protocol [udp|tcp]
set iperf-server-port {integer}
set max-clients {integer}
set max-distance {integer}
set mode [disabled|ap|...]
set optional-antenna [none|FANT-04ABGN-0606-O-N|...]
set power-level {integer}
set power-mode [dBm|percentage]
set power-value {integer}
set powersave-optimize {option1}, {option2}, ...
set protection-mode [rtscts|ctsonly|...]
set rts-threshold {integer}
set sam-bssid {mac-address}
set sam-captive-portal [enable|disable]
set sam-cwp-failure-string {string}
set sam-cwp-match-string {string}
set sam-cwp-password {password}
set sam-cwp-success-string {string}
set sam-cwp-test-url {string}
set sam-cwp-username {string}
set sam-password {password}
set sam-report-intv {integer}
set sam-security-type [open|wpa-personal|...]
set sam-server-fqdn {string}
set sam-server-ip {ipv4-address}
set sam-server-type [ip|fqdn]
set sam-ssid {string}
set sam-test [ping|iperf]
set sam-username {string}
set short-guard-interval [enable|disable]
set transmit-optimize {option1}, {option2}, ...
set vap-all [tunnel|bridge|...]
set vaps <name1>, <name2>, ...
set wids-profile {string}
set zero-wait-dfs [enable|disable]
end
config radio-4
    Description: Configuration options for radio 4.

```

```
set 80211d [enable|disable]
set airtime-fairness [enable|disable]
set amsdu [enable|disable]
set ap-sniffer-addr {mac-address}
set ap-sniffer-bufsize {integer}
set ap-sniffer-chan {integer}
set ap-sniffer-ctl [enable|disable]
set ap-sniffer-data [enable|disable]
set ap-sniffer-mgmt-beacon [enable|disable]
set ap-sniffer-mgmt-other [enable|disable]
set ap-sniffer-mgmt-probe [enable|disable]
set arrp-profile {string}
set auto-power-high {integer}
set auto-power-level [enable|disable]
set auto-power-low {integer}
set auto-power-target {string}
set band [802.11a|802.11b|...]
set band-5g-type [5g-full|5g-high|...]
set bandwidth-admission-control [enable|disable]
set bandwidth-capacity {integer}
set beacon-interval {integer}
set bss-color {integer}
set bss-color-mode [auto|static]
set call-admission-control [enable|disable]
set call-capacity {integer}
set channel <chan1>, <chan2>, ...
set channel-bonding [160MHz|80MHz|...]
set channel-utilization [enable|disable]
set coexistence [enable|disable]
set darrp [enable|disable]
set drma [disable|enable]
set drma-sensitivity [low|medium|...]
set dtim {integer}
set frag-threshold {integer}
set iperf-protocol [udp|tcp]
set iperf-server-port {integer}
set max-clients {integer}
set max-distance {integer}
set mode [disabled|ap|...]
set optional-antenna [none|FANT-04ABGN-0606-O-N|...]
set power-level {integer}
set power-mode [dBm|percentage]
set power-value {integer}
set powersave-optimize {option1}, {option2}, ...
set protection-mode [rtscts|ctsonly|...]
set rts-threshold {integer}
set sam-bssid {mac-address}
set sam-captive-portal [enable|disable]
set sam-cwp-failure-string {string}
set sam-cwp-match-string {string}
set sam-cwp-password {password}
set sam-cwp-success-string {string}
```

```

set sam-cwp-test-url {string}
set sam-cwp-username {string}
set sam-password {password}
set sam-report-intv {integer}
set sam-security-type [open|wpa-personal|...]
set sam-server-fqdn {string}
set sam-server-ip {ipv4-address}
set sam-server-type [ip|fqdn]
set sam-ssid {string}
set sam-test [ping|iperf]
set sam-username {string}
set short-guard-interval [enable|disable]
set transmit-optimize {option1}, {option2}, ...
set vap-all [tunnel|bridge|...]
set vaps <name1>, <name2>, ...
set wids-profile {string}
set zero-wait-dfs [enable|disable]
end
config split-tunneling-acl
  Description: Split tunneling ACL filter list.
  edit <id>
    set dest-ip {ipv4-classnet}
  next
end
set split-tunneling-acl-local-ap-subnet [enable|disable]
set split-tunneling-acl-path [tunnel|local]
set syslog-profile {string}
set tun-mtu-downlink {integer}
set tun-mtu-uplink {integer}
set wan-port-auth [none|802.1x]
set wan-port-auth-methods [all|EAP-FAST|...]
set wan-port-auth-password {password}
set wan-port-auth-usrname {string}
set wan-port-mode [wan-lan|wan-only]
next
end

```

config wireless-controller wtp-profile

Parameter	Description	Type	Size	Default						
allowaccess	Control management access to the managed WTP, FortiAP, or AP. Separate entries with a space.	option	-							
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>https</td><td>HTTPS access.</td></tr><tr><td>ssh</td><td>SSH access.</td></tr></table>	Option	Description	https	HTTPS access.	ssh	SSH access.			
Option	Description									
https	HTTPS access.									
ssh	SSH access.									

Parameter	Description	Type	Size	Default

Option	Description
<i>snmp</i>	SNMP access.

ap-country	Country in which this WTP, FortiAP, or AP will operate (default = NA, automatically use the country configured for the current VDOM).	option	-	--

Option	Description
--	NO_COUNTRY_SET
AF	AFGHANISTAN
AL	ALBANIA
DZ	ALGERIA
AS	AMERICAN SAMOA
AO	ANGOLA
AR	ARGENTINA
AM	ARMENIA
AU	AUSTRALIA
AT	AUSTRIA
AZ	AZERBAIJAN
BS	BAHAMAS
BH	BAHRAIN
BD	BANGLADESH
BB	BARBADOS
BY	BELARUS
BE	BELGIUM
BZ	BELIZE
BJ	BENIN
BM	BERMUDA
BT	BHUTAN
BO	BOLIVIA
BA	BOSNIA AND HERZEGOVINA
BW	BOTSWANA

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>BR</i>	BRAZIL		
	<i>BN</i>	BRUNEI DARUSSALAM		
	<i>BG</i>	BULGARIA		
	<i>BF</i>	BURKINA-FASO		
	<i>KH</i>	CAMBODIA		
	<i>CM</i>	CAMEROON		
	<i>KY</i>	CAYMAN ISLANDS		
	<i>CF</i>	CENTRAL AFRICA REPUBLIC		
	<i>TD</i>	CHAD		
	<i>CL</i>	CHILE		
	<i>CN</i>	CHINA		
	<i>CX</i>	CHRISTMAS ISLAND		
	<i>CO</i>	COLOMBIA		
	<i>CG</i>	CONGO REPUBLIC		
	<i>CD</i>	DEMOCRATIC REPUBLIC OF CONGO		
	<i>CR</i>	COSTA RICA		
	<i>HR</i>	CROATIA		
	<i>CY</i>	CYPRUS		
	<i>CZ</i>	CZECH REPUBLIC		
	<i>DK</i>	DENMARK		
	<i>DJ</i>	DJIBOUTI		
	<i>DM</i>	DOMINICA		
	<i>DO</i>	DOMINICAN REPUBLIC		
	<i>EC</i>	ECUADOR		
	<i>EG</i>	EGYPT		
	<i>SV</i>	EL SALVADOR		
	<i>ET</i>	ETHIOPIA		
	<i>EE</i>	ESTONIA		
	<i>GF</i>	FRENCH GUIANA		

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>PF</i>	FRENCH POLYNESIA		
	<i>FO</i>	FAEROE ISLANDS		
	<i>FJ</i>	FIJI		
	<i>FI</i>	FINLAND		
	<i>FR</i>	FRANCE		
	<i>GA</i>	GABON		
	<i>GE</i>	GEORGIA		
	<i>GM</i>	GAMBIA		
	<i>DE</i>	GERMANY		
	<i>GH</i>	GHANA		
	<i>GI</i>	GIBRALTAR		
	<i>GR</i>	GREECE		
	<i>GL</i>	GREENLAND		
	<i>GD</i>	GRENADA		
	<i>GP</i>	GUADELOUPE		
	<i>GU</i>	GUAM		
	<i>GT</i>	GUATEMALA		
	<i>GY</i>	GUYANA		
	<i>HT</i>	HAITI		
	<i>HN</i>	HONDURAS		
	<i>HK</i>	HONG KONG		
	<i>HU</i>	HUNGARY		
	<i>IS</i>	ICELAND		
	<i>IN</i>	INDIA		
	<i>ID</i>	INDONESIA		
	<i>IQ</i>	IRAQ		
	<i>IE</i>	IRELAND		
	<i>IM</i>	ISLE OF MAN		
	<i>IL</i>	ISRAEL		

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>IT</i>	ITALY		
	<i>CI</i>	COTE_D_IVOIRE		
	<i>JM</i>	JAMAICA		
	<i>JO</i>	JORDAN		
	<i>KZ</i>	KAZAKHSTAN		
	<i>KE</i>	KENYA		
	<i>KR</i>	KOREA REPUBLIC		
	<i>KW</i>	KUWAIT		
	<i>LA</i>	LAOS		
	<i>LV</i>	LATVIA		
	<i>LB</i>	LEBANON		
	<i>LS</i>	LESOTHO		
	<i>LR</i>	LIBERIA		
	<i>LY</i>	LIBYA		
	<i>LI</i>	LIECHTENSTEIN		
	<i>LT</i>	LITHUANIA		
	<i>LU</i>	LUXEMBOURG		
	<i>MO</i>	MACAU SAR		
	<i>MK</i>	MACEDONIA, FYRO		
	<i>MG</i>	MADAGASCAR		
	<i>MW</i>	MALAWI		
	<i>MY</i>	MALAYSIA		
	<i>MV</i>	MALDIVES		
	<i>ML</i>	MALI		
	<i>MT</i>	MALTA		
	<i>MH</i>	MARSHALL ISLANDS		
	<i>MQ</i>	MARTINIQUE		
	<i>MR</i>	MAURITANIA		
	<i>MU</i>	MAURITIUS		

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>YT</i>	MAYOTTE		
	<i>MX</i>	MEXICO		
	<i>FM</i>	MICRONESIA		
	<i>MD</i>	REPUBLIC OF MOLDOVA		
	<i>MC</i>	MONACO		
	<i>MN</i>	MONGOLIA		
	<i>MA</i>	MOROCCO		
	<i>MZ</i>	MOZAMBIQUE		
	<i>MM</i>	MYANMAR		
	<i>NA</i>	NAMIBIA		
	<i>NP</i>	NEPAL		
	<i>NL</i>	NETHERLANDS		
	<i>AN</i>	NETHERLANDS ANTILLES		
	<i>AW</i>	ARUBA		
	<i>NZ</i>	NEW ZEALAND		
	<i>NI</i>	NICARAGUA		
	<i>NE</i>	NIGER		
	<i>NG</i>	NIGERIA		
	<i>NO</i>	NORWAY		
	<i>MP</i>	NORTHERN MARIANA ISLANDS		
	<i>OM</i>	OMAN		
	<i>PK</i>	PAKISTAN		
	<i>PW</i>	PALAU		
	<i>PA</i>	PANAMA		
	<i>PG</i>	PAPUA NEW GUINEA		
	<i>PY</i>	PARAGUAY		
	<i>PE</i>	PERU		
	<i>PH</i>	PHILIPPINES		
	<i>PL</i>	POLAND		

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>PT</i>	PORTUGAL		
	<i>PR</i>	PUERTO RICO		
	<i>QA</i>	QATAR		
	<i>RE</i>	REUNION		
	<i>RO</i>	ROMANIA		
	<i>RU</i>	RUSSIA		
	<i>RW</i>	RWANDA		
	<i>BL</i>	SAINT BARTHELEMY		
	<i>KN</i>	SAINT KITTS AND NEVIS		
	<i>LC</i>	SAINT LUCIA		
	<i>MF</i>	SAINT MARTIN		
	<i>PM</i>	SAINT PIERRE AND MIQUELON		
	<i>VC</i>	SAINT VINCENT AND GRENADIENS		
	<i>SA</i>	SAUDI ARABIA		
	<i>SN</i>	SENEGAL		
	<i>RS</i>	REPUBLIC OF SERBIA		
	<i>ME</i>	MONTENEGRO		
	<i>SL</i>	SIERRA LEONE		
	<i>SG</i>	SINGAPORE		
	<i>SK</i>	SLOVAKIA		
	<i>SI</i>	SLOVENIA		
	<i>SO</i>	SOMALIA		
	<i>ZA</i>	SOUTH AFRICA		
	<i>ES</i>	SPAIN		
	<i>LK</i>	SRI LANKA		
	<i>SR</i>	SURINAME		
	<i>SZ</i>	SWAZILAND		
	<i>SE</i>	SWEDEN		
	<i>CH</i>	SWITZERLAND		

Parameter	Description	Type	Size	Default																																																								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>TW</td><td>TAIWAN</td></tr><tr><td>TZ</td><td>TANZANIA</td></tr><tr><td>TH</td><td>THAILAND</td></tr><tr><td>TG</td><td>TOGO</td></tr><tr><td>TT</td><td>TRINIDAD AND TOBAGO</td></tr><tr><td>TN</td><td>TUNISIA</td></tr><tr><td>TR</td><td>TURKEY</td></tr><tr><td>TM</td><td>TURKMENISTAN</td></tr><tr><td>AE</td><td>UNITED ARAB EMIRATES</td></tr><tr><td>TC</td><td>TURKS AND CAICOS</td></tr><tr><td>UG</td><td>UGANDA</td></tr><tr><td>UA</td><td>UKRAINE</td></tr><tr><td>GB</td><td>UNITED KINGDOM</td></tr><tr><td>US</td><td>UNITED STATES2</td></tr><tr><td>PS</td><td>UNITED STATES (PUBLIC SAFETY)</td></tr><tr><td>UY</td><td>URUGUAY</td></tr><tr><td>UZ</td><td>UZBEKISTAN</td></tr><tr><td>VU</td><td>VANUATU</td></tr><tr><td>VE</td><td>VENEZUELA</td></tr><tr><td>VN</td><td>VIET NAM</td></tr><tr><td>VI</td><td>VIRGIN ISLANDS</td></tr><tr><td>WF</td><td>WALLIS AND FUTUNA</td></tr><tr><td>YE</td><td>YEMEN</td></tr><tr><td>ZM</td><td>ZAMBIA</td></tr><tr><td>ZW</td><td>ZIMBABWE</td></tr><tr><td>JP</td><td>JAPAN14</td></tr><tr><td>CA</td><td>CANADA2</td></tr></table>	Option	Description	TW	TAIWAN	TZ	TANZANIA	TH	THAILAND	TG	TOGO	TT	TRINIDAD AND TOBAGO	TN	TUNISIA	TR	TURKEY	TM	TURKMENISTAN	AE	UNITED ARAB EMIRATES	TC	TURKS AND CAICOS	UG	UGANDA	UA	UKRAINE	GB	UNITED KINGDOM	US	UNITED STATES2	PS	UNITED STATES (PUBLIC SAFETY)	UY	URUGUAY	UZ	UZBEKISTAN	VU	VANUATU	VE	VENEZUELA	VN	VIET NAM	VI	VIRGIN ISLANDS	WF	WALLIS AND FUTUNA	YE	YEMEN	ZM	ZAMBIA	ZW	ZIMBABWE	JP	JAPAN14	CA	CANADA2			
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	ap-handoff	Enable/disable AP handoff of clients to other APs (default = disable).	option	-	disable																																																							

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>enable</i>	Enable AP handoff.		
	<i>disable</i>	Disable AP handoff.		
apcfg-profile	AP local configuration profile name.	string	Maximum length: 35	
ble-profile	Bluetooth Low Energy profile name.	string	Maximum length: 35	
comment	Comment.	var-string	Maximum length: 255	
console-login	Enable/disable FortiAP console login access (default = enable).	option	-	enable
	Option	Description		
	<i>enable</i>	Enable FAP console login access.		
	<i>disable</i>	Disable FAP console login access.		
control-message-offload	Enable/disable CAPWAP control message data channel offload.	option	-	ebp-frame aeroscout-tag ap-list sta-list sta-cap-list stats aeroscout-mu sta-health spectral-analysis
	Option	Description		
	<i>ebp-frame</i>	Ekahau blink protocol (EBP) frames.		
	<i>aeroscout-tag</i>	AeroScout tag.		
	<i>ap-list</i>	Rogue AP list.		
	<i>sta-list</i>	Rogue STA list.		
	<i>sta-cap-list</i>	STA capability list.		
	<i>stats</i>	WTP, radio, VAP, and STA statistics.		
	<i>aeroscout-mu</i>	AeroScout Mobile Unit (MU) report.		
	<i>sta-health</i>	STA health log.		
<i>spectral-analysis</i>	Spectral analysis report.			

Parameter	Description	Type	Size	Default								
dtls-in-kernel	Enable/disable data channel DTLS in kernel.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable data channel DTLS in kernel.</td></tr><tr><td><i>disable</i></td><td>Disable data channel DTLS in kernel.</td></tr></table>	Option	Description	<i>enable</i>	Enable data channel DTLS in kernel.	<i>disable</i>	Disable data channel DTLS in kernel.					
Option	Description											
<i>enable</i>	Enable data channel DTLS in kernel.											
<i>disable</i>	Disable data channel DTLS in kernel.											
dtls-policy	WTP data channel DTLS policy (default = clear-text).	option	-	clear-text								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>clear-text</i></td><td>Clear Text Data Channel.</td></tr><tr><td><i>dtls-enabled</i></td><td>DTLS Enabled Data Channel.</td></tr><tr><td><i>ipsec-vpn</i></td><td>IPsec VPN Data Channel.</td></tr></table>	Option	Description	<i>clear-text</i>	Clear Text Data Channel.	<i>dtls-enabled</i>	DTLS Enabled Data Channel.	<i>ipsec-vpn</i>	IPsec VPN Data Channel.			
Option	Description											
<i>clear-text</i>	Clear Text Data Channel.											
<i>dtls-enabled</i>	DTLS Enabled Data Channel.											
<i>ipsec-vpn</i>	IPsec VPN Data Channel.											
energy-efficient-ethernet	Enable/disable use of energy efficient Ethernet on WTP.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable use of energy efficient Ethernet on WTP.</td></tr><tr><td><i>disable</i></td><td>Disable use of energy efficient Ethernet on WTP.</td></tr></table>	Option	Description	<i>enable</i>	Enable use of energy efficient Ethernet on WTP.	<i>disable</i>	Disable use of energy efficient Ethernet on WTP.					
Option	Description											
<i>enable</i>	Enable use of energy efficient Ethernet on WTP.											
<i>disable</i>	Disable use of energy efficient Ethernet on WTP.											
ext-info-enable	Enable/disable station/VAP/radio extension information.	option	-	enable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable station/VAP/radio extension information.</td></tr><tr><td><i>disable</i></td><td>Disable station/VAP/radio extension information.</td></tr></table>	Option	Description	<i>enable</i>	Enable station/VAP/radio extension information.	<i>disable</i>	Disable station/VAP/radio extension information.					
Option	Description											
<i>enable</i>	Enable station/VAP/radio extension information.											
<i>disable</i>	Disable station/VAP/radio extension information.											
frequency-handoff	Enable/disable frequency handoff of clients to other channels (default = disable).	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable frequency handoff.</td></tr><tr><td><i>disable</i></td><td>Disable frequency handoff.</td></tr></table>	Option	Description	<i>enable</i>	Enable frequency handoff.	<i>disable</i>	Disable frequency handoff.					
Option	Description											
<i>enable</i>	Enable frequency handoff.											
<i>disable</i>	Disable frequency handoff.											
handoff-roaming	Enable/disable client load balancing during roaming to avoid roaming delay (default = disable).	option	-	enable								

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>enable</i>	Enable handoff roaming.		
	<i>disable</i>	Disable handoff roaming.		
handoff-rssi	Minimum received signal strength indicator (RSSI) value for handoff (20 - 30, default = 25).	integer	Minimum value: 20 Maximum value: 30	25
handoff-sta-thresh	Threshold value for AP handoff.	integer	Minimum value: 5 Maximum value: 60	0
indoor-outdoor-deployment	Set to allow indoor/outdoor-only channels under regulatory rules (default = platform-determined).	option	-	platform-determined
	Option	Description		
	<i>platform-determined</i>	Set AP deployment type based on its platform.		
	<i>outdoor</i>	Set AP deployment type to outdoor.		
	<i>indoor</i>	Set AP deployment type to indoor.		
ip-fragment-preventing	Method(s) by which IP fragmentation is prevented for control and data packets through CAPWAP tunnel (default = tcp-mss-adjust).	option	-	tcp-mss-adjust
	Option	Description		
	<i>tcp-mss-adjust</i>	TCP maximum segment size adjustment.		
	<i>icmp-unreachable</i>	Drop packet and send ICMP Destination Unreachable		
led-schedules <name>	Recurring firewall schedules for illuminating LEDs on the FortiAP. If led-state is enabled, LEDs will be visible when at least one of the schedules is valid. Separate multiple schedule names with a space. Schedule name.	string	Maximum length: 35	
led-state	Enable/disable use of LEDs on WTP (default = disable).	option	-	enable

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>enable</i>	Enable use of LEDs on WTP.		
	<i>disable</i>	Disable use of LEDs on WTP.		
lldp	Enable/disable Link Layer Discovery Protocol (LLDP) for the WTP, FortiAP, or AP (default = enable).	option	-	enable
	Option	Description		
	<i>enable</i>	Enable LLDP.		
	<i>disable</i>	Disable LLDP.		
login-passwd	Set the managed WTP, FortiAP, or AP's administrator password.	password	Not Specified	
login-passwd-change	Change or reset the administrator password of a managed WTP, FortiAP or AP (yes, default, or no, default = no).	option	-	no
	Option	Description		
	<i>yes</i>	Change the managed WTP, FortiAP or AP's administrator password. Use the login-password option to set the password.		
	<i>default</i>	Keep the managed WTP, FortiAP or AP's administrator password set to the factory default.		
	<i>no</i>	Do not change the managed WTP, FortiAP or AP's administrator password.		
max-clients	Maximum number of stations (STAs) supported by the WTP (default = 0, meaning no client limitation).	integer	Minimum value: 0 Maximum value: 4294967295	
name	WTP (or FortiAP or AP) profile name.	string	Maximum length: 35	
poe-mode	Set the WTP, FortiAP, or AP's PoE mode.	option	-	auto
	Option	Description		
	<i>auto</i>	Automatically detect the PoE mode.		
	<i>8023af</i>	Use 802.3af PoE mode.		
	<i>8023at</i>	Use 802.3at PoE mode.		

Parameter	Description	Type	Size	Default										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>power-adapter</i></td><td>Use the power adapter to control the PoE mode.</td></tr><tr><td><i>full</i></td><td>Use full power mode.</td></tr><tr><td><i>high</i></td><td>Use high power mode.</td></tr><tr><td><i>low</i></td><td>Use low power mode.</td></tr></table>	Option	Description	<i>power-adapter</i>	Use the power adapter to control the PoE mode.	<i>full</i>	Use full power mode.	<i>high</i>	Use high power mode.	<i>low</i>	Use low power mode.			
	Option	Description												
	<i>power-adapter</i>	Use the power adapter to control the PoE mode.												
	<i>full</i>	Use full power mode.												
	<i>high</i>	Use high power mode.												
<i>low</i>	Use low power mode.													
split-tunneling-acl-local-ap-subnet	Enable/disable automatically adding local subnetwork of FortiAP to split-tunneling ACL (default = disable).	option	-	disable										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable automatically adding local subnetwork of FortiAP to split-tunneling ACL.</td></tr><tr><td><i>disable</i></td><td>Disable automatically adding local subnetwork of FortiAP to split-tunneling ACL.</td></tr></table>	Option	Description	<i>enable</i>	Enable automatically adding local subnetwork of FortiAP to split-tunneling ACL.	<i>disable</i>	Disable automatically adding local subnetwork of FortiAP to split-tunneling ACL.							
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	<i>enable</i>	Enable automatically adding local subnetwork of FortiAP to split-tunneling ACL.												
<i>disable</i>	Disable automatically adding local subnetwork of FortiAP to split-tunneling ACL.													
split-tunneling-acl-path	Split tunneling ACL path is local/tunnel.	option	-	local										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>tunnel</i></td><td>Split tunneling ACL list traffic will be tunnel.</td></tr><tr><td><i>local</i></td><td>Split tunneling ACL list traffic will be local NATed.</td></tr></table>	Option	Description	<i>tunnel</i>	Split tunneling ACL list traffic will be tunnel.	<i>local</i>	Split tunneling ACL list traffic will be local NATed.							
	Option	Description												
	<i>tunnel</i>	Split tunneling ACL list traffic will be tunnel.												
<i>local</i>	Split tunneling ACL list traffic will be local NATed.													
syslog-profile	System log server configuration profile name.	string	Maximum length: 35											
tun-mtu-downlink	The MTU of downlink CAPWAP tunnel (576 - 1500 bytes or 0; 0 means the local MTU of FortiAP; default = 0).	integer	Minimum value: 0 576 Maximum value: 1500											
tun-mtu-uplink	The maximum transmission unit (MTU) of uplink CAPWAP tunnel (576 - 1500 bytes or 0; 0 means the local MTU of FortiAP; default = 0).	integer	Minimum value: 0 576 Maximum value: 1500											
wan-port-auth	Set WAN port authentication mode (default = none).	option	-	none										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>none</i></td><td>Disable WAN port authentication.</td></tr><tr><td><i>802.1x</i></td><td>Enable WAN port 802.1x authentication.</td></tr></table>	Option	Description	<i>none</i>	Disable WAN port authentication.	<i>802.1x</i>	Enable WAN port 802.1x authentication.							
	Option	Description												
	<i>none</i>	Disable WAN port authentication.												
<i>802.1x</i>	Enable WAN port 802.1x authentication.													

Parameter	Description	Type	Size	Default
wan-port-auth-methods	WAN port 802.1x supplicant EAP methods (default = all).	option	-	all
	Option	Description		
	<i>all</i>	Do not specify any EAP methods.		
	<i>EAP-FAST</i>	Enable EAP-FAST.		
	<i>EAP-TLS</i>	Enable EAP-TLS.		
	<i>EAP-PEAP</i>	Enable EAP-PEAP.		
wan-port-auth-password	Set WAN port 802.1x supplicant password.	password	Not Specified	
wan-port-auth-username	Set WAN port 802.1x supplicant user name.	string	Maximum length: 63	
wan-port-mode	Enable/disable using a WAN port as a LAN port.	option	-	wan-only
	Option	Description		
	<i>wan-lan</i>	Enable using a WAN port as a LAN port.		
	<i>wan-only</i>	Disable using a WAN port as a LAN port.		

config deny-mac-list

Parameter	Description	Type	Size	Default
id	ID.	integer	Minimum value: 0 Maximum value: 4294967295	0
mac	A WiFi device with this MAC address is denied access to this WTP, FortiAP or AP.	mac-address	Not Specified	00:00:00:00:00:00

config esl-ses-dongle

Parameter	Description	Type	Size	Default
apc-addr-type	ESL SES-imagotag APC address type (default = fqdn).	option	-	fqdn

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>fqdn</i>	Fully Qualified Domain Name address.		
	<i>ip</i>	IPv4 address.		
apc-fqdn	FQDN of ESL SES-imagotag Access Point Controller (APC).	string	Maximum length: 63	
apc-ip	IP address of ESL SES-imagotag Access Point Controller (APC).	ipv4-address	Not Specified	0.0.0.0
apc-port	Port of ESL SES-imagotag Access Point Controller (APC).	integer	Minimum value: 0 Maximum value: 65535	0
coex-level	ESL SES-imagotag dongle coexistence level (default = none).	option	-	none
	Option	Description		
	<i>none</i>	No support for coexistence of USB-Dongle with WiFi AP.		
compliance-level	Compliance levels for the ESL solution integration (default = compliance-level-2).	option	-	compliance-level-2
	Option	Description		
	<i>compliance-level-2</i>	Compliance Level 2 - Full Cloud Support, IoT and Fast-Response.		
esl-channel	ESL SES-imagotag dongle channel (default = 127).	option	-	127
	Option	Description		
	-1	No esl-channel is set.		
	0	ESL channel 0.		
	1	ESL channel 1.		
	2	ESL channel 2.		
	3	ESL channel 3.		
	4	ESL channel 4.		
	5	ESL channel 5.		
	6	ESL channel 6.		

Parameter	Description	Type	Size	Default																		
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>7</td><td>ESL channel 7.</td></tr><tr><td>8</td><td>ESL channel 8.</td></tr><tr><td>9</td><td>ESL channel 9.</td></tr><tr><td>10</td><td>ESL channel 10.</td></tr><tr><td>127</td><td>Managed channel enabled, indicates that the APC (server) is setting the esl-channel via the slot channel</td></tr></table>	Option	Description	7	ESL channel 7.	8	ESL channel 8.	9	ESL channel 9.	10	ESL channel 10.	127	Managed channel enabled, indicates that the APC (server) is setting the esl-channel via the slot channel									
	Option	Description																				
	7	ESL channel 7.																				
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	10	ESL channel 10.																				
127	Managed channel enabled, indicates that the APC (server) is setting the esl-channel via the slot channel																					
output-power	ESL SES-imagotag dongle output power (default = A).	option	-	a																		
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>a</td><td>About 15mW.</td></tr><tr><td>b</td><td>About 7mW.</td></tr><tr><td>c</td><td>About 5mW.</td></tr><tr><td>d</td><td>About 1mW.</td></tr><tr><td>e</td><td>About 13mW.</td></tr><tr><td>f</td><td>About 10mW.</td></tr><tr><td>g</td><td>About 3mW.</td></tr><tr><td>h</td><td>About 2mW.</td></tr></table>	Option	Description	a	About 15mW.	b	About 7mW.	c	About 5mW.	d	About 1mW.	e	About 13mW.	f	About 10mW.	g	About 3mW.	h	About 2mW.			
	Option	Description																				
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	e	About 13mW.																				
	f	About 10mW.																				
	g	About 3mW.																				
h	About 2mW.																					
scd-enable	Enable/disable ESL SES-imagotag Serial Communication Daemon (SCD) (default = disable).	option	-	disable																		
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable ESL SES-imagotag SCD.</td></tr><tr><td>disable</td><td>Disable ESL SES-imagotag SCD.</td></tr></table>	Option	Description	enable	Enable ESL SES-imagotag SCD.	disable	Disable ESL SES-imagotag SCD.															
	Option	Description																				
	enable	Enable ESL SES-imagotag SCD.																				
disable	Disable ESL SES-imagotag SCD.																					
tls-cert-verification	Enable/disable TLS certificate verification (default = enable).	option	-	enable																		
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable TLS Certificate verification.</td></tr><tr><td>disable</td><td>Disable TLS Certificate verification.</td></tr></table>	Option	Description	enable	Enable TLS Certificate verification.	disable	Disable TLS Certificate verification.															
	Option	Description																				
	enable	Enable TLS Certificate verification.																				
disable	Disable TLS Certificate verification.																					
tls-fqdn-verification	Enable/disable TLS certificate verification (default = disable).	option	-	disable																		

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>enable</i>	Enable TLS FQDN verification.		
	<i>disable</i>	Disable TLS FQDN verification.		

config lan

Parameter	Description	Type	Size	Default
port-esl-mode	ESL port mode.	option	-	offline
	Option	Description		
	<i>offline</i>	Offline.		
	<i>nat-to-wan</i>	NAT WTP ESL port to WTP WAN port.		
	<i>bridge-to-wan</i>	Bridge WTP ESL port to WTP WAN port.		
	<i>bridge-to-ssid</i>	Bridge WTP ESL port to SSID.		
port-esl-ssid	Bridge ESL port to SSID.	string	Maximum length: 15	
port-mode	LAN port mode.	option	-	offline
	Option	Description		
	<i>offline</i>	Offline.		
	<i>nat-to-wan</i>	NAT WTP LAN port to WTP WAN port.		
	<i>bridge-to-wan</i>	Bridge WTP LAN port to WTP WAN port.		
	<i>bridge-to-ssid</i>	Bridge WTP LAN port to SSID.		
port-ssid	Bridge LAN port to SSID.	string	Maximum length: 15	
port1-mode	LAN port 1 mode.	option	-	offline
	Option	Description		
	<i>offline</i>	Offline.		
	<i>nat-to-wan</i>	NAT WTP LAN port to WTP WAN port.		
	<i>bridge-to-wan</i>	Bridge WTP LAN port to WTP WAN port.		
	<i>bridge-to-ssid</i>	Bridge WTP LAN port to SSID.		

Parameter	Description	Type	Size	Default
port1-ssid	Bridge LAN port 1 to SSID.	string	Maximum length: 15	
port2-mode	LAN port 2 mode.	option	-	offline
	Option	Description		
	offline	Offline.		
	nat-to-wan	NAT WTP LAN port to WTP WAN port.		
	bridge-to-wan	Bridge WTP LAN port to WTP WAN port.		
	bridge-to-ssid	Bridge WTP LAN port to SSID.		
port2-ssid	Bridge LAN port 2 to SSID.	string	Maximum length: 15	
port3-mode	LAN port 3 mode.	option	-	offline
	Option	Description		
	offline	Offline.		
	nat-to-wan	NAT WTP LAN port to WTP WAN port.		
	bridge-to-wan	Bridge WTP LAN port to WTP WAN port.		
	bridge-to-ssid	Bridge WTP LAN port to SSID.		
port3-ssid	Bridge LAN port 3 to SSID.	string	Maximum length: 15	
port4-mode	LAN port 4 mode.	option	-	offline
	Option	Description		
	offline	Offline.		
	nat-to-wan	NAT WTP LAN port to WTP WAN port.		
	bridge-to-wan	Bridge WTP LAN port to WTP WAN port.		
	bridge-to-ssid	Bridge WTP LAN port to SSID.		
port4-ssid	Bridge LAN port 4 to SSID.	string	Maximum length: 15	
port5-mode	LAN port 5 mode.	option	-	offline
	Option	Description		
	offline	Offline.		
	nat-to-wan	NAT WTP LAN port to WTP WAN port.		

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>bridge-to-wan</i>	Bridge WTP LAN port to WTP WAN port.		
	<i>bridge-to-ssid</i>	Bridge WTP LAN port to SSID.		
port5-ssid	Bridge LAN port 5 to SSID.	string	Maximum length: 15	
port6-mode	LAN port 6 mode.	option	-	offline
	Option	Description		
	<i>offline</i>	Offline.		
	<i>nat-to-wan</i>	NAT WTP LAN port to WTP WAN port.		
	<i>bridge-to-wan</i>	Bridge WTP LAN port to WTP WAN port.		
	<i>bridge-to-ssid</i>	Bridge WTP LAN port to SSID.		
port6-ssid	Bridge LAN port 6 to SSID.	string	Maximum length: 15	
port7-mode	LAN port 7 mode.	option	-	offline
	Option	Description		
	<i>offline</i>	Offline.		
	<i>nat-to-wan</i>	NAT WTP LAN port to WTP WAN port.		
	<i>bridge-to-wan</i>	Bridge WTP LAN port to WTP WAN port.		
	<i>bridge-to-ssid</i>	Bridge WTP LAN port to SSID.		
port7-ssid	Bridge LAN port 7 to SSID.	string	Maximum length: 15	
port8-mode	LAN port 8 mode.	option	-	offline
	Option	Description		
	<i>offline</i>	Offline.		
	<i>nat-to-wan</i>	NAT WTP LAN port to WTP WAN port.		
	<i>bridge-to-wan</i>	Bridge WTP LAN port to WTP WAN port.		
	<i>bridge-to-ssid</i>	Bridge WTP LAN port to SSID.		
port8-ssid	Bridge LAN port 8 to SSID.	string	Maximum length: 15	

config lbs

Parameter	Description	Type	Size	Default						
aeroscout	Enable/disable AeroScout Real Time Location Service (RTLS) support (default = disable).	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable AeroScout support.</td></tr><tr><td><i>disable</i></td><td>Disable AeroScout support.</td></tr></table>	Option	Description	<i>enable</i>	Enable AeroScout support.	<i>disable</i>	Disable AeroScout support.			
Option	Description									
<i>enable</i>	Enable AeroScout support.									
<i>disable</i>	Disable AeroScout support.									
aeroscout-ap-mac	Use BSSID or board MAC address as AP MAC address in AeroScout AP messages (default = bssid).	option	-	bssid						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>bssid</i></td><td>Use BSSID as AP MAC address in AeroScout AP messages.</td></tr><tr><td><i>board-mac</i></td><td>Use board MAC address as AP MAC address in AeroScout AP messages.</td></tr></table>	Option	Description	<i>bssid</i>	Use BSSID as AP MAC address in AeroScout AP messages.	<i>board-mac</i>	Use board MAC address as AP MAC address in AeroScout AP messages.			
Option	Description									
<i>bssid</i>	Use BSSID as AP MAC address in AeroScout AP messages.									
<i>board-mac</i>	Use board MAC address as AP MAC address in AeroScout AP messages.									
aeroscout-mmu-report	Enable/disable compounded AeroScout tag and MU report (default = enable).	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable compounded AeroScout tag and MU report.</td></tr><tr><td><i>disable</i></td><td>Disable compounded AeroScout tag and MU report.</td></tr></table>	Option	Description	<i>enable</i>	Enable compounded AeroScout tag and MU report.	<i>disable</i>	Disable compounded AeroScout tag and MU report.			
Option	Description									
<i>enable</i>	Enable compounded AeroScout tag and MU report.									
<i>disable</i>	Disable compounded AeroScout tag and MU report.									
aeroscout-mu	Enable/disable AeroScout Mobile Unit (MU) support (default = disable).	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable AeroScout MU mode support.</td></tr><tr><td><i>disable</i></td><td>Disable AeroScout MU mode support.</td></tr></table>	Option	Description	<i>enable</i>	Enable AeroScout MU mode support.	<i>disable</i>	Disable AeroScout MU mode support.			
Option	Description									
<i>enable</i>	Enable AeroScout MU mode support.									
<i>disable</i>	Disable AeroScout MU mode support.									
aeroscout-mu-factor	AeroScout MU mode dilution factor (default = 20).	integer	Minimum value: 20 0 Maximum value: 4294967295							
aeroscout-mu-timeout	AeroScout MU mode timeout (0 - 65535 sec, default = 5).	integer	Minimum value: 5 0 Maximum value: 65535							

Parameter	Description	Type	Size	Default								
aeroscout-server-ip	IP address of AeroScout server.	ipv4-address-any	Not Specified	0.0.0.0								
aeroscout-server-port	AeroScout server UDP listening port.	integer	Minimum value: 0 1024 Maximum value: 65535	0								
ekahau-blink-mode	Enable/disable Ekahau blink mode (now known as AiRISTA Flow) to track and locate WiFi tags (default = disable).	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable Ekahau blink mode.</td></tr><tr><td>disable</td><td>Disable Ekahau blink mode.</td></tr></table>				Option	Description	enable	Enable Ekahau blink mode.	disable	Disable Ekahau blink mode.		
	Option	Description										
	enable	Enable Ekahau blink mode.										
disable	Disable Ekahau blink mode.											
ekahau-tag	WiFi frame MAC address or WiFi Tag.	mac-address	Not Specified	01:18:8e:00:00:00								
erc-server-ip	IP address of Ekahau RTLS Controller (ERC).	ipv4-address-any	Not Specified	0.0.0.0								
erc-server-port	Ekahau RTLS Controller (ERC) UDP listening port.	integer	Minimum value: 8569 1024 Maximum value: 65535									
fortipresence	Enable/disable FortiPresence to monitor the location and activity of WiFi clients even if they don't connect to this WiFi network (default = disable).	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>foreign</td><td>FortiPresence monitors foreign channels only. Foreign channels mean all other available channels than the current operating channel of the WTP, AP, or FortiAP.</td></tr><tr><td>both</td><td>Enable FortiPresence on both foreign and home channels. Select this option to have FortiPresence monitor all WiFi channels.</td></tr><tr><td>disable</td><td>Disable FortiPresence.</td></tr></table>				Option	Description	foreign	FortiPresence monitors foreign channels only. Foreign channels mean all other available channels than the current operating channel of the WTP, AP, or FortiAP.	both	Enable FortiPresence on both foreign and home channels. Select this option to have FortiPresence monitor all WiFi channels.	disable	Disable FortiPresence.
	Option	Description										
	foreign	FortiPresence monitors foreign channels only. Foreign channels mean all other available channels than the current operating channel of the WTP, AP, or FortiAP.										
both	Enable FortiPresence on both foreign and home channels. Select this option to have FortiPresence monitor all WiFi channels.											
disable	Disable FortiPresence.											
fortipresence-ble	Enable/disable FortiPresence finding and reporting BLE devices.	option	-	enable								

Parameter	Description	Type	Size	Default
	Option Description			
	<i>enable</i>	Enable FortiPresence finding and reporting BLE devices.		
	<i>disable</i>	Disable FortiPresence finding and reporting BLE devices.		
fortipresence-frequency	FortiPresence report transmit frequency (5 - 65535 sec, default = 30).	integer	Minimum value: 30 5 Maximum value: 65535	
fortipresence-port	UDP listening port of FortiPresence server (default = 3000).	integer	Minimum value: 3000 300 Maximum value: 65535	
fortipresence-project	FortiPresence project name (max. 16 characters, default = fortipresence).	string	Maximum length: 16	fortipresence
fortipresence-rogue	Enable/disable FortiPresence finding and reporting rogue APs.	option	-	disable
	Option Description			
	<i>enable</i>	Enable FortiPresence finding and reporting rogue APs.		
	<i>disable</i>	Disable FortiPresence finding and reporting rogue APs.		
fortipresence-secret	FortiPresence secret password (max. 16 characters).	password	Not Specified	
fortipresence-server	IP address of FortiPresence server.	ipv4-address-any	Not Specified	0.0.0.0
fortipresence-server-addr-type	FortiPresence server address type (default = ipv4).	option	-	ipv4
	Option Description			
	<i>ipv4</i>	IPv4 address.		
	<i>fqdn</i>	Fully Qualified Domain Name address.		
fortipresence-server-fqdn	FQDN of FortiPresence server.	string	Maximum length: 255	
fortipresence-unassoc	Enable/disable FortiPresence finding and reporting unassociated stations.	option	-	enable

Parameter	Description	Type	Size	Default
	Option Description			
	<i>enable</i>	Enable FortiPresence finding and reporting unassociated stations.		
	<i>disable</i>	Disable FortiPresence finding and reporting unassociated stations.		
station-locate	Enable/disable client station locating services for all clients, whether associated or not (default = disable).	option	-	disable
	Option Description			
	<i>enable</i>	Enable station locating service.		
	<i>disable</i>	Disable station locating service.		

config platform

Parameter	Description	Type	Size	Default
ddscan	Enable/disable use of one radio for dedicated full-band scanning to detect RF characterization and wireless threat management.	option	-	disable
	Option Description			
	<i>enable</i>	Enable dedicated full-band scan mode.		
	<i>disable</i>	Disable dedicated full-band scan mode.		
mode	Configure operation mode of 5G radios (default = single-5G).	option	-	single-5G
	Option Description			
	<i>single-5G</i>	Configure radios as one 5GHz band, one 2.4GHz band, and one dedicated monitor or sniffer.		
	<i>dual-5G</i>	Configure radios as one lower 5GHz band, one higher 5GHz band and one 2.4GHz band respectively.		
type	WTP, FortiAP or AP platform type. There are built-in WTP profiles for all supported FortiAP models. You can select a built-in profile and customize it or create a new profile.	option	-	221E
	Option Description			
	<i>AP-11N</i>	Default 11n AP.		

Parameter	Description	Type	Size	Default
	Option	Description		
	220B	FAP220B/221B.		
	210B	FAP210B.		
	222B	FAP222B.		
	112B	FAP112B.		
	320B	FAP320B.		
	11C	FAP11C.		
	14C	FAP14C.		
	223B	FAP223B.		
	28C	FAP28C.		
	320C	FAP320C.		
	221C	FAP221C.		
	25D	FAP25D.		
	222C	FAP222C.		
	224D	FAP224D.		
	214B	FK214B.		
	21D	FAP21D.		
	24D	FAP24D.		
	112D	FAP112D.		
	223C	FAP223C.		
	321C	FAP321C.		
	C220C	FAPC220C.		
	C225C	FAPC225C.		
	C23JD	FAPC23JD.		
	C24JE	FAPC24JE.		
	S321C	FAPS321C.		
	S322C	FAPS322C.		
	S323C	FAPS323C.		
	S311C	FAPS311C.		
	S313C	FAPS313C.		

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>S321CR</i>	FAPS321CR.		
	<i>S322CR</i>	FAPS322CR.		
	<i>S323CR</i>	FAPS323CR.		
	<i>S421E</i>	FAPS421E.		
	<i>S422E</i>	FAPS422E.		
	<i>S423E</i>	FAPS423E.		
	<i>421E</i>	FAP421E.		
	<i>423E</i>	FAP423E.		
	<i>221E</i>	FAP221E.		
	<i>222E</i>	FAP222E.		
	<i>223E</i>	FAP223E.		
	<i>224E</i>	FAP224E.		
	<i>231E</i>	FAP231E.		
	<i>S221E</i>	FAPS221E.		
	<i>S223E</i>	FAPS223E.		
	<i>321E</i>	FAP321E.		
	<i>431F</i>	FAP431F.		
	<i>431FL</i>	FAP431FL.		
	<i>432F</i>	FAP432F.		
	<i>432FR</i>	FAP432FR.		
	<i>433F</i>	FAP433F.		
	<i>433FL</i>	FAP433FL.		
	<i>231F</i>	FAP231F.		
	<i>231FL</i>	FAP231FL.		
	<i>234F</i>	FAP234F.		
	<i>23JF</i>	FAP23JF.		
	<i>831F</i>	FAP831F.		
	<i>231G</i>	FAP231G.		
	<i>233G</i>	FAP233G.		

Parameter	Description	Type	Size	Default
	Option	Description		
	234G	FAP234G.		
	431G	FAP431G.		
	432G	FAP432G.		
	433G	FAP433G.		
	U421E	FAPU421EV.		
	U422EV	FAPU422EV.		
	U423E	FAPU423EV.		
	U221EV	FAPU221EV.		
	U223EV	FAPU223EV.		
	U24JEV	FAPU24JEV.		
	U321EV	FAPU321EV.		
	U323EV	FAPU323EV.		
	U431F	FAPU431F.		
	U433F	FAPU433F.		
	U231F	FAPU231F.		
	U234F	FAPU234F.		
	U432F	FAPU432F.		
	U231G	FAPU231G.		
	U441G	FAPU441G.		

config radio-1

Parameter	Description	Type	Size	Default
80211d	Enable/disable 802.11d countryie (default = enable).	option	-	enable
	Option	Description		
	enable	Enable 802.11d countryie.		
	disable	Disable 802.11d countryie.		
airtime-fairness	Enable/disable airtime fairness (default = disable).	option	-	disable

Parameter	Description	Type	Size	Default
	Option Description			
	<i>enable</i>	Enable airtime fairness (ATF) support.		
	<i>disable</i>	Disable airtime fairness (ATF) support.		
amsdu	Enable/disable 802.11n AMSDU support. AMSDU can improve performance if supported by your WiFi clients (default = enable).	option	-	enable
	Option Description			
	<i>enable</i>	Enable AMSDU support.		
	<i>disable</i>	Disable AMSDU support.		
ap-sniffer-addr	MAC address to monitor.	mac-address	Not Specified	00:00:00:00:00:00
ap-sniffer-bufsize	Sniffer buffer size (1 - 32 MB, default = 16).	integer	Minimum value: 1 Maximum value: 32	16
ap-sniffer-chan	Channel on which to operate the sniffer (default = 6).	integer	Minimum value: 0 Maximum value: 4294967295	36
ap-sniffer-ctl	Enable/disable sniffer on WiFi control frame (default = enable).	option	-	enable
	Option Description			
	<i>enable</i>	Enable sniffer on WiFi control frame.		
	<i>disable</i>	Disable sniffer on WiFi control frame.		
ap-sniffer-data	Enable/disable sniffer on WiFi data frame (default = enable).	option	-	enable
	Option Description			
	<i>enable</i>	Enable sniffer on WiFi data frame		
	<i>disable</i>	Disable sniffer on WiFi data frame		
ap-sniffer-mgmt-beacon	Enable/disable sniffer on WiFi management Beacon frames (default = enable).	option	-	enable

Parameter	Description	Type	Size	Default
	Option Description			
	<i>enable</i>	Enable sniffer on WiFi management beacon frame.		
	<i>disable</i>	Disable sniffer on WiFi management beacon frame.		
ap-sniffer-mgmt-other	Enable/disable sniffer on WiFi management other frames (default = enable).	option	-	enable
	Option Description			
	<i>enable</i>	Enable sniffer on WiFi management other frame.		
	<i>disable</i>	Disable sniffer on WiFi management other frame.		
ap-sniffer-mgmt-probe	Enable/disable sniffer on WiFi management probe frames (default = enable).	option	-	enable
	Option Description			
	<i>enable</i>	Enable sniffer on WiFi management probe frame.		
	<i>disable</i>	Enable sniffer on WiFi management probe frame.		
arp-profile	Distributed Automatic Radio Resource Provisioning (DARRP) profile name to assign to the radio.	string	Maximum length: 35	
auto-power-high	The upper bound of automatic transmit power adjustment in dBm (the actual range of transmit power depends on the AP platform type).	integer	Minimum value: 17 0 Maximum value: 4294967295	
auto-power-level	Enable/disable automatic power-level adjustment to prevent co-channel interference (default = enable).	option	-	disable
	Option Description			
	<i>enable</i>	Enable automatic transmit power adjustment.		
	<i>disable</i>	Disable automatic transmit power adjustment.		
auto-power-low	The lower bound of automatic transmit power adjustment in dBm (the actual range of transmit power depends on the AP platform type).	integer	Minimum value: 10 0 Maximum value: 4294967295	

Parameter	Description	Type	Size	Default																																														
auto-power-target	Target of automatic transmit power adjustment in dBm (-95 to -20, default = -70).	string	Maximum length: 7	-70																																														
band	WiFi band that Radio 1 operates on.	option	-																																															
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>802.11a</td><td>802.11a.</td></tr><tr><td>802.11b</td><td>802.11b.</td></tr><tr><td>802.11g</td><td>802.11g/b.</td></tr><tr><td>802.11n</td><td>802.11n/g/b at 2.4GHz.</td></tr><tr><td>802.11n-5G</td><td>802.11n/a at 5GHz.</td></tr><tr><td>802.11ac</td><td>802.11ac/n/a.</td></tr><tr><td>802.11ax-5G</td><td>802.11ax/ac/n/a at 5GHz.</td></tr><tr><td>802.11ax</td><td>802.11ax/n/g/b at 2.4GHz.</td></tr><tr><td>802.11ac-2G</td><td>802.11ac at 2.4GHz.</td></tr><tr><td>802.11ax-6G</td><td>802.11ax at 6GHz.</td></tr><tr><td>802.11n,g-only</td><td>802.11n/g at 2.4GHz.</td></tr><tr><td>802.11g-only</td><td>802.11g.</td></tr><tr><td>802.11n-only</td><td>802.11n at 2.4GHz.</td></tr><tr><td>802.11n-5G-only</td><td>802.11n at 5GHz.</td></tr><tr><td>802.11ac,n-only</td><td>802.11ac/n.</td></tr><tr><td>802.11ac-only</td><td>802.11ac.</td></tr><tr><td>802.11ax,ac-only</td><td>802.11ax/ac at 5GHz.</td></tr><tr><td>802.11ax,ac,n-only</td><td>802.11ax/ac/n at 5GHz.</td></tr><tr><td>802.11ax-5G-only</td><td>802.11ax at 5GHz.</td></tr><tr><td>802.11ax,n-only</td><td>802.11ax/n at 2.4GHz.</td></tr><tr><td>802.11ax,n,g-only</td><td>802.11ax/n/g at 2.4GHz.</td></tr><tr><td>802.11ax-only</td><td>802.11ax at 2.4GHz.</td></tr></table>	Option	Description	802.11a	802.11a.	802.11b	802.11b.	802.11g	802.11g/b.	802.11n	802.11n/g/b at 2.4GHz.	802.11n-5G	802.11n/a at 5GHz.	802.11ac	802.11ac/n/a.	802.11ax-5G	802.11ax/ac/n/a at 5GHz.	802.11ax	802.11ax/n/g/b at 2.4GHz.	802.11ac-2G	802.11ac at 2.4GHz.	802.11ax-6G	802.11ax at 6GHz.	802.11n,g-only	802.11n/g at 2.4GHz.	802.11g-only	802.11g.	802.11n-only	802.11n at 2.4GHz.	802.11n-5G-only	802.11n at 5GHz.	802.11ac,n-only	802.11ac/n.	802.11ac-only	802.11ac.	802.11ax,ac-only	802.11ax/ac at 5GHz.	802.11ax,ac,n-only	802.11ax/ac/n at 5GHz.	802.11ax-5G-only	802.11ax at 5GHz.	802.11ax,n-only	802.11ax/n at 2.4GHz.	802.11ax,n,g-only	802.11ax/n/g at 2.4GHz.	802.11ax-only	802.11ax at 2.4GHz.			
Option	Description																																																	
802.11a	802.11a.																																																	
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802.11ax-only	802.11ax at 2.4GHz.																																																	
band-5g-type	WiFi 5G band type.	option	-	5g-full																																														
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>5g-full</td><td>Full 5G band.</td></tr></table>	Option	Description	5g-full	Full 5G band.																																													
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Parameter	Description	Type	Size	Default
	Option	Description		
	<i>5g-high</i>	High 5G band.		
	<i>5g-low</i>	Low 5G band.		
bandwidth-admission-control	Enable/disable WiFi multimedia (WMM) bandwidth admission control to optimize WiFi bandwidth use. A request to join the wireless network is only allowed if the access point has enough bandwidth to support it.	option	-	disable
	Option	Description		
	<i>enable</i>	Enable WMM bandwidth admission control.		
	<i>disable</i>	Disable WMM bandwidth admission control.		
bandwidth-capacity	Maximum bandwidth capacity allowed (1 - 600000 Kbps, default = 2000).	integer	Minimum value: 2000 1 Maximum value: 600000	
beacon-interval	Beacon interval. The time between beacon frames in milliseconds. Actual range of beacon interval depends on the AP platform type (default = 100).	integer	Minimum value: 100 0 Maximum value: 65535	
bss-color	BSS color value for this 11ax radio (0 - 63, disable = 0, default = 0).	integer	Minimum value: 0 0 Maximum value: 63	
bss-color-mode	BSS color mode for this 11ax radio (default = auto).	option	-	auto
	Option	Description		
	<i>auto</i>	Automatically select BSS color value on AP.		
	<i>static</i>	Set BSS color value on this radio based on 'bss-color' CLI.		
call-admission-control	Enable/disable WiFi multimedia (WMM) call admission control to optimize WiFi bandwidth use for VoIP calls. New VoIP calls are only accepted if there is enough bandwidth available to support them.	option	-	disable

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>enable</i>	Enable WMM call admission control.		
	<i>disable</i>	Disable WMM call admission control.		
call-capacity	Maximum number of Voice over WLAN (VoWLAN) phones supported by the radio (0 - 60, default = 10).	integer	Minimum value: 10 0 Maximum value: 60	
channel <chan>	Selected list of wireless radio channels. Channel number.	string	Maximum length: 3	
channel-bonding	Channel bandwidth: 160,80, 40, or 20MHz. Channels may use both 20 and 40 by enabling coexistence.	option	-	20MHz
	Option	Description		
	<i>160MHz</i>	160 MHz channel width.		
	<i>80MHz</i>	80 MHz channel width.		
	<i>40MHz</i>	40 MHz channel width.		
	<i>20MHz</i>	20 MHz channel width.		
channel-utilization	Enable/disable measuring channel utilization.	option	-	enable
	Option	Description		
	<i>enable</i>	Enable measuring channel utilization.		
	<i>disable</i>	Disable measuring channel utilization.		
coexistence	Enable/disable allowing both HT20 and HT40 on the same radio (default = enable).	option	-	enable
	Option	Description		
	<i>enable</i>	Enable support for both HT20 and HT40 on the same radio.		
	<i>disable</i>	Disable support for both HT20 and HT40 on the same radio.		
darrp	Enable/disable Distributed Automatic Radio Resource Provisioning (DARRP) to make sure the radio is always using the most optimal channel (default = disable).	option	-	disable

Parameter	Description	Type	Size	Default								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable distributed automatic radio resource provisioning.</td></tr><tr><td><i>disable</i></td><td>Disable distributed automatic radio resource provisioning.</td></tr></table>	Option	Description	<i>enable</i>	Enable distributed automatic radio resource provisioning.	<i>disable</i>	Disable distributed automatic radio resource provisioning.					
	Option	Description										
	<i>enable</i>	Enable distributed automatic radio resource provisioning.										
<i>disable</i>	Disable distributed automatic radio resource provisioning.											
drma	Enable/disable dynamic radio mode assignment (DRMA) (default = disable).	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>disable</i></td><td>Disable dynamic radio mode assignment (DRMA).</td></tr><tr><td><i>enable</i></td><td>Enable dynamic radio mode assignment (DRMA).</td></tr></table>	Option	Description	<i>disable</i>	Disable dynamic radio mode assignment (DRMA).	<i>enable</i>	Enable dynamic radio mode assignment (DRMA).					
	Option	Description										
	<i>disable</i>	Disable dynamic radio mode assignment (DRMA).										
<i>enable</i>	Enable dynamic radio mode assignment (DRMA).											
drma-sensitivity	Network Coverage Factor (NCF) percentage required to consider a radio as redundant (default = low).	option	-	low								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>low</i></td><td>Consider a radio as redundant when its NCF is 100%.</td></tr><tr><td><i>medium</i></td><td>Consider a radio as redundant when its NCF is 95%.</td></tr><tr><td><i>high</i></td><td>Consider a radio as redundant when its NCF is 90%.</td></tr></table>	Option	Description	<i>low</i>	Consider a radio as redundant when its NCF is 100%.	<i>medium</i>	Consider a radio as redundant when its NCF is 95%.	<i>high</i>	Consider a radio as redundant when its NCF is 90%.			
	Option	Description										
	<i>low</i>	Consider a radio as redundant when its NCF is 100%.										
	<i>medium</i>	Consider a radio as redundant when its NCF is 95%.										
<i>high</i>	Consider a radio as redundant when its NCF is 90%.											
dtim	Delivery Traffic Indication Map (DTIM) period (1 - 255, default = 1). Set higher to save battery life of WiFi client in power-save mode.	integer	Minimum value: 1 Maximum value: 255									
frag-threshold	Maximum packet size that can be sent without fragmentation (800 - 2346 bytes, default = 2346).	integer	Minimum value: 800 Maximum value: 2346									
iperf-protocol	Iperf test protocol (default = "UDP").	option	-	udp								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>udp</i></td><td>UDP.</td></tr><tr><td><i>tcp</i></td><td>TCP.</td></tr></table>	Option	Description	<i>udp</i>	UDP.	<i>tcp</i>	TCP.					
	Option	Description										
	<i>udp</i>	UDP.										
<i>tcp</i>	TCP.											
iperf-server-port	Iperf service port number.	integer	Minimum value: 5001 Maximum value: 65535									

Parameter	Description	Type	Size	Default
max-clients	Maximum number of stations (STAs) or WiFi clients supported by the radio. Range depends on the hardware.	integer	Minimum value: 0 0 Maximum value: 4294967295	
max-distance	Maximum expected distance between the AP and clients (0 - 54000 m, default = 0).	integer	Minimum value: 0 0 Maximum value: 54000	
mode	Mode of radio 1. Radio 1 can be disabled, configured as an access point, a rogue AP monitor, a sniffer, or a station.	option	-	ap
	Option	Description		
	disabled	Radio 1 is disabled.		
	ap	Radio 1 operates as an access point that allows WiFi clients to connect to your network.		
	monitor	Radio 1 operates as a dedicated monitor. As a monitor, the radio scans for other WiFi access points and adds them to the Rogue AP monitor list.		
	sniffer	Radio 1 operates as a sniffer capturing WiFi frames on air.		
	sam	Radio 1 operates as a station that can connect to a neighboring AP for connectivity and health check.		
optional-antenna	Optional antenna used on FAP (default = none).	option	-	none
	Option	Description		
	none	None.		
	FANT-04ABGN-0606-O-N	6 dBi(2.4GHz) and 6 dBi(5GHz).		
	FANT-04ABGN-1414-P-N	14 dBi(2.4GHz) and 14 dBi(5GHz).		
	FANT-04ABGN-8065-P-N	8 dBi(2.4GHz) and 6.5 dBi(5GHz).		

Parameter	Description	Type	Size	Default										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>FANT-04ABGN-0606-O-R</td><td>6 dBi(2.4GHz) and 6 dBi(5GHz).</td></tr><tr><td>FANT-04ABGN-0606-P-R</td><td>6 dBi(2.4GHz) and 6 dBi(5GHz).</td></tr><tr><td>FANT-10ACAX-1213-D-N</td><td>12 dBi(2.4GHz) and 13 dBi(5GHz).</td></tr><tr><td>FANT-08ABGN-1213-D-R</td><td>12 dBi(2.4GHz) and 13 dBi(5GHz).</td></tr></table>	Option	Description	FANT-04ABGN-0606-O-R	6 dBi(2.4GHz) and 6 dBi(5GHz).	FANT-04ABGN-0606-P-R	6 dBi(2.4GHz) and 6 dBi(5GHz).	FANT-10ACAX-1213-D-N	12 dBi(2.4GHz) and 13 dBi(5GHz).	FANT-08ABGN-1213-D-R	12 dBi(2.4GHz) and 13 dBi(5GHz).			
	Option	Description												
	FANT-04ABGN-0606-O-R	6 dBi(2.4GHz) and 6 dBi(5GHz).												
	FANT-04ABGN-0606-P-R	6 dBi(2.4GHz) and 6 dBi(5GHz).												
	FANT-10ACAX-1213-D-N	12 dBi(2.4GHz) and 13 dBi(5GHz).												
FANT-08ABGN-1213-D-R	12 dBi(2.4GHz) and 13 dBi(5GHz).													
power-level	Radio EIRP power level as a percentage of the maximum EIRP power (0 - 100, default = 100).	integer	Minimum value: 0 Maximum value: 100	100										
power-mode	Set radio effective isotropic radiated power (EIRP) in dBm or by a percentage of the maximum EIRP (default = percentage). This power takes into account both radio transmit power and antenna gain. Higher power level settings may be constrained by local regulatory requirements and AP capabilities.	option	-	percentage										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>dBm</td><td>Set radio EIRP power in dBm.</td></tr><tr><td>percentage</td><td>Set radio EIRP power by percentage.</td></tr></table>	Option	Description	dBm	Set radio EIRP power in dBm.	percentage	Set radio EIRP power by percentage.							
	Option	Description												
	dBm	Set radio EIRP power in dBm.												
percentage	Set radio EIRP power by percentage.													
power-value	Radio EIRP power in dBm (1 - 33, default = 27).	integer	Minimum value: 1 Maximum value: 33	27										
powersave-optimize	Enable client power-saving features such as TIM, AC VO, and OBSS etc.	option	-											
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>tim</td><td>TIM bit for client in power save mode.</td></tr><tr><td>ac-vo</td><td>Use AC VO priority to send out packets in the power save queue.</td></tr><tr><td>no-obss-scan</td><td>Do not put OBSS scan IE into beacon and probe response frames.</td></tr></table>	Option	Description	tim	TIM bit for client in power save mode.	ac-vo	Use AC VO priority to send out packets in the power save queue.	no-obss-scan	Do not put OBSS scan IE into beacon and probe response frames.					
	Option	Description												
	tim	TIM bit for client in power save mode.												
	ac-vo	Use AC VO priority to send out packets in the power save queue.												
no-obss-scan	Do not put OBSS scan IE into beacon and probe response frames.													

Parameter	Description	Type	Size	Default								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>no-11b-rate</i></td><td>Do not send frame using 11b data rate.</td></tr><tr><td><i>client-rate-follow</i></td><td>Adapt transmitting PHY rate with receiving PHY rate from a client.</td></tr></table>	Option	Description	<i>no-11b-rate</i>	Do not send frame using 11b data rate.	<i>client-rate-follow</i>	Adapt transmitting PHY rate with receiving PHY rate from a client.					
	Option	Description										
	<i>no-11b-rate</i>	Do not send frame using 11b data rate.										
<i>client-rate-follow</i>	Adapt transmitting PHY rate with receiving PHY rate from a client.											
protection-mode	Enable/disable 802.11g protection modes to support backwards compatibility with older clients (rtscts, ctsonly, disable).	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>rtscts</i></td><td>Enable 802.11g protection RTS/CTS mode.</td></tr><tr><td><i>ctsonly</i></td><td>Enable 802.11g protection CTS only mode.</td></tr><tr><td><i>disable</i></td><td>Disable 802.11g protection mode.</td></tr></table>	Option	Description	<i>rtscts</i>	Enable 802.11g protection RTS/CTS mode.	<i>ctsonly</i>	Enable 802.11g protection CTS only mode.	<i>disable</i>	Disable 802.11g protection mode.			
	Option	Description										
	<i>rtscts</i>	Enable 802.11g protection RTS/CTS mode.										
	<i>ctsonly</i>	Enable 802.11g protection CTS only mode.										
<i>disable</i>	Disable 802.11g protection mode.											
rts-threshold	Maximum packet size for RTS transmissions, specifying the maximum size of a data packet before RTS/CTS (256 - 2346 bytes, default = 2346).	integer	Minimum value: 256 Maximum value: 2346	2346								
sam-bssid	BSSID for WiFi network.	mac-address	Not Specified	00:00:00:00:00:00								
sam-captive-portal	Enable/disable Captive Portal Authentication (default = disable).	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable Captive Portal Authentication.</td></tr><tr><td><i>disable</i></td><td>Disable Captive Portal Authentication.</td></tr></table>	Option	Description	<i>enable</i>	Enable Captive Portal Authentication.	<i>disable</i>	Disable Captive Portal Authentication.					
	Option	Description										
	<i>enable</i>	Enable Captive Portal Authentication.										
<i>disable</i>	Disable Captive Portal Authentication.											
sam-cwp-failure-string	Failure identification on the page after an incorrect login.	string	Maximum length: 64									
sam-cwp-match-string	Identification string from the captive portal login form.	string	Maximum length: 64									
sam-cwp-password	Password for captive portal authentication.	password	Not Specified									
sam-cwp-success-string	Success identification on the page after a successful login.	string	Maximum length: 64									
sam-cwp-test-url	Website the client is trying to access.	string	Maximum length: 255									

Parameter	Description	Type	Size	Default								
sam-cwp-username	Username for captive portal authentication.	string	Maximum length: 35									
sam-password	Passphrase for WiFi network connection.	password	Not Specified									
sam-report-intv	SAM report interval (sec), 0 for a one-time report.	integer	Minimum value: 0 60 Maximum value: 864000									
sam-security-type	Select WiFi network security type (default = "wpa-personal").	option	-	wpa-personal								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>open</i></td><td>Open.</td></tr><tr><td><i>wpa-personal</i></td><td>WPA/WPA2 personal.</td></tr><tr><td><i>wpa-enterprise</i></td><td>WPA/WPA2 enterprise.</td></tr></table>				Option	Description	<i>open</i>	Open.	<i>wpa-personal</i>	WPA/WPA2 personal.	<i>wpa-enterprise</i>	WPA/WPA2 enterprise.
Option	Description											
<i>open</i>	Open.											
<i>wpa-personal</i>	WPA/WPA2 personal.											
<i>wpa-enterprise</i>	WPA/WPA2 enterprise.											
sam-server-fqdn	SAM test server domain name.	string	Maximum length: 255									
sam-server-ip	SAM test server IP address.	ipv4-address	Not Specified	0.0.0.0								
sam-server-type	Select SAM server type (default = "IP").	option	-	ip								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>ip</i></td><td>IPv4 address.</td></tr><tr><td><i>fqdn</i></td><td>Fully Qualified Domain Name address.</td></tr></table>				Option	Description	<i>ip</i>	IPv4 address.	<i>fqdn</i>	Fully Qualified Domain Name address.		
Option	Description											
<i>ip</i>	IPv4 address.											
<i>fqdn</i>	Fully Qualified Domain Name address.											
sam-ssid	SSID for WiFi network.	string	Maximum length: 32									
sam-test	Select SAM test type (default = "PING").	option	-	ping								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>ping</i></td><td>PING test.</td></tr><tr><td><i>iperf</i></td><td>IPERF test.</td></tr></table>				Option	Description	<i>ping</i>	PING test.	<i>iperf</i>	IPERF test.		
Option	Description											
<i>ping</i>	PING test.											
<i>iperf</i>	IPERF test.											
sam-username	Username for WiFi network connection.	string	Maximum length: 35									

Parameter	Description	Type	Size	Default												
short-guard-interval	Use either the short guard interval (Short GI) of 400 ns or the long guard interval (Long GI) of 800 ns.	option	-	disable												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Select the 400 ns short guard interval (Short GI).</td></tr><tr><td><i>disable</i></td><td>Select the 800 ns long guard interval (Long GI).</td></tr></table>	Option	Description	<i>enable</i>	Select the 400 ns short guard interval (Short GI).	<i>disable</i>	Select the 800 ns long guard interval (Long GI).									
Option	Description															
<i>enable</i>	Select the 400 ns short guard interval (Short GI).															
<i>disable</i>	Select the 800 ns long guard interval (Long GI).															
transmit-optimize	Packet transmission optimization options including power saving, aggregation limiting, retry limiting, etc. All are enabled by default.	option	-	power-save aggr-limit retry-limit send-bar												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>disable</i></td><td>Disable packet transmission optimization.</td></tr><tr><td><i>power-save</i></td><td>Tag client as operating in power save mode if excessive transmit retries occur.</td></tr><tr><td><i>aggr-limit</i></td><td>Set aggregation limit to a lower value when data rate is low.</td></tr><tr><td><i>retry-limit</i></td><td>Set software retry limit to a lower value when data rate is low.</td></tr><tr><td><i>send-bar</i></td><td>Limit transmission of BAR frames.</td></tr></table>	Option	Description	<i>disable</i>	Disable packet transmission optimization.	<i>power-save</i>	Tag client as operating in power save mode if excessive transmit retries occur.	<i>aggr-limit</i>	Set aggregation limit to a lower value when data rate is low.	<i>retry-limit</i>	Set software retry limit to a lower value when data rate is low.	<i>send-bar</i>	Limit transmission of BAR frames.			
Option	Description															
<i>disable</i>	Disable packet transmission optimization.															
<i>power-save</i>	Tag client as operating in power save mode if excessive transmit retries occur.															
<i>aggr-limit</i>	Set aggregation limit to a lower value when data rate is low.															
<i>retry-limit</i>	Set software retry limit to a lower value when data rate is low.															
<i>send-bar</i>	Limit transmission of BAR frames.															
vap-all	Configure method for assigning SSIDs to this FortiAP (default = automatically assign tunnel SSIDs).	option	-	tunnel												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>tunnel</i></td><td>Automatically select tunnel SSIDs.</td></tr><tr><td><i>bridge</i></td><td>Automatically select local-bridging SSIDs.</td></tr><tr><td><i>manual</i></td><td>Manually select SSIDs.</td></tr></table>	Option	Description	<i>tunnel</i>	Automatically select tunnel SSIDs.	<i>bridge</i>	Automatically select local-bridging SSIDs.	<i>manual</i>	Manually select SSIDs.							
Option	Description															
<i>tunnel</i>	Automatically select tunnel SSIDs.															
<i>bridge</i>	Automatically select local-bridging SSIDs.															
<i>manual</i>	Manually select SSIDs.															
vaps <name>	Manually selected list of Virtual Access Points (VAPs). Virtual Access Point (VAP) name.	string	Maximum length: 35													
wids-profile	Wireless Intrusion Detection System (WIDS) profile name to assign to the radio.	string	Maximum length: 35													
zero-wait-dfs	Enable/disable zero wait DFS on radio (default = enable).	option	-	enable												

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>enable</i>	Enable zero wait DFS		
	<i>disable</i>	Disable zero wait DFS		

config radio-2

Parameter	Description	Type	Size	Default
80211d	Enable/disable 802.11d countryie (default = enable).	option	-	enable
	Option	Description		
	<i>enable</i>	Enable 802.11d countryie.		
	<i>disable</i>	Disable 802.11d countryie.		
airtime-fairness	Enable/disable airtime fairness (default = disable).	option	-	disable
	Option	Description		
	<i>enable</i>	Enable airtime fairness (ATF) support.		
	<i>disable</i>	Disable airtime fairness (ATF) support.		
amsdu	Enable/disable 802.11n AMSDU support. AMSDU can improve performance if supported by your WiFi clients (default = enable).	option	-	enable
	Option	Description		
	<i>enable</i>	Enable AMSDU support.		
	<i>disable</i>	Disable AMSDU support.		
ap-sniffer-addr	MAC address to monitor.	mac-address	Not Specified	00:00:00:00:00:00
ap-sniffer-bufsize	Sniffer buffer size (1 - 32 MB, default = 16).	integer	Minimum value: 1 Maximum value: 32	16
ap-sniffer-chan	Channel on which to operate the sniffer (default = 6).	integer	Minimum value: 0 Maximum value: 4294967295	6

Parameter	Description	Type	Size	Default						
ap-sniffer-ctl	Enable/disable sniffer on WiFi control frame (default = enable).	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable sniffer on WiFi control frame.</td></tr><tr><td><i>disable</i></td><td>Disable sniffer on WiFi control frame.</td></tr></table>	Option	Description	<i>enable</i>	Enable sniffer on WiFi control frame.	<i>disable</i>	Disable sniffer on WiFi control frame.			
Option	Description									
<i>enable</i>	Enable sniffer on WiFi control frame.									
<i>disable</i>	Disable sniffer on WiFi control frame.									
ap-sniffer-data	Enable/disable sniffer on WiFi data frame (default = enable).	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable sniffer on WiFi data frame</td></tr><tr><td><i>disable</i></td><td>Disable sniffer on WiFi data frame</td></tr></table>	Option	Description	<i>enable</i>	Enable sniffer on WiFi data frame	<i>disable</i>	Disable sniffer on WiFi data frame			
Option	Description									
<i>enable</i>	Enable sniffer on WiFi data frame									
<i>disable</i>	Disable sniffer on WiFi data frame									
ap-sniffer-mgmt-beacon	Enable/disable sniffer on WiFi management Beacon frames (default = enable).	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable sniffer on WiFi management beacon frame.</td></tr><tr><td><i>disable</i></td><td>Disable sniffer on WiFi management beacon frame.</td></tr></table>	Option	Description	<i>enable</i>	Enable sniffer on WiFi management beacon frame.	<i>disable</i>	Disable sniffer on WiFi management beacon frame.			
Option	Description									
<i>enable</i>	Enable sniffer on WiFi management beacon frame.									
<i>disable</i>	Disable sniffer on WiFi management beacon frame.									
ap-sniffer-mgmt-other	Enable/disable sniffer on WiFi management other frames (default = enable).	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable sniffer on WiFi management other frame.</td></tr><tr><td><i>disable</i></td><td>Disable sniffer on WiFi management other frame.</td></tr></table>	Option	Description	<i>enable</i>	Enable sniffer on WiFi management other frame.	<i>disable</i>	Disable sniffer on WiFi management other frame.			
Option	Description									
<i>enable</i>	Enable sniffer on WiFi management other frame.									
<i>disable</i>	Disable sniffer on WiFi management other frame.									
ap-sniffer-mgmt-probe	Enable/disable sniffer on WiFi management probe frames (default = enable).	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable sniffer on WiFi management probe frame.</td></tr><tr><td><i>disable</i></td><td>Enable sniffer on WiFi management probe frame.</td></tr></table>	Option	Description	<i>enable</i>	Enable sniffer on WiFi management probe frame.	<i>disable</i>	Enable sniffer on WiFi management probe frame.			
Option	Description									
<i>enable</i>	Enable sniffer on WiFi management probe frame.									
<i>disable</i>	Enable sniffer on WiFi management probe frame.									
arp-profile	Distributed Automatic Radio Resource Provisioning (DARRP) profile name to assign to the radio.	string	Maximum length: 35							

Parameter	Description	Type	Size	Default																												
auto-power-high	The upper bound of automatic transmit power adjustment in dBm (the actual range of transmit power depends on the AP platform type).	integer	Minimum value: 0 Maximum value: 4294967295	17																												
auto-power-level	Enable/disable automatic power-level adjustment to prevent co-channel interference (default = enable).	option	-	disable																												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable automatic transmit power adjustment.</td></tr><tr><td>disable</td><td>Disable automatic transmit power adjustment.</td></tr></table>				Option	Description	enable	Enable automatic transmit power adjustment.	disable	Disable automatic transmit power adjustment.																						
Option	Description																															
enable	Enable automatic transmit power adjustment.																															
disable	Disable automatic transmit power adjustment.																															
auto-power-low	The lower bound of automatic transmit power adjustment in dBm (the actual range of transmit power depends on the AP platform type).	integer	Minimum value: 0 Maximum value: 4294967295	10																												
auto-power-target	Target of automatic transmit power adjustment in dBm (-95 to -20, default = -70).	string	Maximum length: 7	-70																												
band	WiFi band that Radio 2 operates on.	option	-																													
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>802.11a</td><td>802.11a.</td></tr><tr><td>802.11b</td><td>802.11b.</td></tr><tr><td>802.11g</td><td>802.11g/b.</td></tr><tr><td>802.11n</td><td>802.11n/g/b at 2.4GHz.</td></tr><tr><td>802.11n-5G</td><td>802.11n/a at 5GHz.</td></tr><tr><td>802.11ac</td><td>802.11ac/n/a.</td></tr><tr><td>802.11ax-5G</td><td>802.11ax/ac/n/a at 5GHz.</td></tr><tr><td>802.11ax</td><td>802.11ax/n/g/b at 2.4GHz.</td></tr><tr><td>802.11ac-2G</td><td>802.11ac at 2.4GHz.</td></tr><tr><td>802.11ax-6G</td><td>802.11ax at 6GHz.</td></tr><tr><td>802.11n,g-only</td><td>802.11n/g at 2.4GHz.</td></tr><tr><td>802.11g-only</td><td>802.11g.</td></tr><tr><td>802.11n-only</td><td>802.11n at 2.4GHz.</td></tr></table>				Option	Description	802.11a	802.11a.	802.11b	802.11b.	802.11g	802.11g/b.	802.11n	802.11n/g/b at 2.4GHz.	802.11n-5G	802.11n/a at 5GHz.	802.11ac	802.11ac/n/a.	802.11ax-5G	802.11ax/ac/n/a at 5GHz.	802.11ax	802.11ax/n/g/b at 2.4GHz.	802.11ac-2G	802.11ac at 2.4GHz.	802.11ax-6G	802.11ax at 6GHz.	802.11n,g-only	802.11n/g at 2.4GHz.	802.11g-only	802.11g.	802.11n-only	802.11n at 2.4GHz.
Option	Description																															
802.11a	802.11a.																															
802.11b	802.11b.																															
802.11g	802.11g/b.																															
802.11n	802.11n/g/b at 2.4GHz.																															
802.11n-5G	802.11n/a at 5GHz.																															
802.11ac	802.11ac/n/a.																															
802.11ax-5G	802.11ax/ac/n/a at 5GHz.																															
802.11ax	802.11ax/n/g/b at 2.4GHz.																															
802.11ac-2G	802.11ac at 2.4GHz.																															
802.11ax-6G	802.11ax at 6GHz.																															
802.11n,g-only	802.11n/g at 2.4GHz.																															
802.11g-only	802.11g.																															
802.11n-only	802.11n at 2.4GHz.																															

Parameter	Description	Type	Size	Default																				
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>802.11n-5G-only</td><td>802.11n at 5GHz.</td></tr><tr><td>802.11ac,n-only</td><td>802.11ac/n.</td></tr><tr><td>802.11ac-only</td><td>802.11ac.</td></tr><tr><td>802.11ax,ac-only</td><td>802.11ax/ac at 5GHz.</td></tr><tr><td>802.11ax,ac,n-only</td><td>802.11ax/ac/n at 5GHz.</td></tr><tr><td>802.11ax-5G-only</td><td>802.11ax at 5GHz.</td></tr><tr><td>802.11ax,n-only</td><td>802.11ax/n at 2.4GHz.</td></tr><tr><td>802.11ax,n,g-only</td><td>802.11ax/n/g at 2.4GHz.</td></tr><tr><td>802.11ax-only</td><td>802.11ax at 2.4GHz.</td></tr></table>	Option	Description	802.11n-5G-only	802.11n at 5GHz.	802.11ac,n-only	802.11ac/n.	802.11ac-only	802.11ac.	802.11ax,ac-only	802.11ax/ac at 5GHz.	802.11ax,ac,n-only	802.11ax/ac/n at 5GHz.	802.11ax-5G-only	802.11ax at 5GHz.	802.11ax,n-only	802.11ax/n at 2.4GHz.	802.11ax,n,g-only	802.11ax/n/g at 2.4GHz.	802.11ax-only	802.11ax at 2.4GHz.			
	Option	Description																						
	802.11n-5G-only	802.11n at 5GHz.																						
	802.11ac,n-only	802.11ac/n.																						
	802.11ac-only	802.11ac.																						
	802.11ax,ac-only	802.11ax/ac at 5GHz.																						
	802.11ax,ac,n-only	802.11ax/ac/n at 5GHz.																						
	802.11ax-5G-only	802.11ax at 5GHz.																						
	802.11ax,n-only	802.11ax/n at 2.4GHz.																						
	802.11ax,n,g-only	802.11ax/n/g at 2.4GHz.																						
802.11ax-only	802.11ax at 2.4GHz.																							
band-5g-type	WiFi 5G band type.	option	-	5g-full																				
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>5g-full</td><td>Full 5G band.</td></tr><tr><td>5g-high</td><td>High 5G band.</td></tr><tr><td>5g-low</td><td>Low 5G band.</td></tr></table>	Option	Description	5g-full	Full 5G band.	5g-high	High 5G band.	5g-low	Low 5G band.															
	Option	Description																						
	5g-full	Full 5G band.																						
	5g-high	High 5G band.																						
5g-low	Low 5G band.																							
bandwidth-admission-control	Enable/disable WiFi multimedia (WMM) bandwidth admission control to optimize WiFi bandwidth use. A request to join the wireless network is only allowed if the access point has enough bandwidth to support it.	option	-	disable																				
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable WMM bandwidth admission control.</td></tr><tr><td>disable</td><td>Disable WMM bandwidth admission control.</td></tr></table>	Option	Description	enable	Enable WMM bandwidth admission control.	disable	Disable WMM bandwidth admission control.																	
	Option	Description																						
	enable	Enable WMM bandwidth admission control.																						
disable	Disable WMM bandwidth admission control.																							
bandwidth-capacity	Maximum bandwidth capacity allowed (1 - 600000 Kbps, default = 2000).	integer	Minimum value: 1 Maximum value: 600000	2000																				
beacon-interval	Beacon interval. The time between beacon frames in milliseconds. Actual range of beacon interval depends on the AP platform type (default = 100).	integer	Minimum value: 0 Maximum value: 65535	100																				

Parameter	Description	Type	Size	Default										
bss-color	BSS color value for this 11ax radio (0 - 63, disable = 0, default = 0).	integer	Minimum value: 0 0 Maximum value: 63	0										
bss-color-mode	BSS color mode for this 11ax radio (default = auto).	option	-	auto										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>auto</td><td>Automatically select BSS color value on AP.</td></tr><tr><td>static</td><td>Set BSS color value on this radio based on 'bss-color' CLI.</td></tr></table>				Option	Description	auto	Automatically select BSS color value on AP.	static	Set BSS color value on this radio based on 'bss-color' CLI.				
Option	Description													
auto	Automatically select BSS color value on AP.													
static	Set BSS color value on this radio based on 'bss-color' CLI.													
call-admission-control	Enable/disable WiFi multimedia (WMM) call admission control to optimize WiFi bandwidth use for VoIP calls. New VoIP calls are only accepted if there is enough bandwidth available to support them.	option	-	disable										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable WMM call admission control.</td></tr><tr><td>disable</td><td>Disable WMM call admission control.</td></tr></table>				Option	Description	enable	Enable WMM call admission control.	disable	Disable WMM call admission control.				
Option	Description													
enable	Enable WMM call admission control.													
disable	Disable WMM call admission control.													
call-capacity	Maximum number of Voice over WLAN (VoWLAN) phones supported by the radio (0 - 60, default = 10).	integer	Minimum value: 10 0 Maximum value: 60	10										
channel <chan>	Selected list of wireless radio channels. Channel number.	string	Maximum length: 3											
channel-bonding	Channel bandwidth: 160,80, 40, or 20MHz. Channels may use both 20 and 40 by enabling coexistence.	option	-	20MHz										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>160MHz</td><td>160 MHz channel width.</td></tr><tr><td>80MHz</td><td>80 MHz channel width.</td></tr><tr><td>40MHz</td><td>40 MHz channel width.</td></tr><tr><td>20MHz</td><td>20 MHz channel width.</td></tr></table>				Option	Description	160MHz	160 MHz channel width.	80MHz	80 MHz channel width.	40MHz	40 MHz channel width.	20MHz	20 MHz channel width.
Option	Description													
160MHz	160 MHz channel width.													
80MHz	80 MHz channel width.													
40MHz	40 MHz channel width.													
20MHz	20 MHz channel width.													
channel-utilization	Enable/disable measuring channel utilization.	option	-	enable										

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>enable</i>	Enable measuring channel utilization.		
	<i>disable</i>	Disable measuring channel utilization.		
coexistence	Enable/disable allowing both HT20 and HT40 on the same radio (default = enable).	option	-	enable
	Option	Description		
	<i>enable</i>	Enable support for both HT20 and HT40 on the same radio.		
	<i>disable</i>	Disable support for both HT20 and HT40 on the same radio.		
darrp	Enable/disable Distributed Automatic Radio Resource Provisioning (DARRP) to make sure the radio is always using the most optimal channel (default = disable).	option	-	disable
	Option	Description		
	<i>enable</i>	Enable distributed automatic radio resource provisioning.		
	<i>disable</i>	Disable distributed automatic radio resource provisioning.		
drma	Enable/disable dynamic radio mode assignment (DRMA) (default = disable).	option	-	disable
	Option	Description		
	<i>disable</i>	Disable dynamic radio mode assignment (DRMA).		
	<i>enable</i>	Enable dynamic radio mode assignment (DRMA).		
drma-sensitivity	Network Coverage Factor (NCF) percentage required to consider a radio as redundant (default = low).	option	-	low
	Option	Description		
	<i>low</i>	Consider a radio as redundant when its NCF is 100%.		
	<i>medium</i>	Consider a radio as redundant when its NCF is 95%.		
	<i>high</i>	Consider a radio as redundant when its NCF is 90%.		

Parameter	Description	Type	Size	Default												
dtim	Delivery Traffic Indication Map (DTIM) period (1 - 255, default = 1). Set higher to save battery life of WiFi client in power-save mode.	integer	Minimum value: 1 1 Maximum value: 255													
frag-threshold	Maximum packet size that can be sent without fragmentation (800 - 2346 bytes, default = 2346).	integer	Minimum value: 800 800 Maximum value: 2346	2346												
iperf-protocol	Iperf test protocol (default = "UDP").	option	-	udp												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>udp</td><td>UDP.</td></tr><tr><td>tcp</td><td>TCP.</td></tr></table>				Option	Description	udp	UDP.	tcp	TCP.						
Option	Description															
udp	UDP.															
tcp	TCP.															
iperf-server-port	Iperf service port number.	integer	Minimum value: 5001 0 Maximum value: 65535													
max-clients	Maximum number of stations (STAs) or WiFi clients supported by the radio. Range depends on the hardware.	integer	Minimum value: 0 0 Maximum value: 4294967295													
max-distance	Maximum expected distance between the AP and clients (0 - 54000 m, default = 0).	integer	Minimum value: 0 0 Maximum value: 54000													
mode	Mode of radio 2. Radio 2 can be disabled, configured as an access point, a rogue AP monitor, a sniffer, or a station.	option	-	ap												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disabled</td><td>Radio 2 is disabled.</td></tr><tr><td>ap</td><td>Radio 2 operates as an access point that allows WiFi clients to connect to your network.</td></tr><tr><td>monitor</td><td>Radio 2 operates as a dedicated monitor. As a monitor, the radio scans for other WiFi access points and adds them to the Rogue AP monitor list.</td></tr><tr><td>sniffer</td><td>Radio 2 operates as a sniffer capturing WiFi frames on air.</td></tr><tr><td>sam</td><td>Radio 2 operates as a station that can connect to a neighboring AP for connectivity and health check.</td></tr></table>				Option	Description	disabled	Radio 2 is disabled.	ap	Radio 2 operates as an access point that allows WiFi clients to connect to your network.	monitor	Radio 2 operates as a dedicated monitor. As a monitor, the radio scans for other WiFi access points and adds them to the Rogue AP monitor list.	sniffer	Radio 2 operates as a sniffer capturing WiFi frames on air.	sam	Radio 2 operates as a station that can connect to a neighboring AP for connectivity and health check.
Option	Description															
disabled	Radio 2 is disabled.															
ap	Radio 2 operates as an access point that allows WiFi clients to connect to your network.															
monitor	Radio 2 operates as a dedicated monitor. As a monitor, the radio scans for other WiFi access points and adds them to the Rogue AP monitor list.															
sniffer	Radio 2 operates as a sniffer capturing WiFi frames on air.															
sam	Radio 2 operates as a station that can connect to a neighboring AP for connectivity and health check.															

Parameter	Description	Type	Size	Default
optional-antenna	Optional antenna used on FAP (default = none).	option	-	none
	Option	Description		
	<i>none</i>	None.		
	<i>FANT-04ABGN-0606-O-N</i>	6 dBi(2.4GHz) and 6 dBi(5GHz).		
	<i>FANT-04ABGN-1414-P-N</i>	14 dBi(2.4GHz) and 14 dBi(5GHz).		
	<i>FANT-04ABGN-8065-P-N</i>	8 dBi(2.4GHz) and 6.5 dBi(5GHz).		
	<i>FANT-04ABGN-0606-O-R</i>	6 dBi(2.4GHz) and 6 dBi(5GHz).		
	<i>FANT-04ABGN-0606-P-R</i>	6 dBi(2.4GHz) and 6 dBi(5GHz).		
	<i>FANT-10ACAX-1213-D-N</i>	12 dBi(2.4GHz) and 13 dBi(5GHz).		
	<i>FANT-08ABGN-1213-D-R</i>	12 dBi(2.4GHz) and 13 dBi(5GHz).		
power-level	Radio EIRP power level as a percentage of the maximum EIRP power (0 - 100, default = 100).	integer	Minimum value: 0 Maximum value: 100	100
power-mode	Set radio effective isotropic radiated power (EIRP) in dBm or by a percentage of the maximum EIRP (default = percentage). This power takes into account both radio transmit power and antenna gain. Higher power level settings may be constrained by local regulatory requirements and AP capabilities.	option	-	percentage

Parameter	Description	Type	Size	Default												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>dBm</i></td><td>Set radio EIRP power in dBm.</td></tr><tr><td><i>percentage</i></td><td>Set radio EIRP power by percentage.</td></tr></table>	Option	Description	<i>dBm</i>	Set radio EIRP power in dBm.	<i>percentage</i>	Set radio EIRP power by percentage.									
	Option	Description														
	<i>dBm</i>	Set radio EIRP power in dBm.														
<i>percentage</i>	Set radio EIRP power by percentage.															
power-value	Radio EIRP power in dBm (1 - 33, default = 27).	integer	Minimum value: 27 1 Maximum value: 33													
powersave-optimize	Enable client power-saving features such as TIM, AC VO, and OBSS etc.	option	-													
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>tim</i></td><td>TIM bit for client in power save mode.</td></tr><tr><td><i>ac-vo</i></td><td>Use AC VO priority to send out packets in the power save queue.</td></tr><tr><td><i>no-obss-scan</i></td><td>Do not put OBSS scan IE into beacon and probe response frames.</td></tr><tr><td><i>no-11b-rate</i></td><td>Do not send frame using 11b data rate.</td></tr><tr><td><i>client-rate-follow</i></td><td>Adapt transmitting PHY rate with receiving PHY rate from a client.</td></tr></table>	Option	Description	<i>tim</i>	TIM bit for client in power save mode.	<i>ac-vo</i>	Use AC VO priority to send out packets in the power save queue.	<i>no-obss-scan</i>	Do not put OBSS scan IE into beacon and probe response frames.	<i>no-11b-rate</i>	Do not send frame using 11b data rate.	<i>client-rate-follow</i>	Adapt transmitting PHY rate with receiving PHY rate from a client.			
	Option	Description														
	<i>tim</i>	TIM bit for client in power save mode.														
	<i>ac-vo</i>	Use AC VO priority to send out packets in the power save queue.														
	<i>no-obss-scan</i>	Do not put OBSS scan IE into beacon and probe response frames.														
	<i>no-11b-rate</i>	Do not send frame using 11b data rate.														
<i>client-rate-follow</i>	Adapt transmitting PHY rate with receiving PHY rate from a client.															
protection-mode	Enable/disable 802.11g protection modes to support backwards compatibility with older clients (rtscts, ctsonly, disable).	option	-	disable												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>rtscts</i></td><td>Enable 802.11g protection RTS/CTS mode.</td></tr><tr><td><i>ctsonly</i></td><td>Enable 802.11g protection CTS only mode.</td></tr><tr><td><i>disable</i></td><td>Disable 802.11g protection mode.</td></tr></table>	Option	Description	<i>rtscts</i>	Enable 802.11g protection RTS/CTS mode.	<i>ctsonly</i>	Enable 802.11g protection CTS only mode.	<i>disable</i>	Disable 802.11g protection mode.							
	Option	Description														
	<i>rtscts</i>	Enable 802.11g protection RTS/CTS mode.														
	<i>ctsonly</i>	Enable 802.11g protection CTS only mode.														
<i>disable</i>	Disable 802.11g protection mode.															
rts-threshold	Maximum packet size for RTS transmissions, specifying the maximum size of a data packet before RTS/CTS (256 - 2346 bytes, default = 2346).	integer	Minimum value: 256 Maximum value: 2346													
sam-bssid	BSSID for WiFi network.	mac-address	Not Specified	00:00:00:00:00:00												
sam-captive-portal	Enable/disable Captive Portal Authentication (default = disable).	option	-	disable												

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>enable</i>	Enable Captive Portal Authentication.		
	<i>disable</i>	Disable Captive Portal Authentication.		
sam-cwp-failure-string	Failure identification on the page after an incorrect login.	string	Maximum length: 64	
sam-cwp-match-string	Identification string from the captive portal login form.	string	Maximum length: 64	
sam-cwp-password	Password for captive portal authentication.	password	Not Specified	
sam-cwp-success-string	Success identification on the page after a successful login.	string	Maximum length: 64	
sam-cwp-test-url	Website the client is trying to access.	string	Maximum length: 255	
sam-cwp-username	Username for captive portal authentication.	string	Maximum length: 35	
sam-password	Passphrase for WiFi network connection.	password	Not Specified	
sam-report-intv	SAM report interval (sec), 0 for a one-time report.	integer	Minimum value: 0 60 Maximum value: 864000	
sam-security-type	Select WiFi network security type (default = "wpa-personal").	option	-	wpa-personal
	Option	Description		
	<i>open</i>	Open.		
	<i>wpa-personal</i>	WPA/WPA2 personal.		
	<i>wpa-enterprise</i>	WPA/WPA2 enterprise.		
sam-server-fqdn	SAM test server domain name.	string	Maximum length: 255	
sam-server-ip	SAM test server IP address.	ipv4-address	Not Specified	0.0.0.0
sam-server-type	Select SAM server type (default = "IP").	option	-	ip

Parameter	Description	Type	Size	Default
	Option Description			
	<i>ip</i>	IPv4 address.		
	<i>fqdn</i>	Fully Qualified Domain Name address.		
sam-ssid	SSID for WiFi network.	string	Maximum length: 32	
sam-test	Select SAM test type (default = "PING").	option	-	ping
	Option Description			
	<i>ping</i>	PING test.		
	<i>iperf</i>	IPERF test.		
sam-username	Username for WiFi network connection.	string	Maximum length: 35	
short-guard-interval	Use either the short guard interval (Short GI) of 400 ns or the long guard interval (Long GI) of 800 ns.	option	-	disable
	Option Description			
	<i>enable</i>	Select the 400 ns short guard interval (Short GI).		
	<i>disable</i>	Select the 800 ns long guard interval (Long GI).		
transmit-optimize	Packet transmission optimization options including power saving, aggregation limiting, retry limiting, etc. All are enabled by default.	option	-	power-save aggr-limit retry-limit send-bar
	Option Description			
	<i>disable</i>	Disable packet transmission optimization.		
	<i>power-save</i>	Tag client as operating in power save mode if excessive transmit retries occur.		
	<i>aggr-limit</i>	Set aggregation limit to a lower value when data rate is low.		
	<i>retry-limit</i>	Set software retry limit to a lower value when data rate is low.		
	<i>send-bar</i>	Limit transmission of BAR frames.		
vap-all	Configure method for assigning SSIDs to this FortiAP (default = automatically assign tunnel SSIDs).	option	-	tunnel

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>tunnel</i>	Automatically select tunnel SSIDs.		
	<i>bridge</i>	Automatically select local-bridging SSIDs.		
	<i>manual</i>	Manually select SSIDs.		
vaps <name>	Manually selected list of Virtual Access Points (VAPs). Virtual Access Point (VAP) name.	string	Maximum length: 35	
wids-profile	Wireless Intrusion Detection System (WIDS) profile name to assign to the radio.	string	Maximum length: 35	
zero-wait-dfs	Enable/disable zero wait DFS on radio (default = enable).	option	-	enable
	Option	Description		
	<i>enable</i>	Enable zero wait DFS		
	<i>disable</i>	Disable zero wait DFS		

config radio-3

Parameter	Description	Type	Size	Default						
80211d	Enable/disable 802.11d countryie (default = enable).	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable 802.11d countryie.</td></tr><tr><td><i>disable</i></td><td>Disable 802.11d countryie.</td></tr></table>	Option	Description	<i>enable</i>	Enable 802.11d countryie.	<i>disable</i>	Disable 802.11d countryie.			
Option	Description									
<i>enable</i>	Enable 802.11d countryie.									
<i>disable</i>	Disable 802.11d countryie.									
airtime-fairness	Enable/disable airtime fairness (default = disable).	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable airtime fairness (ATF) support.</td></tr><tr><td><i>disable</i></td><td>Disable airtime fairness (ATF) support.</td></tr></table>	Option	Description	<i>enable</i>	Enable airtime fairness (ATF) support.	<i>disable</i>	Disable airtime fairness (ATF) support.			
Option	Description									
<i>enable</i>	Enable airtime fairness (ATF) support.									
<i>disable</i>	Disable airtime fairness (ATF) support.									
amsdu	Enable/disable 802.11n AMSDU support. AMSDU can improve performance if supported by your WiFi clients (default = enable).	option	-	enable						

Parameter	Description	Type	Size	Default
	Option Description			
	<i>enable</i>	Enable AMSDU support.		
	<i>disable</i>	Disable AMSDU support.		
ap-sniffer-addr	MAC address to monitor.	mac-address	Not Specified	00:00:00:00:00:00
ap-sniffer-bufsize	Sniffer buffer size (1 - 32 MB, default = 16).	integer	Minimum value: 1 Maximum value: 32	16
ap-sniffer-chan	Channel on which to operate the sniffer (default = 6).	integer	Minimum value: 0 Maximum value: 4294967295	6
ap-sniffer-ctl	Enable/disable sniffer on WiFi control frame (default = enable).	option	-	enable
	Option Description			
	<i>enable</i>	Enable sniffer on WiFi control frame.		
	<i>disable</i>	Disable sniffer on WiFi control frame.		
ap-sniffer-data	Enable/disable sniffer on WiFi data frame (default = enable).	option	-	enable
	Option Description			
	<i>enable</i>	Enable sniffer on WiFi data frame		
	<i>disable</i>	Disable sniffer on WiFi data frame		
ap-sniffer-mgmt-beacon	Enable/disable sniffer on WiFi management Beacon frames (default = enable).	option	-	enable
	Option Description			
	<i>enable</i>	Enable sniffer on WiFi management beacon frame.		
	<i>disable</i>	Disable sniffer on WiFi management beacon frame.		
ap-sniffer-mgmt-other	Enable/disable sniffer on WiFi management other frames (default = enable).	option	-	enable

Parameter	Description	Type	Size	Default
	Option Description			
	<i>enable</i>	Enable sniffer on WiFi management other frame.		
	<i>disable</i>	Disable sniffer on WiFi management other frame.		
ap-sniffer-mgmt-probe	Enable/disable sniffer on WiFi management probe frames (default = enable).	option	-	enable
	Option Description			
	<i>enable</i>	Enable sniffer on WiFi management probe frame.		
	<i>disable</i>	Enable sniffer on WiFi management probe frame.		
arrp-profile	Distributed Automatic Radio Resource Provisioning (DARRP) profile name to assign to the radio.	string	Maximum length: 35	
auto-power-high	The upper bound of automatic transmit power adjustment in dBm (the actual range of transmit power depends on the AP platform type).	integer	Minimum value: 17 0 Maximum value: 4294967295	
auto-power-level	Enable/disable automatic power-level adjustment to prevent co-channel interference (default = enable).	option	-	disable
	Option Description			
	<i>enable</i>	Enable automatic transmit power adjustment.		
	<i>disable</i>	Disable automatic transmit power adjustment.		
auto-power-low	The lower bound of automatic transmit power adjustment in dBm (the actual range of transmit power depends on the AP platform type).	integer	Minimum value: 10 0 Maximum value: 4294967295	
auto-power-target	Target of automatic transmit power adjustment in dBm (-95 to -20, default = -70).	string	Maximum length: 7	-70
band	WiFi band that Radio 3 operates on.	option	-	
	Option Description			
	<i>802.11a</i>	802.11a.		

Parameter	Description	Type	Size	Default
	Option	Description		
	802.11b	802.11b.		
	802.11g	802.11g/b.		
	802.11n	802.11n/g/b at 2.4GHz.		
	802.11n-5G	802.11n/a at 5GHz.		
	802.11ac	802.11ac/n/a.		
	802.11ax-5G	802.11ax/ac/n/a at 5GHz.		
	802.11ax	802.11ax/n/g/b at 2.4GHz.		
	802.11ac-2G	802.11ac at 2.4GHz.		
	802.11ax-6G	802.11ax at 6GHz.		
	802.11n,g-only	802.11n/g at 2.4GHz.		
	802.11g-only	802.11g.		
	802.11n-only	802.11n at 2.4GHz.		
	802.11n-5G-only	802.11n at 5GHz.		
	802.11ac,n-only	802.11ac/n.		
	802.11ac-only	802.11ac.		
	802.11ax,ac-only	802.11ax/ac at 5GHz.		
	802.11ax,ac,n-only	802.11ax/ac/n at 5GHz.		
	802.11ax-5G-only	802.11ax at 5GHz.		
	802.11ax,n-only	802.11ax/n at 2.4GHz.		
802.11ax,n,g-only	802.11ax/n/g at 2.4GHz.			
802.11ax-only	802.11ax at 2.4GHz.			
band-5g-type	WiFi 5G band type.	option	-	5g-full
	Option	Description		
	5g-full	Full 5G band.		
	5g-high	High 5G band.		
	5g-low	Low 5G band.		

Parameter	Description	Type	Size	Default						
bandwidth-admission-control	Enable/disable WiFi multimedia (WMM) bandwidth admission control to optimize WiFi bandwidth use. A request to join the wireless network is only allowed if the access point has enough bandwidth to support it.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable WMM bandwidth admission control.</td></tr><tr><td><i>disable</i></td><td>Disable WMM bandwidth admission control.</td></tr></table>	Option	Description	<i>enable</i>	Enable WMM bandwidth admission control.	<i>disable</i>	Disable WMM bandwidth admission control.			
Option	Description									
<i>enable</i>	Enable WMM bandwidth admission control.									
<i>disable</i>	Disable WMM bandwidth admission control.									
bandwidth-capacity	Maximum bandwidth capacity allowed (1 - 600000 Kbps, default = 2000).	integer	Minimum value: 2000 1 Maximum value: 600000							
beacon-interval	Beacon interval. The time between beacon frames in milliseconds. Actual range of beacon interval depends on the AP platform type (default = 100).	integer	Minimum value: 100 0 Maximum value: 65535							
bss-color	BSS color value for this 11ax radio (0 - 63, disable = 0, default = 0).	integer	Minimum value: 0 0 Maximum value: 63							
bss-color-mode	BSS color mode for this 11ax radio (default = auto).	option	-	auto						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>auto</i></td><td>Automatically select BSS color value on AP.</td></tr><tr><td><i>static</i></td><td>Set BSS color value on this radio based on 'bss-color' CLI.</td></tr></table>	Option	Description	<i>auto</i>	Automatically select BSS color value on AP.	<i>static</i>	Set BSS color value on this radio based on 'bss-color' CLI.			
Option	Description									
<i>auto</i>	Automatically select BSS color value on AP.									
<i>static</i>	Set BSS color value on this radio based on 'bss-color' CLI.									
call-admission-control	Enable/disable WiFi multimedia (WMM) call admission control to optimize WiFi bandwidth use for VoIP calls. New VoIP calls are only accepted if there is enough bandwidth available to support them.	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable WMM call admission control.</td></tr><tr><td><i>disable</i></td><td>Disable WMM call admission control.</td></tr></table>	Option	Description	<i>enable</i>	Enable WMM call admission control.	<i>disable</i>	Disable WMM call admission control.			
Option	Description									
<i>enable</i>	Enable WMM call admission control.									
<i>disable</i>	Disable WMM call admission control.									

Parameter	Description	Type	Size	Default										
call-capacity	Maximum number of Voice over WLAN (VoWLAN) phones supported by the radio (0 - 60, default = 10).	integer	Minimum value: 0 Maximum value: 60	10										
channel <chan>	Selected list of wireless radio channels. Channel number.	string	Maximum length: 3											
channel-bonding	Channel bandwidth: 160,80, 40, or 20MHz. Channels may use both 20 and 40 by enabling coexistence.	option	-	20MHz										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>160MHz</td><td>160 MHz channel width.</td></tr><tr><td>80MHz</td><td>80 MHz channel width.</td></tr><tr><td>40MHz</td><td>40 MHz channel width.</td></tr><tr><td>20MHz</td><td>20 MHz channel width.</td></tr></table>	Option	Description	160MHz	160 MHz channel width.	80MHz	80 MHz channel width.	40MHz	40 MHz channel width.	20MHz	20 MHz channel width.			
Option	Description													
160MHz	160 MHz channel width.													
80MHz	80 MHz channel width.													
40MHz	40 MHz channel width.													
20MHz	20 MHz channel width.													
channel-utilization	Enable/disable measuring channel utilization.	option	-	enable										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable measuring channel utilization.</td></tr><tr><td>disable</td><td>Disable measuring channel utilization.</td></tr></table>	Option	Description	enable	Enable measuring channel utilization.	disable	Disable measuring channel utilization.							
Option	Description													
enable	Enable measuring channel utilization.													
disable	Disable measuring channel utilization.													
coexistence	Enable/disable allowing both HT20 and HT40 on the same radio (default = enable).	option	-	enable										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable support for both HT20 and HT40 on the same radio.</td></tr><tr><td>disable</td><td>Disable support for both HT20 and HT40 on the same radio.</td></tr></table>	Option	Description	enable	Enable support for both HT20 and HT40 on the same radio.	disable	Disable support for both HT20 and HT40 on the same radio.							
Option	Description													
enable	Enable support for both HT20 and HT40 on the same radio.													
disable	Disable support for both HT20 and HT40 on the same radio.													
darrp	Enable/disable Distributed Automatic Radio Resource Provisioning (DARRP) to make sure the radio is always using the most optimal channel (default = disable).	option	-	disable										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable distributed automatic radio resource provisioning.</td></tr><tr><td>disable</td><td>Disable distributed automatic radio resource provisioning.</td></tr></table>	Option	Description	enable	Enable distributed automatic radio resource provisioning.	disable	Disable distributed automatic radio resource provisioning.							
Option	Description													
enable	Enable distributed automatic radio resource provisioning.													
disable	Disable distributed automatic radio resource provisioning.													

Parameter	Description	Type	Size	Default								
drma	Enable/disable dynamic radio mode assignment (DRMA) (default = disable).	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Disable dynamic radio mode assignment (DRMA).</td></tr><tr><td>enable</td><td>Enable dynamic radio mode assignment (DRMA).</td></tr></table>	Option	Description	disable	Disable dynamic radio mode assignment (DRMA).	enable	Enable dynamic radio mode assignment (DRMA).					
Option	Description											
disable	Disable dynamic radio mode assignment (DRMA).											
enable	Enable dynamic radio mode assignment (DRMA).											
drma-sensitivity	Network Coverage Factor (NCF) percentage required to consider a radio as redundant (default = low).	option	-	low								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>low</td><td>Consider a radio as redundant when its NCF is 100%.</td></tr><tr><td>medium</td><td>Consider a radio as redundant when its NCF is 95%.</td></tr><tr><td>high</td><td>Consider a radio as redundant when its NCF is 90%.</td></tr></table>	Option	Description	low	Consider a radio as redundant when its NCF is 100%.	medium	Consider a radio as redundant when its NCF is 95%.	high	Consider a radio as redundant when its NCF is 90%.			
Option	Description											
low	Consider a radio as redundant when its NCF is 100%.											
medium	Consider a radio as redundant when its NCF is 95%.											
high	Consider a radio as redundant when its NCF is 90%.											
dtim	Delivery Traffic Indication Map (DTIM) period (1 - 255, default = 1). Set higher to save battery life of WiFi client in power-save mode.	integer	Minimum value: 1 Maximum value: 255									
frag-threshold	Maximum packet size that can be sent without fragmentation (800 - 2346 bytes, default = 2346).	integer	Minimum value: 800 Maximum value: 2346	2346								
iperf-protocol	Iperf test protocol (default = "UDP").	option	-	udp								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>udp</td><td>UDP.</td></tr><tr><td>tcp</td><td>TCP.</td></tr></table>	Option	Description	udp	UDP.	tcp	TCP.					
Option	Description											
udp	UDP.											
tcp	TCP.											
iperf-server-port	Iperf service port number.	integer	Minimum value: 5001 Maximum value: 65535									
max-clients	Maximum number of stations (STAs) or WiFi clients supported by the radio. Range depends on the hardware.	integer	Minimum value: 0 Maximum value: 4294967295									
max-distance	Maximum expected distance between the AP and clients (0 - 54000 m, default = 0).	integer	Minimum value: 0 Maximum value: 54000									

Parameter	Description	Type	Size	Default																
mode	Mode of radio 3. Radio 3 can be disabled, configured as an access point, a rogue AP monitor, a sniffer, or a station.	option	-	ap																
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disabled</td><td>Radio 3 is disabled.</td></tr><tr><td>ap</td><td>Radio 3 operates as an access point that allows WiFi clients to connect to your network.</td></tr><tr><td>monitor</td><td>Radio 3 operates as a dedicated monitor. As a monitor, the radio scans for other WiFi access points and adds them to the Rogue AP monitor list.</td></tr><tr><td>sniffer</td><td>Radio 3 operates as a sniffer capturing WiFi frames on air.</td></tr><tr><td>sam</td><td>Radio 3 operates as a station that can connect to a neighboring AP for connectivity and health check.</td></tr></table>	Option	Description	disabled	Radio 3 is disabled.	ap	Radio 3 operates as an access point that allows WiFi clients to connect to your network.	monitor	Radio 3 operates as a dedicated monitor. As a monitor, the radio scans for other WiFi access points and adds them to the Rogue AP monitor list.	sniffer	Radio 3 operates as a sniffer capturing WiFi frames on air.	sam	Radio 3 operates as a station that can connect to a neighboring AP for connectivity and health check.							
Option	Description																			
disabled	Radio 3 is disabled.																			
ap	Radio 3 operates as an access point that allows WiFi clients to connect to your network.																			
monitor	Radio 3 operates as a dedicated monitor. As a monitor, the radio scans for other WiFi access points and adds them to the Rogue AP monitor list.																			
sniffer	Radio 3 operates as a sniffer capturing WiFi frames on air.																			
sam	Radio 3 operates as a station that can connect to a neighboring AP for connectivity and health check.																			
optional-antenna	Optional antenna used on FAP (default = none).	option	-	none																
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>none</td><td>None.</td></tr><tr><td>FANT-04ABGN-0606-O-N</td><td>6 dBi(2.4GHz) and 6 dBi(5GHz).</td></tr><tr><td>FANT-04ABGN-1414-P-N</td><td>14 dBi(2.4GHz) and 14 dBi(5GHz).</td></tr><tr><td>FANT-04ABGN-8065-P-N</td><td>8 dBi(2.4GHz) and 6.5 dBi(5GHz).</td></tr><tr><td>FANT-04ABGN-0606-O-R</td><td>6 dBi(2.4GHz) and 6 dBi(5GHz).</td></tr><tr><td>FANT-04ABGN-0606-P-R</td><td>6 dBi(2.4GHz) and 6 dBi(5GHz).</td></tr><tr><td>FANT-10ACAX-1213-D-N</td><td>12 dBi(2.4GHz) and 13 dBi(5GHz).</td></tr></table>	Option	Description	none	None.	FANT-04ABGN-0606-O-N	6 dBi(2.4GHz) and 6 dBi(5GHz).	FANT-04ABGN-1414-P-N	14 dBi(2.4GHz) and 14 dBi(5GHz).	FANT-04ABGN-8065-P-N	8 dBi(2.4GHz) and 6.5 dBi(5GHz).	FANT-04ABGN-0606-O-R	6 dBi(2.4GHz) and 6 dBi(5GHz).	FANT-04ABGN-0606-P-R	6 dBi(2.4GHz) and 6 dBi(5GHz).	FANT-10ACAX-1213-D-N	12 dBi(2.4GHz) and 13 dBi(5GHz).			
Option	Description																			
none	None.																			
FANT-04ABGN-0606-O-N	6 dBi(2.4GHz) and 6 dBi(5GHz).																			
FANT-04ABGN-1414-P-N	14 dBi(2.4GHz) and 14 dBi(5GHz).																			
FANT-04ABGN-8065-P-N	8 dBi(2.4GHz) and 6.5 dBi(5GHz).																			
FANT-04ABGN-0606-O-R	6 dBi(2.4GHz) and 6 dBi(5GHz).																			
FANT-04ABGN-0606-P-R	6 dBi(2.4GHz) and 6 dBi(5GHz).																			
FANT-10ACAX-1213-D-N	12 dBi(2.4GHz) and 13 dBi(5GHz).																			

Parameter	Description	Type	Size	Default												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>FANT-08ABGN-1213-D-R</td><td>12 dBi(2.4GHz) and 13 dBi(5GHz).</td></tr></table>	Option	Description	FANT-08ABGN-1213-D-R	12 dBi(2.4GHz) and 13 dBi(5GHz).											
Option	Description															
FANT-08ABGN-1213-D-R	12 dBi(2.4GHz) and 13 dBi(5GHz).															
power-level	Radio EIRP power level as a percentage of the maximum EIRP power (0 - 100, default = 100).	integer	Minimum value: 0 Maximum value: 100	100												
power-mode	Set radio effective isotropic radiated power (EIRP) in dBm or by a percentage of the maximum EIRP (default = percentage). This power takes into account both radio transmit power and antenna gain. Higher power level settings may be constrained by local regulatory requirements and AP capabilities.	option	-	percentage												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>dBm</td><td>Set radio EIRP power in dBm.</td></tr><tr><td>percentage</td><td>Set radio EIRP power by percentage.</td></tr></table>	Option	Description	dBm	Set radio EIRP power in dBm.	percentage	Set radio EIRP power by percentage.									
Option	Description															
dBm	Set radio EIRP power in dBm.															
percentage	Set radio EIRP power by percentage.															
power-value	Radio EIRP power in dBm (1 - 33, default = 27).	integer	Minimum value: 1 Maximum value: 33	27												
powersave-optimize	Enable client power-saving features such as TIM, AC VO, and OBSS etc.	option	-													
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>tim</td><td>TIM bit for client in power save mode.</td></tr><tr><td>ac-vo</td><td>Use AC VO priority to send out packets in the power save queue.</td></tr><tr><td>no-obss-scan</td><td>Do not put OBSS scan IE into beacon and probe response frames.</td></tr><tr><td>no-11b-rate</td><td>Do not send frame using 11b data rate.</td></tr><tr><td>client-rate-follow</td><td>Adapt transmitting PHY rate with receiving PHY rate from a client.</td></tr></table>	Option	Description	tim	TIM bit for client in power save mode.	ac-vo	Use AC VO priority to send out packets in the power save queue.	no-obss-scan	Do not put OBSS scan IE into beacon and probe response frames.	no-11b-rate	Do not send frame using 11b data rate.	client-rate-follow	Adapt transmitting PHY rate with receiving PHY rate from a client.			
Option	Description															
tim	TIM bit for client in power save mode.															
ac-vo	Use AC VO priority to send out packets in the power save queue.															
no-obss-scan	Do not put OBSS scan IE into beacon and probe response frames.															
no-11b-rate	Do not send frame using 11b data rate.															
client-rate-follow	Adapt transmitting PHY rate with receiving PHY rate from a client.															
protection-mode	Enable/disable 802.11g protection modes to support backwards compatibility with older clients (rtscts, ctsonly, disable).	option	-	disable												

Parameter	Description	Type	Size	Default								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>rtscts</i></td><td>Enable 802.11g protection RTS/CTS mode.</td></tr><tr><td><i>ctsonly</i></td><td>Enable 802.11g protection CTS only mode.</td></tr><tr><td><i>disable</i></td><td>Disable 802.11g protection mode.</td></tr></table>	Option	Description	<i>rtscts</i>	Enable 802.11g protection RTS/CTS mode.	<i>ctsonly</i>	Enable 802.11g protection CTS only mode.	<i>disable</i>	Disable 802.11g protection mode.			
	Option	Description										
	<i>rtscts</i>	Enable 802.11g protection RTS/CTS mode.										
	<i>ctsonly</i>	Enable 802.11g protection CTS only mode.										
<i>disable</i>	Disable 802.11g protection mode.											
rts-threshold	Maximum packet size for RTS transmissions, specifying the maximum size of a data packet before RTS/CTS (256 - 2346 bytes, default = 2346).	integer	Minimum value: 256 Maximum value: 2346	2346								
sam-bssid	BSSID for WiFi network.	mac-address	Not Specified	00:00:00:00:00:00								
sam-captive-portal	Enable/disable Captive Portal Authentication (default = disable).	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable Captive Portal Authentication.</td></tr><tr><td><i>disable</i></td><td>Disable Captive Portal Authentication.</td></tr></table>	Option	Description	<i>enable</i>	Enable Captive Portal Authentication.	<i>disable</i>	Disable Captive Portal Authentication.					
	Option	Description										
	<i>enable</i>	Enable Captive Portal Authentication.										
<i>disable</i>	Disable Captive Portal Authentication.											
sam-cwp-failure-string	Failure identification on the page after an incorrect login.	string	Maximum length: 64									
sam-cwp-match-string	Identification string from the captive portal login form.	string	Maximum length: 64									
sam-cwp-password	Password for captive portal authentication.	password	Not Specified									
sam-cwp-success-string	Success identification on the page after a successful login.	string	Maximum length: 64									
sam-cwp-test-url	Website the client is trying to access.	string	Maximum length: 255									
sam-cwp-username	Username for captive portal authentication.	string	Maximum length: 35									
sam-password	Passphrase for WiFi network connection.	password	Not Specified									
sam-report-intv	SAM report interval (sec), 0 for a one-time report.	integer	Minimum value: 60 Maximum value: 864000	0								

Parameter	Description	Type	Size	Default								
sam-security-type	Select WiFi network security type (default = "wpa-personal").	option	-	wpa-personal								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>open</i></td><td>Open.</td></tr><tr><td><i>wpa-personal</i></td><td>WPA/WPA2 personal.</td></tr><tr><td><i>wpa-enterprise</i></td><td>WPA/WPA2 enterprise.</td></tr></table>	Option	Description	<i>open</i>	Open.	<i>wpa-personal</i>	WPA/WPA2 personal.	<i>wpa-enterprise</i>	WPA/WPA2 enterprise.			
Option	Description											
<i>open</i>	Open.											
<i>wpa-personal</i>	WPA/WPA2 personal.											
<i>wpa-enterprise</i>	WPA/WPA2 enterprise.											
sam-server-fqdn	SAM test server domain name.	string	Maximum length: 255									
sam-server-ip	SAM test server IP address.	ipv4-address	Not Specified	0.0.0.0								
sam-server-type	Select SAM server type (default = "IP").	option	-	ip								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>ip</i></td><td>IPv4 address.</td></tr><tr><td><i>fqdn</i></td><td>Fully Qualified Domain Name address.</td></tr></table>	Option	Description	<i>ip</i>	IPv4 address.	<i>fqdn</i>	Fully Qualified Domain Name address.					
Option	Description											
<i>ip</i>	IPv4 address.											
<i>fqdn</i>	Fully Qualified Domain Name address.											
sam-ssid	SSID for WiFi network.	string	Maximum length: 32									
sam-test	Select SAM test type (default = "PING").	option	-	ping								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>ping</i></td><td>PING test.</td></tr><tr><td><i>iperf</i></td><td>IPERF test.</td></tr></table>	Option	Description	<i>ping</i>	PING test.	<i>iperf</i>	IPERF test.					
Option	Description											
<i>ping</i>	PING test.											
<i>iperf</i>	IPERF test.											
sam-username	Username for WiFi network connection.	string	Maximum length: 35									
short-guard-interval	Use either the short guard interval (Short GI) of 400 ns or the long guard interval (Long GI) of 800 ns.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Select the 400 ns short guard interval (Short GI).</td></tr><tr><td><i>disable</i></td><td>Select the 800 ns long guard interval (Long GI).</td></tr></table>	Option	Description	<i>enable</i>	Select the 400 ns short guard interval (Short GI).	<i>disable</i>	Select the 800 ns long guard interval (Long GI).					
Option	Description											
<i>enable</i>	Select the 400 ns short guard interval (Short GI).											
<i>disable</i>	Select the 800 ns long guard interval (Long GI).											

Parameter	Description	Type	Size	Default												
transmit-optimize	Packet transmission optimization options including power saving, aggregation limiting, retry limiting, etc. All are enabled by default.	option	-	power-save aggr-limit retry-limit send-bar												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Disable packet transmission optimization.</td></tr><tr><td>power-save</td><td>Tag client as operating in power save mode if excessive transmit retries occur.</td></tr><tr><td>aggr-limit</td><td>Set aggregation limit to a lower value when data rate is low.</td></tr><tr><td>retry-limit</td><td>Set software retry limit to a lower value when data rate is low.</td></tr><tr><td>send-bar</td><td>Limit transmission of BAR frames.</td></tr></table>	Option	Description	disable	Disable packet transmission optimization.	power-save	Tag client as operating in power save mode if excessive transmit retries occur.	aggr-limit	Set aggregation limit to a lower value when data rate is low.	retry-limit	Set software retry limit to a lower value when data rate is low.	send-bar	Limit transmission of BAR frames.			
Option	Description															
disable	Disable packet transmission optimization.															
power-save	Tag client as operating in power save mode if excessive transmit retries occur.															
aggr-limit	Set aggregation limit to a lower value when data rate is low.															
retry-limit	Set software retry limit to a lower value when data rate is low.															
send-bar	Limit transmission of BAR frames.															
vap-all	Configure method for assigning SSIDs to this FortiAP (default = automatically assign tunnel SSIDs).	option	-	tunnel												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>tunnel</td><td>Automatically select tunnel SSIDs.</td></tr><tr><td>bridge</td><td>Automatically select local-bridging SSIDs.</td></tr><tr><td>manual</td><td>Manually select SSIDs.</td></tr></table>	Option	Description	tunnel	Automatically select tunnel SSIDs.	bridge	Automatically select local-bridging SSIDs.	manual	Manually select SSIDs.							
Option	Description															
tunnel	Automatically select tunnel SSIDs.															
bridge	Automatically select local-bridging SSIDs.															
manual	Manually select SSIDs.															
vaps <name>	Manually selected list of Virtual Access Points (VAPs). Virtual Access Point (VAP) name.	string	Maximum length: 35													
wids-profile	Wireless Intrusion Detection System (WIDS) profile name to assign to the radio.	string	Maximum length: 35													
zero-wait-dfs	Enable/disable zero wait DFS on radio (default = enable).	option	-	enable												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable zero wait DFS</td></tr><tr><td>disable</td><td>Disable zero wait DFS</td></tr></table>	Option	Description	enable	Enable zero wait DFS	disable	Disable zero wait DFS									
Option	Description															
enable	Enable zero wait DFS															
disable	Disable zero wait DFS															

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Parameter	Description	Type	Size	Default						
80211d	Enable/disable 802.11d countryie (default = enable).	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable 802.11d countryie.</td></tr><tr><td><i>disable</i></td><td>Disable 802.11d countryie.</td></tr></table>	Option	Description	<i>enable</i>	Enable 802.11d countryie.	<i>disable</i>	Disable 802.11d countryie.			
Option	Description									
<i>enable</i>	Enable 802.11d countryie.									
<i>disable</i>	Disable 802.11d countryie.									
airtime-fairness	Enable/disable airtime fairness (default = disable).	option	-	disable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable airtime fairness (ATF) support.</td></tr><tr><td><i>disable</i></td><td>Disable airtime fairness (ATF) support.</td></tr></table>	Option	Description	<i>enable</i>	Enable airtime fairness (ATF) support.	<i>disable</i>	Disable airtime fairness (ATF) support.			
Option	Description									
<i>enable</i>	Enable airtime fairness (ATF) support.									
<i>disable</i>	Disable airtime fairness (ATF) support.									
amsdu	Enable/disable 802.11n AMSDU support. AMSDU can improve performance if supported by your WiFi clients (default = enable).	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable AMSDU support.</td></tr><tr><td><i>disable</i></td><td>Disable AMSDU support.</td></tr></table>	Option	Description	<i>enable</i>	Enable AMSDU support.	<i>disable</i>	Disable AMSDU support.			
Option	Description									
<i>enable</i>	Enable AMSDU support.									
<i>disable</i>	Disable AMSDU support.									
ap-sniffer-addr	MAC address to monitor.	mac-address	Not Specified	00:00:00:00:00:00						
ap-sniffer-bufsize	Sniffer buffer size (1 - 32 MB, default = 16).	integer	Minimum value: 1 Maximum value: 32	16						
ap-sniffer-chan	Channel on which to operate the sniffer (default = 6).	integer	Minimum value: 0 Maximum value: 4294967295	6						
ap-sniffer-ctl	Enable/disable sniffer on WiFi control frame (default = enable).	option	-	enable						
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable sniffer on WiFi control frame.</td></tr><tr><td><i>disable</i></td><td>Disable sniffer on WiFi control frame.</td></tr></table>	Option	Description	<i>enable</i>	Enable sniffer on WiFi control frame.	<i>disable</i>	Disable sniffer on WiFi control frame.			
Option	Description									
<i>enable</i>	Enable sniffer on WiFi control frame.									
<i>disable</i>	Disable sniffer on WiFi control frame.									
ap-sniffer-data	Enable/disable sniffer on WiFi data frame (default = enable).	option	-	enable						

Parameter	Description	Type	Size	Default
	Option Description			
	<i>enable</i>	Enable sniffer on WiFi data frame		
	<i>disable</i>	Disable sniffer on WiFi data frame		
ap-sniffer-mgmt-beacon	Enable/disable sniffer on WiFi management Beacon frames (default = enable).	option	-	enable
	Option Description			
	<i>enable</i>	Enable sniffer on WiFi management beacon frame.		
	<i>disable</i>	Disable sniffer on WiFi management beacon frame.		
ap-sniffer-mgmt-other	Enable/disable sniffer on WiFi management other frames (default = enable).	option	-	enable
	Option Description			
	<i>enable</i>	Enable sniffer on WiFi management other frame.		
	<i>disable</i>	Disable sniffer on WiFi management other frame.		
ap-sniffer-mgmt-probe	Enable/disable sniffer on WiFi management probe frames (default = enable).	option	-	enable
	Option Description			
	<i>enable</i>	Enable sniffer on WiFi management probe frame.		
	<i>disable</i>	Enable sniffer on WiFi management probe frame.		
arp-profile	Distributed Automatic Radio Resource Provisioning (DARRP) profile name to assign to the radio.	string	Maximum length: 35	
auto-power-high	The upper bound of automatic transmit power adjustment in dBm (the actual range of transmit power depends on the AP platform type).	integer	Minimum value: 17 0 Maximum value: 4294967295	
auto-power-level	Enable/disable automatic power-level adjustment to prevent co-channel interference (default = enable).	option	-	disable

Parameter	Description	Type	Size	Default																																								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable automatic transmit power adjustment.</td></tr><tr><td><i>disable</i></td><td>Disable automatic transmit power adjustment.</td></tr></table>	Option	Description	<i>enable</i>	Enable automatic transmit power adjustment.	<i>disable</i>	Disable automatic transmit power adjustment.																																					
	Option	Description																																										
	<i>enable</i>	Enable automatic transmit power adjustment.																																										
<i>disable</i>	Disable automatic transmit power adjustment.																																											
auto-power-low	The lower bound of automatic transmit power adjustment in dBm (the actual range of transmit power depends on the AP platform type).	integer	Minimum value: 10 0 Maximum value: 4294967295																																									
auto-power-target	Target of automatic transmit power adjustment in dBm (-95 to -20, default = -70).	string	Maximum length: 7	-70																																								
band	WiFi band that Radio 3 operates on.	option	-																																									
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>802.11a</i></td><td>802.11a.</td></tr><tr><td><i>802.11b</i></td><td>802.11b.</td></tr><tr><td><i>802.11g</i></td><td>802.11g/b.</td></tr><tr><td><i>802.11n</i></td><td>802.11n/g/b at 2.4GHz.</td></tr><tr><td><i>802.11n-5G</i></td><td>802.11n/a at 5GHz.</td></tr><tr><td><i>802.11ac</i></td><td>802.11ac/n/a.</td></tr><tr><td><i>802.11ax-5G</i></td><td>802.11ax/ac/n/a at 5GHz.</td></tr><tr><td><i>802.11ax</i></td><td>802.11ax/n/g/b at 2.4GHz.</td></tr><tr><td><i>802.11ac-2G</i></td><td>802.11ac at 2.4GHz.</td></tr><tr><td><i>802.11ax-6G</i></td><td>802.11ax at 6GHz.</td></tr><tr><td><i>802.11n,g-only</i></td><td>802.11n/g at 2.4GHz.</td></tr><tr><td><i>802.11g-only</i></td><td>802.11g.</td></tr><tr><td><i>802.11n-only</i></td><td>802.11n at 2.4GHz.</td></tr><tr><td><i>802.11n-5G-only</i></td><td>802.11n at 5GHz.</td></tr><tr><td><i>802.11ac,n-only</i></td><td>802.11ac/n.</td></tr><tr><td><i>802.11ac-only</i></td><td>802.11ac.</td></tr><tr><td><i>802.11ax,ac-only</i></td><td>802.11ax/ac at 5GHz.</td></tr><tr><td><i>802.11ax,ac,n-only</i></td><td>802.11ax/ac/n at 5GHz.</td></tr><tr><td><i>802.11ax-5G-only</i></td><td>802.11ax at 5GHz.</td></tr></table>	Option	Description	<i>802.11a</i>	802.11a.	<i>802.11b</i>	802.11b.	<i>802.11g</i>	802.11g/b.	<i>802.11n</i>	802.11n/g/b at 2.4GHz.	<i>802.11n-5G</i>	802.11n/a at 5GHz.	<i>802.11ac</i>	802.11ac/n/a.	<i>802.11ax-5G</i>	802.11ax/ac/n/a at 5GHz.	<i>802.11ax</i>	802.11ax/n/g/b at 2.4GHz.	<i>802.11ac-2G</i>	802.11ac at 2.4GHz.	<i>802.11ax-6G</i>	802.11ax at 6GHz.	<i>802.11n,g-only</i>	802.11n/g at 2.4GHz.	<i>802.11g-only</i>	802.11g.	<i>802.11n-only</i>	802.11n at 2.4GHz.	<i>802.11n-5G-only</i>	802.11n at 5GHz.	<i>802.11ac,n-only</i>	802.11ac/n.	<i>802.11ac-only</i>	802.11ac.	<i>802.11ax,ac-only</i>	802.11ax/ac at 5GHz.	<i>802.11ax,ac,n-only</i>	802.11ax/ac/n at 5GHz.	<i>802.11ax-5G-only</i>	802.11ax at 5GHz.			
	Option	Description																																										
	<i>802.11a</i>	802.11a.																																										
	<i>802.11b</i>	802.11b.																																										
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	<i>802.11n</i>	802.11n/g/b at 2.4GHz.																																										
	<i>802.11n-5G</i>	802.11n/a at 5GHz.																																										
	<i>802.11ac</i>	802.11ac/n/a.																																										
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	<i>802.11g-only</i>	802.11g.																																										
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	<i>802.11ac,n-only</i>	802.11ac/n.																																										
	<i>802.11ac-only</i>	802.11ac.																																										
	<i>802.11ax,ac-only</i>	802.11ax/ac at 5GHz.																																										
	<i>802.11ax,ac,n-only</i>	802.11ax/ac/n at 5GHz.																																										
<i>802.11ax-5G-only</i>	802.11ax at 5GHz.																																											

Parameter	Description	Type	Size	Default								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>802.11ax,n-only</td><td>802.11ax/n at 2.4GHz.</td></tr><tr><td>802.11ax,n,g-only</td><td>802.11ax/n/g at 2.4GHz.</td></tr><tr><td>802.11ax-only</td><td>802.11ax at 2.4GHz.</td></tr></table>	Option	Description	802.11ax,n-only	802.11ax/n at 2.4GHz.	802.11ax,n,g-only	802.11ax/n/g at 2.4GHz.	802.11ax-only	802.11ax at 2.4GHz.			
	Option	Description										
	802.11ax,n-only	802.11ax/n at 2.4GHz.										
	802.11ax,n,g-only	802.11ax/n/g at 2.4GHz.										
802.11ax-only	802.11ax at 2.4GHz.											
band-5g-type	WiFi 5G band type.	option	-	5g-full								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>5g-full</td><td>Full 5G band.</td></tr><tr><td>5g-high</td><td>High 5G band.</td></tr><tr><td>5g-low</td><td>Low 5G band.</td></tr></table>	Option	Description	5g-full	Full 5G band.	5g-high	High 5G band.	5g-low	Low 5G band.			
	Option	Description										
	5g-full	Full 5G band.										
	5g-high	High 5G band.										
5g-low	Low 5G band.											
bandwidth-admission-control	Enable/disable WiFi multimedia (WMM) bandwidth admission control to optimize WiFi bandwidth use. A request to join the wireless network is only allowed if the access point has enough bandwidth to support it.	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable WMM bandwidth admission control.</td></tr><tr><td>disable</td><td>Disable WMM bandwidth admission control.</td></tr></table>	Option	Description	enable	Enable WMM bandwidth admission control.	disable	Disable WMM bandwidth admission control.					
	Option	Description										
	enable	Enable WMM bandwidth admission control.										
disable	Disable WMM bandwidth admission control.											
bandwidth-capacity	Maximum bandwidth capacity allowed (1 - 600000 Kbps, default = 2000).	integer	Minimum value: 1 Maximum value: 600000	2000								
beacon-interval	Beacon interval. The time between beacon frames in milliseconds. Actual range of beacon interval depends on the AP platform type (default = 100).	integer	Minimum value: 0 Maximum value: 65535	100								
bss-color	BSS color value for this 11ax radio (0 - 63, disable = 0, default = 0).	integer	Minimum value: 0 Maximum value: 63	0								
bss-color-mode	BSS color mode for this 11ax radio (default = auto).	option	-	auto								

Parameter	Description	Type	Size	Default										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>auto</td><td>Automatically select BSS color value on AP.</td></tr><tr><td>static</td><td>Set BSS color value on this radio based on 'bss-color' CLI.</td></tr></table>	Option	Description	auto	Automatically select BSS color value on AP.	static	Set BSS color value on this radio based on 'bss-color' CLI.							
	Option	Description												
	auto	Automatically select BSS color value on AP.												
static	Set BSS color value on this radio based on 'bss-color' CLI.													
call-admission-control	Enable/disable WiFi multimedia (WMM) call admission control to optimize WiFi bandwidth use for VoIP calls. New VoIP calls are only accepted if there is enough bandwidth available to support them.	option	-	disable										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable WMM call admission control.</td></tr><tr><td>disable</td><td>Disable WMM call admission control.</td></tr></table>	Option	Description	enable	Enable WMM call admission control.	disable	Disable WMM call admission control.							
	Option	Description												
	enable	Enable WMM call admission control.												
disable	Disable WMM call admission control.													
call-capacity	Maximum number of Voice over WLAN (VoWLAN) phones supported by the radio (0 - 60, default = 10).	integer	Minimum value: 0 Maximum value: 60	10										
channel<chan>	Selected list of wireless radio channels. Channel number.	string	Maximum length: 3											
channel-bonding	Channel bandwidth: 160,80, 40, or 20MHz. Channels may use both 20 and 40 by enabling coexistence.	option	-	20MHz										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>160MHz</td><td>160 MHz channel width.</td></tr><tr><td>80MHz</td><td>80 MHz channel width.</td></tr><tr><td>40MHz</td><td>40 MHz channel width.</td></tr><tr><td>20MHz</td><td>20 MHz channel width.</td></tr></table>	Option	Description	160MHz	160 MHz channel width.	80MHz	80 MHz channel width.	40MHz	40 MHz channel width.	20MHz	20 MHz channel width.			
	Option	Description												
	160MHz	160 MHz channel width.												
	80MHz	80 MHz channel width.												
	40MHz	40 MHz channel width.												
20MHz	20 MHz channel width.													
channel-utilization	Enable/disable measuring channel utilization.	option	-	enable										
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable measuring channel utilization.</td></tr><tr><td>disable</td><td>Disable measuring channel utilization.</td></tr></table>	Option	Description	enable	Enable measuring channel utilization.	disable	Disable measuring channel utilization.							
	Option	Description												
	enable	Enable measuring channel utilization.												
disable	Disable measuring channel utilization.													

Parameter	Description	Type	Size	Default								
coexistence	Enable/disable allowing both HT20 and HT40 on the same radio (default = enable).	option	-	enable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable support for both HT20 and HT40 on the same radio.</td></tr><tr><td>disable</td><td>Disable support for both HT20 and HT40 on the same radio.</td></tr></table>	Option	Description	enable	Enable support for both HT20 and HT40 on the same radio.	disable	Disable support for both HT20 and HT40 on the same radio.					
Option	Description											
enable	Enable support for both HT20 and HT40 on the same radio.											
disable	Disable support for both HT20 and HT40 on the same radio.											
darrp	Enable/disable Distributed Automatic Radio Resource Provisioning (DARRP) to make sure the radio is always using the most optimal channel (default = disable).	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Enable distributed automatic radio resource provisioning.</td></tr><tr><td>disable</td><td>Disable distributed automatic radio resource provisioning.</td></tr></table>	Option	Description	enable	Enable distributed automatic radio resource provisioning.	disable	Disable distributed automatic radio resource provisioning.					
Option	Description											
enable	Enable distributed automatic radio resource provisioning.											
disable	Disable distributed automatic radio resource provisioning.											
drma	Enable/disable dynamic radio mode assignment (DRMA) (default = disable).	option	-	disable								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Disable dynamic radio mode assignment (DRMA).</td></tr><tr><td>enable</td><td>Enable dynamic radio mode assignment (DRMA).</td></tr></table>	Option	Description	disable	Disable dynamic radio mode assignment (DRMA).	enable	Enable dynamic radio mode assignment (DRMA).					
Option	Description											
disable	Disable dynamic radio mode assignment (DRMA).											
enable	Enable dynamic radio mode assignment (DRMA).											
drma-sensitivity	Network Coverage Factor (NCF) percentage required to consider a radio as redundant (default = low).	option	-	low								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>low</td><td>Consider a radio as redundant when its NCF is 100%.</td></tr><tr><td>medium</td><td>Consider a radio as redundant when its NCF is 95%.</td></tr><tr><td>high</td><td>Consider a radio as redundant when its NCF is 90%.</td></tr></table>	Option	Description	low	Consider a radio as redundant when its NCF is 100%.	medium	Consider a radio as redundant when its NCF is 95%.	high	Consider a radio as redundant when its NCF is 90%.			
Option	Description											
low	Consider a radio as redundant when its NCF is 100%.											
medium	Consider a radio as redundant when its NCF is 95%.											
high	Consider a radio as redundant when its NCF is 90%.											
dtim	Delivery Traffic Indication Map (DTIM) period (1 - 255, default = 1). Set higher to save battery life of WiFi client in power-save mode.	integer	Minimum value: 1 Maximum value: 255									
frag-threshold	Maximum packet size that can be sent without fragmentation (800 - 2346 bytes, default = 2346).	integer	Minimum value: 800 Maximum value: 2346									

Parameter	Description	Type	Size	Default												
iperf-protocol	Iperf test protocol (default = "UDP").	option	-	udp												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>udp</td><td>UDP.</td></tr><tr><td>tcp</td><td>TCP.</td></tr></table>	Option	Description	udp	UDP.	tcp	TCP.									
Option	Description															
udp	UDP.															
tcp	TCP.															
iperf-server-port	Iperf service port number.	integer	Minimum value: 5001 0 Maximum value: 65535													
max-clients	Maximum number of stations (STAs) or WiFi clients supported by the radio. Range depends on the hardware.	integer	Minimum value: 0 0 Maximum value: 4294967295													
max-distance	Maximum expected distance between the AP and clients (0 - 54000 m, default = 0).	integer	Minimum value: 0 0 Maximum value: 54000													
mode	Mode of radio 3. Radio 3 can be disabled, configured as an access point, a rogue AP monitor, a sniffer, or a station.	option	-	ap												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disabled</td><td>Radio 3 is disabled.</td></tr><tr><td>ap</td><td>Radio 3 operates as an access point that allows WiFi clients to connect to your network.</td></tr><tr><td>monitor</td><td>Radio 3 operates as a dedicated monitor. As a monitor, the radio scans for other WiFi access points and adds them to the Rogue AP monitor list.</td></tr><tr><td>sniffer</td><td>Radio 3 operates as a sniffer capturing WiFi frames on air.</td></tr><tr><td>sam</td><td>Radio 3 operates as a station that can connect to a neighboring AP for connectivity and health check.</td></tr></table>	Option	Description	disabled	Radio 3 is disabled.	ap	Radio 3 operates as an access point that allows WiFi clients to connect to your network.	monitor	Radio 3 operates as a dedicated monitor. As a monitor, the radio scans for other WiFi access points and adds them to the Rogue AP monitor list.	sniffer	Radio 3 operates as a sniffer capturing WiFi frames on air.	sam	Radio 3 operates as a station that can connect to a neighboring AP for connectivity and health check.			
Option	Description															
disabled	Radio 3 is disabled.															
ap	Radio 3 operates as an access point that allows WiFi clients to connect to your network.															
monitor	Radio 3 operates as a dedicated monitor. As a monitor, the radio scans for other WiFi access points and adds them to the Rogue AP monitor list.															
sniffer	Radio 3 operates as a sniffer capturing WiFi frames on air.															
sam	Radio 3 operates as a station that can connect to a neighboring AP for connectivity and health check.															
optional-antenna	Optional antenna used on FAP (default = none).	option	-	none												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>none</td><td>None.</td></tr><tr><td>FANT-04ABGN-0606-O-N</td><td>6 dBi(2.4GHz) and 6 dBi(5GHz).</td></tr></table>	Option	Description	none	None.	FANT-04ABGN-0606-O-N	6 dBi(2.4GHz) and 6 dBi(5GHz).									
Option	Description															
none	None.															
FANT-04ABGN-0606-O-N	6 dBi(2.4GHz) and 6 dBi(5GHz).															

Parameter	Description	Type	Size	Default															
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>FANT-04ABGN-1414-P-N</td><td>14 dBi(2.4GHz) and 14 dBi(5GHz).</td></tr><tr><td>FANT-04ABGN-8065-P-N</td><td>8 dBi(2.4GHz) and 6.5 dBi(5GHz).</td></tr><tr><td>FANT-04ABGN-0606-O-R</td><td>6 dBi(2.4GHz) and 6 dBi(5GHz).</td></tr><tr><td>FANT-04ABGN-0606-P-R</td><td>6 dBi(2.4GHz) and 6 dBi(5GHz).</td></tr><tr><td>FANT-10ACAX-1213-D-N</td><td>12 dBi(2.4GHz) and 13 dBi(5GHz).</td></tr><tr><td>FANT-08ABGN-1213-D-R</td><td>12 dBi(2.4GHz) and 13 dBi(5GHz).</td></tr></table>	Option	Description	FANT-04ABGN-1414-P-N	14 dBi(2.4GHz) and 14 dBi(5GHz).	FANT-04ABGN-8065-P-N	8 dBi(2.4GHz) and 6.5 dBi(5GHz).	FANT-04ABGN-0606-O-R	6 dBi(2.4GHz) and 6 dBi(5GHz).	FANT-04ABGN-0606-P-R	6 dBi(2.4GHz) and 6 dBi(5GHz).	FANT-10ACAX-1213-D-N	12 dBi(2.4GHz) and 13 dBi(5GHz).	FANT-08ABGN-1213-D-R	12 dBi(2.4GHz) and 13 dBi(5GHz).				
	Option	Description																	
	FANT-04ABGN-1414-P-N	14 dBi(2.4GHz) and 14 dBi(5GHz).																	
	FANT-04ABGN-8065-P-N	8 dBi(2.4GHz) and 6.5 dBi(5GHz).																	
	FANT-04ABGN-0606-O-R	6 dBi(2.4GHz) and 6 dBi(5GHz).																	
	FANT-04ABGN-0606-P-R	6 dBi(2.4GHz) and 6 dBi(5GHz).																	
FANT-10ACAX-1213-D-N	12 dBi(2.4GHz) and 13 dBi(5GHz).																		
FANT-08ABGN-1213-D-R	12 dBi(2.4GHz) and 13 dBi(5GHz).																		
power-level	Radio EIRP power level as a percentage of the maximum EIRP power (0 - 100, default = 100).	integer	Minimum value: 100 0 Maximum value: 100	100															
power-mode	Set radio effective isotropic radiated power (EIRP) in dBm or by a percentage of the maximum EIRP (default = percentage). This power takes into account both radio transmit power and antenna gain. Higher power level settings may be constrained by local regulatory requirements and AP capabilities.	option	-	percentage															
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>dBm</td><td>Set radio EIRP power in dBm.</td></tr><tr><td>percentage</td><td>Set radio EIRP power by percentage.</td></tr></table>	Option	Description	dBm	Set radio EIRP power in dBm.	percentage	Set radio EIRP power by percentage.												
	Option	Description																	
	dBm	Set radio EIRP power in dBm.																	
percentage	Set radio EIRP power by percentage.																		
power-value	Radio EIRP power in dBm (1 - 33, default = 27).	integer	Minimum value: 27 1 Maximum value: 33	27															
powersave-optimize	Enable client power-saving features such as TIM, AC VO, and OBSS etc.	option	-																

Parameter	Description	Type	Size	Default												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>tim</i></td><td>TIM bit for client in power save mode.</td></tr><tr><td><i>ac-vo</i></td><td>Use AC VO priority to send out packets in the power save queue.</td></tr><tr><td><i>no-obss-scan</i></td><td>Do not put OBSS scan IE into beacon and probe response frames.</td></tr><tr><td><i>no-11b-rate</i></td><td>Do not send frame using 11b data rate.</td></tr><tr><td><i>client-rate-follow</i></td><td>Adapt transmitting PHY rate with receiving PHY rate from a client.</td></tr></table>	Option	Description	<i>tim</i>	TIM bit for client in power save mode.	<i>ac-vo</i>	Use AC VO priority to send out packets in the power save queue.	<i>no-obss-scan</i>	Do not put OBSS scan IE into beacon and probe response frames.	<i>no-11b-rate</i>	Do not send frame using 11b data rate.	<i>client-rate-follow</i>	Adapt transmitting PHY rate with receiving PHY rate from a client.			
	Option	Description														
	<i>tim</i>	TIM bit for client in power save mode.														
	<i>ac-vo</i>	Use AC VO priority to send out packets in the power save queue.														
	<i>no-obss-scan</i>	Do not put OBSS scan IE into beacon and probe response frames.														
	<i>no-11b-rate</i>	Do not send frame using 11b data rate.														
<i>client-rate-follow</i>	Adapt transmitting PHY rate with receiving PHY rate from a client.															
protection-mode	Enable/disable 802.11g protection modes to support backwards compatibility with older clients (rtscts, ctsonly, disable).	option	-	disable												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>rtscts</i></td><td>Enable 802.11g protection RTS/CTS mode.</td></tr><tr><td><i>ctsonly</i></td><td>Enable 802.11g protection CTS only mode.</td></tr><tr><td><i>disable</i></td><td>Disable 802.11g protection mode.</td></tr></table>	Option	Description	<i>rtscts</i>	Enable 802.11g protection RTS/CTS mode.	<i>ctsonly</i>	Enable 802.11g protection CTS only mode.	<i>disable</i>	Disable 802.11g protection mode.							
	Option	Description														
	<i>rtscts</i>	Enable 802.11g protection RTS/CTS mode.														
	<i>ctsonly</i>	Enable 802.11g protection CTS only mode.														
<i>disable</i>	Disable 802.11g protection mode.															
rts-threshold	Maximum packet size for RTS transmissions, specifying the maximum size of a data packet before RTS/CTS (256 - 2346 bytes, default = 2346).	integer	Minimum value: 256 Maximum value: 2346	2346												
sam-bssid	BSSID for WiFi network.	mac-address	Not Specified	00:00:00:00:00:00												
sam-captive-portal	Enable/disable Captive Portal Authentication (default = disable).	option	-	disable												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>enable</i></td><td>Enable Captive Portal Authentication.</td></tr><tr><td><i>disable</i></td><td>Disable Captive Portal Authentication.</td></tr></table>	Option	Description	<i>enable</i>	Enable Captive Portal Authentication.	<i>disable</i>	Disable Captive Portal Authentication.									
	Option	Description														
	<i>enable</i>	Enable Captive Portal Authentication.														
<i>disable</i>	Disable Captive Portal Authentication.															
sam-cwp-failure-string	Failure identification on the page after an incorrect login.	string	Maximum length: 64													
sam-cwp-match-string	Identification string from the captive portal login form.	string	Maximum length: 64													
sam-cwp-password	Password for captive portal authentication.	password	Not Specified													

Parameter	Description	Type	Size	Default								
sam-cwp-success-string	Success identification on the page after a successful login.	string	Maximum length: 64									
sam-cwp-test-url	Website the client is trying to access.	string	Maximum length: 255									
sam-cwp-username	Username for captive portal authentication.	string	Maximum length: 35									
sam-password	Passphrase for WiFi network connection.	password	Not Specified									
sam-report-intv	SAM report interval (sec), 0 for a one-time report.	integer	Minimum value: 0 60 Maximum value: 864000									
sam-security-type	Select WiFi network security type (default = "wpa-personal").	option	-	wpa-personal								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>open</i></td><td>Open.</td></tr><tr><td><i>wpa-personal</i></td><td>WPA/WPA2 personal.</td></tr><tr><td><i>wpa-enterprise</i></td><td>WPA/WPA2 enterprise.</td></tr></table>				Option	Description	<i>open</i>	Open.	<i>wpa-personal</i>	WPA/WPA2 personal.	<i>wpa-enterprise</i>	WPA/WPA2 enterprise.
Option	Description											
<i>open</i>	Open.											
<i>wpa-personal</i>	WPA/WPA2 personal.											
<i>wpa-enterprise</i>	WPA/WPA2 enterprise.											
sam-server-fqdn	SAM test server domain name.	string	Maximum length: 255									
sam-server-ip	SAM test server IP address.	ipv4-address	Not Specified	0.0.0.0								
sam-server-type	Select SAM server type (default = "IP").	option	-	ip								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>ip</i></td><td>IPv4 address.</td></tr><tr><td><i>fqdn</i></td><td>Fully Qualified Domain Name address.</td></tr></table>				Option	Description	<i>ip</i>	IPv4 address.	<i>fqdn</i>	Fully Qualified Domain Name address.		
Option	Description											
<i>ip</i>	IPv4 address.											
<i>fqdn</i>	Fully Qualified Domain Name address.											
sam-ssid	SSID for WiFi network.	string	Maximum length: 32									
sam-test	Select SAM test type (default = "PING").	option	-	ping								
	<table><tr><th>Option</th><th>Description</th></tr><tr><td><i>ping</i></td><td>PING test.</td></tr><tr><td><i>iperf</i></td><td>IPERF test.</td></tr></table>				Option	Description	<i>ping</i>	PING test.	<i>iperf</i>	IPERF test.		
Option	Description											
<i>ping</i>	PING test.											
<i>iperf</i>	IPERF test.											

Parameter	Description	Type	Size	Default												
sam-username	Username for WiFi network connection.	string	Maximum length: 35													
short-guard-interval	Use either the short guard interval (Short GI) of 400 ns or the long guard interval (Long GI) of 800 ns.	option	-	disable												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>enable</td><td>Select the 400 ns short guard interval (Short GI).</td></tr><tr><td>disable</td><td>Select the 800 ns long guard interval (Long GI).</td></tr></table>	Option	Description	enable	Select the 400 ns short guard interval (Short GI).	disable	Select the 800 ns long guard interval (Long GI).									
Option	Description															
enable	Select the 400 ns short guard interval (Short GI).															
disable	Select the 800 ns long guard interval (Long GI).															
transmit-optimize	Packet transmission optimization options including power saving, aggregation limiting, retry limiting, etc. All are enabled by default.	option	-	power-save aggr-limit retry-limit send-bar												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>disable</td><td>Disable packet transmission optimization.</td></tr><tr><td>power-save</td><td>Tag client as operating in power save mode if excessive transmit retries occur.</td></tr><tr><td>aggr-limit</td><td>Set aggregation limit to a lower value when data rate is low.</td></tr><tr><td>retry-limit</td><td>Set software retry limit to a lower value when data rate is low.</td></tr><tr><td>send-bar</td><td>Limit transmission of BAR frames.</td></tr></table>	Option	Description	disable	Disable packet transmission optimization.	power-save	Tag client as operating in power save mode if excessive transmit retries occur.	aggr-limit	Set aggregation limit to a lower value when data rate is low.	retry-limit	Set software retry limit to a lower value when data rate is low.	send-bar	Limit transmission of BAR frames.			
Option	Description															
disable	Disable packet transmission optimization.															
power-save	Tag client as operating in power save mode if excessive transmit retries occur.															
aggr-limit	Set aggregation limit to a lower value when data rate is low.															
retry-limit	Set software retry limit to a lower value when data rate is low.															
send-bar	Limit transmission of BAR frames.															
vap-all	Configure method for assigning SSIDs to this FortiAP (default = automatically assign tunnel SSIDs).	option	-	tunnel												
	<table><tr><th>Option</th><th>Description</th></tr><tr><td>tunnel</td><td>Automatically select tunnel SSIDs.</td></tr><tr><td>bridge</td><td>Automatically select local-bridging SSIDs.</td></tr><tr><td>manual</td><td>Manually select SSIDs.</td></tr></table>	Option	Description	tunnel	Automatically select tunnel SSIDs.	bridge	Automatically select local-bridging SSIDs.	manual	Manually select SSIDs.							
Option	Description															
tunnel	Automatically select tunnel SSIDs.															
bridge	Automatically select local-bridging SSIDs.															
manual	Manually select SSIDs.															
vaps <name>	Manually selected list of Virtual Access Points (VAPs). Virtual Access Point (VAP) name.	string	Maximum length: 35													
wids-profile	Wireless Intrusion Detection System (WIDS) profile name to assign to the radio.	string	Maximum length: 35													
zero-wait-dfs	Enable/disable zero wait DFS on radio (default = enable).	option	-	enable												

Parameter	Description	Type	Size	Default
	Option	Description		
	<i>enable</i>	Enable zero wait DFS		
	<i>disable</i>	Disable zero wait DFS		

config split-tunneling-acl

Parameter	Description	Type	Size	Default
dest-ip	Destination IP and mask for the split-tunneling subnet.	ipv4-classnet	Not Specified	0.0.0.0 0.0.0.0
id	ID.	integer	Minimum value: 0 Maximum value: 4294967295	0

CLI diagnose commands

Use diagnose commands to run debugging commands.

This section includes syntax for the following commands:

- [diagnose alertconsole on page 2341](#)
- [diagnose antivirus on page 2342](#)
- [diagnose automation on page 2344](#)
- [diagnose autoupdate on page 2344](#)
- [diagnose bluetooth on page 2345](#)
- [diagnose bypass-mode on page 2352](#)
- [diagnose central-mgmt on page 2353](#)
- [diagnose cid on page 2354](#)
- [diagnose clearpass on page 2358](#)
- [diagnose cp on page 2360](#)
- [diagnose debug on page 2367](#)
- [diagnose disktest on page 2443](#)
- [diagnose dpdk config on page 2446](#)
- [diagnose dpdk log clear on page 2446](#)
- [diagnose dpdk log show on page 2446](#)
- [diagnose dpdk performance on page 2447](#)
- [diagnose dpdk statistics clear on page 2447](#)
- [diagnose dpdk statistics show on page 2447](#)
- [diagnose dsl on page 2448](#)
- [diagnose emailfilter on page 2450](#)
- [diagnose endpoint on page 2451](#)
- [diagnose extender on page 2471](#)
- [diagnose fdsm on page 2472](#)
- [diagnose firewall on page 2479](#)
- [diagnose forticare on page 2529](#)
- [diagnose forticlient on page 2531](#)
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- [diagnose ip address on page 2567](#)
- [diagnose ip arp on page 2568](#)
- [diagnose ip gre-tunnel on page 2569](#)
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- [diagnose ip multicast on page 2570](#)
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- [diagnose ip router command on page 2581](#)
- [diagnose ip router igmp on page 2581](#)
- [diagnose ip router isis on page 2584](#)
- [diagnose ip router ospf on page 2587](#)
- [diagnose ip router pim-dm on page 2590](#)
- [diagnose ip router pim-sm on page 2593](#)
- [diagnose ip router rip on page 2601](#)
- [diagnose ip router zl on page 2604](#)
- [diagnose ip rtcache on page 2604](#)
- [diagnose ip tcp on page 2605](#)
- [diagnose ip udp on page 2605](#)
- [diagnose ips anomaly on page 2605](#)
- [diagnose ips anomaly6 on page 2608](#)
- [diagnose ips av avengine on page 2610](#)
- [diagnose ips av cache on page 2611](#)
- [diagnose ips av mode on page 2612](#)
- [diagnose ips av stats on page 2613](#)
- [diagnose ips av timeout on page 2613](#)
- [diagnose ips config disable on page 2614](#)
- [diagnose ips config enable on page 2614](#)
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- [diagnose ips debug enable on page 2622](#)
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- [diagnose ips dissector on page 2629](#)
- [diagnose ips filter on page 2630](#)
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- [diagnose lldprx on page 2660](#)
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- [diagnose webfilter quota on page 3227](#)
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- [diagnose wireless-controller on page 3232](#)
- [diagnose wpa on page 3234](#)

diagnose alertconsole

alertconsole

This topic includes the following commands:

- [diagnose alertconsole clear on page 2341](#)
- [diagnose alertconsole fgd-retrieve on page 2341](#)
- [diagnose alertconsole list on page 2341](#)
- [diagnose alertconsole test on page 2341](#)

diagnose alertconsole clear

Clear alert messages.

```
diagnose alertconsole clear
```

diagnose alertconsole fgd-retrieve

Retrieve FortiGuard alerts.

```
diagnose alertconsole fgd-retrieve
```

diagnose alertconsole list

List current alert messages.

```
diagnose alertconsole list
```

diagnose alertconsole test

Generate alert messages.

```
diagnose alertconsole test
```

diagnose antivirus

antivirus

This topic includes the following commands:

- [diagnose antivirus database-info on page 2342](#)
- [diagnose antivirus outbreak-prevention on page 2342](#)
- [diagnose antivirus outbreak-prevention statistics on page 2342](#)
- [diagnose antivirus outbreak-prevention statistics flush on page 2342](#)
- [diagnose antivirus outbreak-prevention statistics list on page 2343](#)
- [diagnose antivirus quarantine on page 2343](#)
- [diagnose antivirus quarantine delete on page 2343](#)
- [diagnose antivirus quarantine list on page 2343](#)
- [diagnose antivirus quarantine purge on page 2343](#)
- [diagnose antivirus test on page 2344](#)

diagnose antivirus database-info

AntiVirus database info.

```
diagnose antivirus database-info
```

diagnose antivirus outbreak-prevention

FortiGuard - Virus Outbreak Prevention statistics and reporting.

```
diagnose antivirus outbreak-prevention
```

diagnose antivirus outbreak-prevention statistics

Cache and daemon statistics.

```
diagnose antivirus outbreak-prevention statistics
```

diagnose antivirus outbreak-prevention statistics flush

Flush daemon and cache statistics.

```
diagnose antivirus outbreak-prevention statistics flush
```

diagnose antivirus outbreak-prevention statistics list

Display cache and daemon statistics.

```
diagnose antivirus outbreak-prevention statistics list
```

diagnose antivirus quarantine

Quarantine functions.

```
diagnose antivirus quarantine
```

diagnose antivirus quarantine delete

Delete a file in quarantine.

```
diagnose antivirus quarantine delete <checksum>
```

Parameter	Description	Type	Size
<checksum>	Checksum of the file to delete.	string	

diagnose antivirus quarantine list

List the files in quarantine.

```
diagnose antivirus quarantine list <value>
```

Parameter	Description	Type	Size
<value>	service: http, https, ftp, smtp, smtps, pop3, pop3s, imap, imaps, im, nntp status: infected, machine-learning, blocked (optional)	string	

diagnose antivirus quarantine purge

Delete all quarantined files.

```
diagnose antivirus quarantine purge
```

diagnose antivirus test

AV Engine diagnostics.

```
diagnose antivirus test <command>
```

Parameter	Description	Type	Size
<command>	Command to pass into AV engine. Please double quote the command.	string	

diagnose automation

Diagnose commands for automation stitches.

This topic includes the following commands:

- [diagnose automation test on page 2344](#)

diagnose automation test

Test automation stitches.

```
diagnose automation test
```

diagnose autoupdate

Automatic updates.

This topic includes the following commands:

- [diagnose autoupdate downgrade on page 2344](#)
- [diagnose autoupdate downgrade disable on page 2345](#)
- [diagnose autoupdate downgrade enable on page 2345](#)
- [diagnose autoupdate status on page 2345](#)
- [diagnose autoupdate versions on page 2345](#)

diagnose autoupdate downgrade

Update object downgrade status.

```
diagnose autoupdate downgrade
```

diagnose autoupdate downgrade disable

Disable Update object downgrade.

```
diagnose autoupdate downgrade disable
```

diagnose autoupdate downgrade enable

Enable Update object downgrade.

```
diagnose autoupdate downgrade enable
```

diagnose autoupdate status

Status of automatic updates.

```
diagnose autoupdate status
```

diagnose autoupdate versions

Update object versions.

```
diagnose autoupdate versions
```

diagnose bluetooth

Diagnose command for bluetooth

This topic includes the following commands:

- [diagnose bluetooth bootloader on page 2346](#)
- [diagnose bluetooth cap on page 2346](#)
- [diagnose bluetooth enable on page 2347](#)
- [diagnose bluetooth enter on page 2347](#)
- [diagnose bluetooth exit on page 2347](#)
- [diagnose bluetooth ext_enhanced_modem_hop_tx on page 2347](#)
- [diagnose bluetooth ext_enhanced_modem_rx on page 2347](#)

- [diagnose bluetooth ext_enhanced_modem_tx](#) on page 2348
- [diagnose bluetooth ext_modem_end](#) on page 2348
- [diagnose bluetooth ext_modem_tx](#) on page 2348
- [diagnose bluetooth ext_tx_power](#) on page 2348
- [diagnose bluetooth get_bt_adv_txpower](#) on page 2349
- [diagnose bluetooth get_bt_mac](#) on page 2349
- [diagnose bluetooth get_bt_rf_fe_mode_and_bias](#) on page 2349
- [diagnose bluetooth get_bt_state](#) on page 2349
- [diagnose bluetooth get_bt_update](#) on page 2349
- [diagnose bluetooth get_bt_version](#) on page 2349
- [diagnose bluetooth program](#) on page 2350
- [diagnose bluetooth ptm](#) on page 2350
- [diagnose bluetooth ptm_power](#) on page 2350
- [diagnose bluetooth reset](#) on page 2350
- [diagnose bluetooth reset_bt_mode](#) on page 2350
- [diagnose bluetooth rx](#) on page 2351
- [diagnose bluetooth set_bt_name](#) on page 2351
- [diagnose bluetooth set_bt_rxgain](#) on page 2351
- [diagnose bluetooth set_bt_txpower](#) on page 2351
- [diagnose bluetooth status](#) on page 2352
- [diagnose bluetooth test_bt_conn](#) on page 2352
- [diagnose bluetooth tx](#) on page 2352

diagnose bluetooth bootloader

enable/disable bootloader

```
diagnose bluetooth bootloader <arg> <arg>
```

Parameter	Description	Type	Size
<arg>	0:disable, 1:enable	string	
<arg>	arg	string	

diagnose bluetooth cap

Set caparray delta

```
diagnose bluetooth cap <arg>
```

Parameter	Description	Type	Size
<arg>	delta	string	

diagnose bluetooth enable

enable bluetooth

```
diagnose bluetooth enable <arg> <arg>
```

Parameter	Description	Type	Size
<arg>	0:disable, 1:enable	string	
<arg>	arg	string	

diagnose bluetooth enter

Enter CLI mode

```
diagnose bluetooth enter
```

diagnose bluetooth exit

Exit CLI mode

```
diagnose bluetooth exit
```

diagnose bluetooth ext_enhanced_modem_hop_tx

ptm ext modem hop transmit (modulated test)

```
diagnose bluetooth ext_enhanced_modem_hop_tx <arg> <arg> <arg>
```

Parameter	Description	Type	Size
<arg>	length, 0-39	string	
<arg>	code, 0-7	string	
<arg>	speed, 0-6	string	

diagnose bluetooth ext_enhanced_modem_rx

ptm ext modem receive

```
diagnose bluetooth ext_enhanced_modem_rx <arg> <arg>
```

Parameter	Description	Type	Size
<arg>	speed, 0-6	string	
<arg>	channel, 0-39	string	

diagnose bluetooth ext_enhanced_modem_tx

ptm ext modem transmit (unmodulated test)

```
diagnose bluetooth ext_enhanced_modem_tx <arg> <arg> <arg>
```

Parameter	Description	Type	Size
<arg>	cwMode, 0-1	string	
<arg>	speed, 0-6	string	
<arg>	channel, 0-39	string	

diagnose bluetooth ext_modem_end

ptm ext modem end

```
diagnose bluetooth ext_modem_end
```

diagnose bluetooth ext_modem_tx

ptm ext modem transmit

```
diagnose bluetooth ext_modem_tx <arg> <arg>
```

Parameter	Description	Type	Size
<arg>	cwMode, 0-1	string	
<arg>	channel, 0-39	string	

diagnose bluetooth ext_tx_power

ext tx power

```
diagnose bluetooth ext_tx_power <arg>
```

Parameter	Description	Type	Size
<arg>	tx power	string	

diagnose bluetooth get_bt_adv_txpower

get Bluetooth advertising txpower

```
diagnose bluetooth get_bt_adv_txpower
```

diagnose bluetooth get_bt_mac

get Bluetooth MAC

```
diagnose bluetooth get_bt_mac
```

diagnose bluetooth get_bt_rf_fe_mode_and_bias

get Bluetooth RF FE mode and bias

```
diagnose bluetooth get_bt_rf_fe_mode_and_bias
```

diagnose bluetooth get_bt_state

get Bluetooth state

```
diagnose bluetooth get_bt_state
```

diagnose bluetooth get_bt_update

Check Bluetooth Firmware Update

```
diagnose bluetooth get_bt_update
```

diagnose bluetooth get_bt_version

get Bluetooth firmware revision

```
diagnose bluetooth get_bt_version
```

diagnose bluetooth program

program bluetooth firmware

```
diagnose bluetooth program <arg>
```

Parameter	Description	Type	Size
<arg>	No arg to program normal firmware, ptm to program PTM firmware	string	

diagnose bluetooth ptm

ptm mode enable

```
diagnose bluetooth ptm
```

diagnose bluetooth ptm_power

ptm power

```
diagnose bluetooth ptm_power <arg>
```

Parameter	Description	Type	Size
<arg>	power	string	

diagnose bluetooth reset

reset bluetooth

```
diagnose bluetooth reset <arg> <arg>
```

Parameter	Description	Type	Size
<arg>	1:reset, 0:release	string	
<arg>	arg	string	

diagnose bluetooth reset_bt_mode

reset Bluetooth mode

```
diagnose bluetooth reset_bt_mode
```

diagnose bluetooth rx

ptm receive

```
diagnose bluetooth rx <arg>
```

Parameter	Description	Type	Size
<arg>	channel, 0-39	string	

diagnose bluetooth set_bt_name

set Bluetooth name

```
diagnose bluetooth set_bt_name <arg>
```

Parameter	Description	Type	Size
<arg>	string: if name is empty, would set to unit's serial number	string	

diagnose bluetooth set_bt_rxgain

set Bluetooth rxgain

```
diagnose bluetooth set_bt_rxgain <arg>
```

Parameter	Description	Type	Size
<arg>	rx gain	string	

diagnose bluetooth set_bt_txpower

set Bluetooth txpower

```
diagnose bluetooth set_bt_txpower <arg>
```

Parameter	Description	Type	Size
<arg>	tx power	string	

diagnose bluetooth status

bootloader status

```
diagnose bluetooth status
```

diagnose bluetooth test_bt_conn

test Bluetooth connection

```
diagnose bluetooth test_bt_conn
```

diagnose bluetooth tx

ptm transmit

```
diagnose bluetooth tx <arg> <arg> <arg>
```

Parameter	Description	Type	Size
<arg>	channel, 0-39	string	
<arg>	length, 0-39	string	
<arg>	code, 0-7	string	

diagnose bypass-mode

Diagnose command for get current bypass status

This topic includes the following commands:

- [diagnose bypass-mode status on page 2352](#)
- [diagnose bypass-mode timeout on page 2353](#)
- [diagnose bypass-mode timeout disable on page 2353](#)
- [diagnose bypass-mode timeout enable on page 2353](#)

diagnose bypass-mode status

Get bypass ports status

```
diagnose bypass-mode status
```

diagnose bypass-mode timeout

Test bypass timeout

```
diagnose bypass-mode timeout
```

diagnose bypass-mode timeout disable

disable timeout signal input

```
diagnose bypass-mode timeout disable
```

diagnose bypass-mode timeout enable

enable timeout signal input

```
diagnose bypass-mode timeout enable
```

diagnose central-mgmt

Central management.

This topic includes the following commands:

- [diagnose central-mgmt script-history on page 2353](#)
- [diagnose central-mgmt script-history clear on page 2353](#)
- [diagnose central-mgmt script-history del on page 2354](#)
- [diagnose central-mgmt script-history list on page 2354](#)
- [diagnose central-mgmt script-history test on page 2354](#)

diagnose central-mgmt script-history

Script execution history.

```
diagnose central-mgmt script-history
```

diagnose central-mgmt script-history clear

Clear script execution history.


```
diagnose central-mgmt script-history clear
```

diagnose central-mgmt script-history del

Delete one script execution record.

```
diagnose central-mgmt script-history del <id>
```

Parameter	Description	Type	Size
<id>	Record ID.	string	

diagnose central-mgmt script-history list

List script execution history.

```
diagnose central-mgmt script-history list
```

diagnose central-mgmt script-history test

Generate sample script execution records.

```
diagnose central-mgmt script-history test
```

diagnose cid

Device Identification diagnostics.

This topic includes the following commands:

- [diagnose cid restart on page 2355](#)
- [diagnose cid scan on page 2355](#)
- [diagnose cid scan csf on page 2355](#)
- [diagnose cid scan ethernet on page 2355](#)
- [diagnose cid scan forticlient on page 2356](#)
- [diagnose cid scan lldp on page 2356](#)
- [diagnose cid sigs on page 2356](#)
- [diagnose cid sigs disable on page 2357](#)
- [diagnose cid sigs enable on page 2357](#)
- [diagnose cid stats on page 2357](#)

- [diagnose cid stats config on page 2357](#)
- [diagnose cid stats crash on page 2357](#)
- [diagnose cid stats debug on page 2357](#)
- [diagnose cid stats manager on page 2358](#)
- [diagnose cid stats scan on page 2358](#)
- [diagnose cid stats trap on page 2358](#)

diagnose cid restart

Restart cid.

```
diagnose cid restart
```

diagnose cid scan

Scan something

```
diagnose cid scan
```

diagnose cid scan csf

Scan Fortinet serial number (SN) as if it came from CSF

```
diagnose cid scan csf <interface> <ip4-address> <serial-number>
```

Parameter	Description	Type	Size
<interface>	Interface the device is connected to.	string	
<ip4-address>	IPv4 address of the device	string	
<serial-number>	Fortinet device serial number (SN)	string	

diagnose cid scan ethernet

Scan a hex-encoded ethernet packet

```
diagnose cid scan ethernet <hex-encoded-ethernet-packet>
```

Parameter	Description	Type	Size
<hex-encoded-ethernet-packet>	Hex encoded Ethernet packet.	string	

diagnose cid scan forticlient

Scan a FortiClient OS/VERSION string

```
diagnose cid scan forticlient <mac> <ipv4-address> <os/version>
```

Parameter	Description	Type	Size
<mac>	MAC address of the device	string	
<ipv4-address>	IPv4 address of the device	string	
<os/version>	FortiClient OS/VERSION	string	

diagnose cid scan lldp

Scan LLDP

```
diagnose cid scan lldp <mac> <ipv4-address> <system-name> <system-description> <model>
```

Parameter	Description	Type	Size
<mac>	MAC address	string	
<ipv4-address>	LLDP IPv4 Management address	string	
<system-name>	LLDP System Name	string	
<system-description>	LLDP System Description	string	
<model>	LLDP Model	string	

diagnose cid sigs

Control use of signatures for identification.

```
diagnose cid sigs
```

diagnose cid sigs disable

Disable use of signatures for identification.

```
diagnose cid sigs disable
```

diagnose cid sigs enable

Enable use of signatures for identification.

```
diagnose cid sigs enable
```

diagnose cid stats

Device Identification statistics.

```
diagnose cid stats
```

diagnose cid stats config

Device Identification statistics for the configuration.

```
diagnose cid stats config
```

diagnose cid stats crash

Device Identification statistics for the crash log.

```
diagnose cid stats crash
```

diagnose cid stats debug

Device Identification statistics for the debug.

```
diagnose cid stats debug
```

diagnose cid stats manager

Device Identification statistics for the manager.

```
diagnose cid stats manager
```

diagnose cid stats scan

Device Identification statistics for the scanner.

```
diagnose cid stats scan
```

diagnose cid stats trap

Device Identification statistics for the SMMP trap generator.

```
diagnose cid stats trap
```

diagnose clearpass

ClearPass service SPT (System Posture Token) information.

This topic includes the following commands:

- [diagnose clearpass delete on page 2358](#)
- [diagnose clearpass flush on page 2359](#)
- [diagnose clearpass list on page 2359](#)
- [diagnose clearpass list address on page 2359](#)
- [diagnose clearpass list spt on page 2359](#)
- [diagnose clearpass list summary on page 2359](#)

diagnose clearpass delete

Delete ClearPass database by IP address.

```
diagnose clearpass delete <IP>
```

Parameter	Description	Type	Size
<IP>	IP address	string	

diagnose clearpass flush

Delete ClearPass database.

```
diagnose clearpass flush
```

diagnose clearpass list

List ClearPass database.

```
diagnose clearpass list
```

diagnose clearpass list address

List by IP address.

```
diagnose clearpass list address <IP>
```

Parameter	Description	Type	Size
<IP>	IP address	string	

diagnose clearpass list spt

List by SPT value.

```
diagnose clearpass list spt <spt-value>
```

Parameter	Description	Type	Size
<spt-value>	SPT value	string	

diagnose clearpass list summary

List summary of the ClearPass database.

```
diagnose clearpass list summary
```

diagnose cp

Co-processing Unit

This topic includes the following commands:

- [diagnose cp cp8 on page 2360](#)
- [diagnose cp cp8 register on page 2361](#)
- [diagnose cp cp8 stats on page 2361](#)
- [diagnose cp cp9kxp on page 2361](#)
- [diagnose cp cp9kxp prng_reseed on page 2361](#)
- [diagnose cp cp9kxp prng_test on page 2361](#)
- [diagnose cp cp9kxp register on page 2362](#)
- [diagnose cp cp9kxp stats on page 2362](#)
- [diagnose cp cp9kxp trng_test on page 2362](#)
- [diagnose cp cp9vpn on page 2362](#)
- [diagnose cp cp9vpn register on page 2363](#)
- [diagnose cp cp9vpn ssl-stats on page 2363](#)
- [diagnose cp cp9vpn stats on page 2363](#)
- [diagnose cp soc3 on page 2363](#)
- [diagnose cp soc3 pkce-stats on page 2363](#)
- [diagnose cp soc3 register on page 2364](#)
- [diagnose cp soc3 ssl-stats on page 2364](#)
- [diagnose cp soc3 trng-file-dump on page 2364](#)
- [diagnose cp soc3 trng-read on page 2364](#)
- [diagnose cp soc3 trng-test on page 2365](#)
- [diagnose cp soc3 vpn-stats on page 2365](#)
- [diagnose cp soc4 on page 2365](#)
- [diagnose cp soc4 pkce-stats on page 2365](#)
- [diagnose cp soc4 register on page 2366](#)
- [diagnose cp soc4 ssl-stats on page 2366](#)
- [diagnose cp soc4 trng-file-dump on page 2366](#)
- [diagnose cp soc4 trng-read on page 2366](#)
- [diagnose cp soc4 trng-test on page 2367](#)
- [diagnose cp soc4 vpn-stats on page 2367](#)

diagnose cp cp8

Co-processor version 8.

```
diagnose cp cp8
```

diagnose cp cp8 register

Show CP8 registers.

```
diagnose cp cp8 register <dev_id>
```

Parameter	Description	Type	Size
<dev_id>	CP8 ID.	string	

diagnose cp cp8 stats

Show CP8 stats.

```
diagnose cp cp8 stats <dev_id>
```

Parameter	Description	Type	Size
<dev_id>	CP8 ID.	string	

diagnose cp cp9kxp

Crypto Processor version 9(KXP)

```
diagnose cp cp9kxp
```

diagnose cp cp9kxp prng_reseed

Test CP9 PRNG reseed

```
diagnose cp cp9kxp prng_reseed
```

diagnose cp cp9kxp prng_test

Test CP9 PRNG

```
diagnose cp cp9kxp prng_test <round> <buf_cnt> <buf_size> <dump>
```

Parameter	Description	Type	Size
<round>	Round	string	

Parameter	Description	Type	Size
<buf_cnt>	Buffer count	string	
<buf_size>	Buffer size	string	
<dump>	Dump buffer to console	string	

diagnose cp cp9kxp register

Show CP9-KXP registers

```
diagnose cp cp9kxp register <dev_id>
```

Parameter	Description	Type	Size
<dev_id>	CP9 ID	string	

diagnose cp cp9kxp stats

Show CP9-KXP statistics

```
diagnose cp cp9kxp stats <dev_id>
```

Parameter	Description	Type	Size
<dev_id>	CP9 ID	string	

diagnose cp cp9kxp trng_test

Test CP9 TRNG

```
diagnose cp cp9kxp trng_test <chip_id> <buf_size> <dump>
```

Parameter	Description	Type	Size
<chip_id>	Chip ID	string	
<buf_size>	Buffer size	string	
<dump>	Dump buffer to console	string	

diagnose cp cp9vpn

Crypto Processor version 9(VPN)

```
diagnose cp cp9vpn
```

diagnose cp cp9vpn register

Show CP9-VPN registers

```
diagnose cp cp9vpn register <dev_id>
```

Parameter	Description	Type	Size
<dev_id>	CP9 ID	string	

diagnose cp cp9vpn ssl-stats

Show CP9 sslvpn acceleration stats.

```
diagnose cp cp9vpn ssl-stats <dev_id>
```

Parameter	Description	Type	Size
<dev_id>	CP9 ID.	string	

diagnose cp cp9vpn stats

Show CP9 stats.

```
diagnose cp cp9vpn stats <dev_id>
```

Parameter	Description	Type	Size
<dev_id>	CP9 ID.	string	

diagnose cp soc3

Co-processor version soc3.

```
diagnose cp soc3
```

diagnose cp soc3 pkce-stats

Show SOC3 pkce stats.

```
diagnose cp soc3 pkce-stats <dev_id>
```

Parameter	Description	Type	Size
<dev_id>	SOC3 ID.	string	

diagnose cp soc3 register

Show SOC3 vpn registers.

```
diagnose cp soc3 register <dev_id> <block_id>
```

Parameter	Description	Type	Size
<dev_id>	SOC3 ID.	string	
<block_id>	vpn block id	string	

diagnose cp soc3 ssl-stats

Show SOC3 vpn ssl stats.

```
diagnose cp soc3 ssl-stats
```

diagnose cp soc3 trng-file-dump

Test SOC3 TRNG file dump

```
diagnose cp soc3 trng-file-dump <run> <buf_size>
```

Parameter	Description	Type	Size
<run>	loop of trng dump	string	
<buf_size>	dump 32 byte buffer record size	string	

diagnose cp soc3 trng-read

Test SOC3 TRNG entropy read

```
diagnose cp soc3 trng-read <run> <record_size>
```

Parameter	Description	Type	Size
<run>	batches for every 32 bytes of trng entropy record	string	
<record_size>	dump 32 bytes buffer record size	string	

diagnose cp soc3 trng-test

Test SOC3 TRNG

```
diagnose cp soc3 trng-test <chip_id> <buf_size> <dump>
```

Parameter	Description	Type	Size
<chip_id>	Chip ID	string	
<buf_size>	Buffer size	string	
<dump>	Dump buffer to console	string	

diagnose cp soc3 vpn-stats

Show SOC3 vpn ipsec stats.

```
diagnose cp soc3 vpn-stats <dev_id>
```

Parameter	Description	Type	Size
<dev_id>	SOC3 ID.	string	

diagnose cp soc4

Co-processor version soc4.

```
diagnose cp soc4
```

diagnose cp soc4 pkce-stats

Show SOC4 pkce stats.

```
diagnose cp soc4 pkce-stats <dev_id>
```

Parameter	Description	Type	Size
<dev_id>	SOC4 ID.	string	

diagnose cp soc4 register

Show SOC4 vpn registers.

```
diagnose cp soc4 register <dev_id> <block_id>
```

Parameter	Description	Type	Size
<dev_id>	SOC4 ID.	string	
<block_id>	vpn block id	string	

diagnose cp soc4 ssl-stats

Show SOC4 vpn ssl stats.

```
diagnose cp soc4 ssl-stats
```

diagnose cp soc4 trng-file-dump

Test SOC4 TRNG file dump

```
diagnose cp soc4 trng-file-dump <run> <buf_size>
```

Parameter	Description	Type	Size
<run>	loop of trng dump	string	
<buf_size>	dump 32 bytes buffer record size	string	

diagnose cp soc4 trng-read

Test SOC4 TRNG entropy read

```
diagnose cp soc4 trng-read <run> <record_size>
```

Parameter	Description	Type	Size
<run>	batches for every 32 bytes of trng entropy record	string	
<record_size>	dump 32 bytes buffer record size	string	

diagnose cp soc4 trng-test

Test SOC4 TRNG

```
diagnose cp soc4 trng-test <chip_id> <buf_size> <dump>
```

Parameter	Description	Type	Size
<chip_id>	Chip ID	string	
<buf_size>	Bubffer size	string	
<dump>	Dump bubffer to cosole	string	

diagnose cp soc4 vpn-stats

Show SOC4 vpn ipsec stats.

```
diagnose cp soc4 vpn-stats <dev_id>
```

Parameter	Description	Type	Size
<dev_id>	SOC4 ID.	string	

diagnose debug

debug

This topic includes the following commands:

- [diagnose debug SMC-DATE on page 2375](#)
- [diagnose debug SMC-LAN-interface on page 2375](#)
- [diagnose debug SMC-LAN-interface disable on page 2375](#)
- [diagnose debug SMC-LAN-interface enable on page 2375](#)
- [diagnose debug SMC-LAN-interface link on page 2376](#)
- [diagnose debug admin on page 2376](#)
- [diagnose debug admin error-log on page 2376](#)
- [diagnose debug application on page 2376](#)
- [diagnose debug application acd on page 2376](#)
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- [diagnose debug application azd on page 2378](#)
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- [diagnose debug application ddnsd on page 2382](#)
- [diagnose debug application dhcp6c on page 2382](#)
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diagnose debug SMC-DATE

Show SMC build date

```
diagnose debug SMC-DATE
```

diagnose debug SMC-LAN-interface

enable or disable SMC LAN interface

```
diagnose debug SMC-LAN-interface
```

diagnose debug SMC-LAN-interface disable

Disable SMC LAN interface

```
diagnose debug SMC-LAN-interface disable
```

diagnose debug SMC-LAN-interface enable

Enable SMC LAN interface

```
diagnose debug SMC-LAN-interface enable
```

diagnose debug SMC-LAN-interface link

Check SMC LAN link status

```
diagnose debug SMC-LAN-interface link
```

diagnose debug admin

Admin user.

```
diagnose debug admin
```

diagnose debug admin error-log

Last failed admin user login details.

```
diagnose debug admin error-log
```

diagnose debug application

application

```
diagnose debug application
```

diagnose debug application acd

Aggregate Controller

```
diagnose debug application acd <Integer>
```

Parameter	Description	Type	Size
<Integer>	Debug level.	string	

diagnose debug application acid

Cisco Application Centric Infrastructure (Direct Connection) daemon

```
diagnose debug application acid <Integer>
```

Parameter	Description	Type	Size
<Integer>	Debug level.	string	

diagnose debug application alarmd

Alarmd daemon.

```
diagnose debug application alarmd <Integer>
```

Parameter	Description	Type	Size
<Integer>	Debug level.	string	

diagnose debug application alertmail

Alert mail daemon.

```
diagnose debug application alertmail <Integer>
```

Parameter	Description	Type	Size
<Integer>	Debug level.	string	

diagnose debug application alicloud-ha

AliCloud HA controller

```
diagnose debug application alicloud-ha <Integer>
```

Parameter	Description	Type	Size
<Integer>	Debug level.	string	

diagnose debug application alicloud-sdn

AliCloud SDN controller

```
diagnose debug application alicloud-sdn <Integer>
```

Parameter	Description	Type	Size
<Integer>	Debug level.	string	

diagnose debug application authd

Auth daemon.

```
diagnose debug application authd <Integer> <xxx.xxx.xxx.xxx>
```

Parameter	Description	Type	Size
<Integer>	Debug level.	string	
<xxx.xxx.xxx.xxx>	Specific source IP to debug some modules (e.g.fsso).	string	

diagnose debug application autod

Automation daemon.

```
diagnose debug application autod <Integer>
```

Parameter	Description	Type	Size
<Integer>	Debug level.	string	

diagnose debug application awsd

Amazon Web Services (AWS) daemon.

```
diagnose debug application awsd <Integer>
```

Parameter	Description	Type	Size
<Integer>	Debug level.	string	

diagnose debug application azd

Microsoft Azure daemon.

```
diagnose debug application azd <Integer>
```

Parameter	Description	Type	Size
<Integer>	Debug level.	string	

diagnose debug application azd-ha

Microsoft Azure daemon.

```
diagnose debug application azd-ha <Integer>
```

Parameter	Description	Type	Size
<Integer>	Debug level.	string	

diagnose debug application bfdd

BFD daemon.

```
diagnose debug application bfdd <Integer>
```

Parameter	Description	Type	Size
<Integer>	Debug level.	string	

diagnose debug application cert-update

Certificate update in forticron daemon.

```
diagnose debug application cert-update <Integer>
```

Parameter	Description	Type	Size
<Integer>	Debug level.	string	

diagnose debug application chassis

Chassis daemon.

```
diagnose debug application chassis <Integer>
```

Parameter	Description	Type	Size
<Integer>	Debug level.	string	

diagnose debug application cid

Device Identification daemon.

```
diagnose debug application cid <Integer>
```

Parameter	Description	Type	Size
<Integer>	Debug level.	string	

diagnose debug application clearpass

ClearPass daemon.

```
diagnose debug application clearpass <Integer>
```

Parameter	Description	Type	Size
<Integer>	Debug level.	string	

diagnose debug application cmp

CMPv2.

```
diagnose debug application cmp <Integer>
```

Parameter	Description	Type	Size
<Integer>	Debug level.	string	

diagnose debug application crl-update

CRL update in forticron daemon.

```
diagnose debug application crl-update <Integer>
```

Parameter	Description	Type	Size
<Integer>	Debug level.	string	

diagnose debug application csfd

Security Fabric daemon.

```
diagnose debug application csfd <Integer> <serial <serialnum>|ip <ip>|direction <up|down>> <serial  
<serialnum>|ip <ip>|direction <up|down>> <enter>|negate
```

Parameter	Description	Type	Size
<Integer>	Debug level.	string	
<serial <serialnum> ip <ip> direction <up down>>	Filter by serial number, IP, or stream direction.	string	
<serial <serialnum> ip <ip> direction <up down>>	Filter by serial number, IP, or stream direction.	string	
<enter> negate	If negate, inverse filter.	string	

diagnose debug application cu_acd

caputp AC daemon

```
diagnose debug application cu_acd <Integer>
```

Parameter	Description	Type	Size
<Integer>	Debug level.	string	

diagnose debug application cw_acd

Capwap AC daemon.

```
diagnose debug application cw_acd <Integer>
```

Parameter	Description	Type	Size
<Integer>	Debug level.	string	

diagnose debug application cw_acd_helper

Capwap AC helper daemon.

```
diagnose debug application cw_acd_helper <Integer>
```

Parameter	Description	Type	Size
<Integer>	Debug level.	string	

diagnose debug application cw_acd_wlev

CAPWAP AC daemon wireless event notification.

```
diagnose debug application cw_acd_wlev <Integer>
```

Parameter	Description	Type	Size
<Integer>	Debug level.	string	

diagnose debug application cw_acd_wpad

CAPWAP AC and WPA daemon (wpad).

```
diagnose debug application cw_acd_wpad <Integer>
```

Parameter	Description	Type	Size
<Integer>	Debug level.	string	

diagnose debug application ddnsd

DDNS client daemon.

```
diagnose debug application ddnsd <Integer>
```

Parameter	Description	Type	Size
<Integer>	Debug level.	string	

diagnose debug application dhcp6c

DHCPv6 client.

```
diagnose debug application dhcp6c <Integer>
```

Parameter	Description	Type	Size
<Integer>	Debug level.	string	

diagnose debug application dhcp6r

DHCPv6 relay.

```
diagnose debug application dhcp6r <Integer>
```

Parameter	Description	Type	Size
<Integer>	Debug level.	string	

diagnose debug application dhcp6s

DHCPv6 server.

```
diagnose debug application dhcp6s <Integer>
```

Parameter	Description	Type	Size
<Integer>	Debug level.	string	

diagnose debug application dhcpc

DHCP client module.

```
diagnose debug application dhcpc <Integer>
```

Parameter	Description	Type	Size
<Integer>	Debug level.	string	

diagnose debug application dhcprelay

DHCP relay daemon.

```
diagnose debug application dhcprelay <Integer>
```

Parameter	Description	Type	Size
<Integer>	Debug level.	string	

diagnose debug application dhcps

DHCP server.

```
diagnose debug application dhcps <Integer>
```

Parameter	Description	Type	Size
<Integer>	Debug level.	string	

diagnose debug application dlpfingerprint

DLP fingerprint daemon.

```
diagnose debug application dlpfingerprint <Integer>
```

Parameter	Description	Type	Size
<Integer>	Debug level.	string	

diagnose debug application dnp

DNP proxy daemon.

```
diagnose debug application dnp <Integer>
```

Parameter	Description	Type	Size
<Integer>	Debug level.	string	

diagnose debug application dnsproxy

DNS proxy module.

```
diagnose debug application dnsproxy <Integer> <Integer>
```

Parameter	Description	Type	Size
<Integer>	Debug level.	string	
<Integer>	Daemon index.	string	

diagnose debug application eap_proxy

EAP proxy daemon.

```
diagnose debug application eap_proxy <Integer>
```

Parameter	Description	Type	Size
<Integer>	Debug level.	string	

diagnose debug application eap_supp

EAP supplicant daemon.

```
diagnose debug application eap_supp <Integer>
```

Parameter	Description	Type	Size
<Integer>	Debug level.	string	

diagnose debug application extenderd

Extender Wan daemon.

```
diagnose debug application extenderd <Integer>
```

Parameter	Description	Type	Size
<Integer>	Debug level.	string	

diagnose debug application fcld

Fclicense daemon.

```
diagnose debug application fcld <Integer>
```

Parameter	Description	Type	Size
<Integer>	Debug level.	string	

diagnose debug application fcnacd

FortiClient NAC daemon.

```
diagnose debug application fcnacd <Integer>
```

Parameter	Description	Type	Size
<Integer>	Debug level.	string	

diagnose debug application fds_notify

Update notification daemon.

```
diagnose debug application fds_notify <Integer>
```

Parameter	Description	Type	Size
<Integer>	Debug level.	string	

diagnose debug application fgd_alert

FortiGuard alert message.

```
diagnose debug application fgd_alert <Integer>
```

Parameter	Description	Type	Size
<Integer>	Debug level.	string	

diagnose debug application fgfmd

FortiGate/FortiManager communication daemon.

```
diagnose debug application fgfmd <Integer>
```

Parameter	Description	Type	Size
<Integer>	Debug level.	string	

diagnose debug application fgtlogd

fgtlogd daemon.

```
diagnose debug application fgtlogd <Integer>
```

Parameter	Description	Type	Size
<Integer>	Debug level.	string	

diagnose debug application flcfgd

fortilink configuration daemon

```
diagnose debug application flcfgd <Integer>
```

Parameter	Description	Type	Size
<Integer>	Debug level.	string	

diagnose debug application flpold

FortiLink policy daemon.

```
diagnose debug application flpold <Integer>
```

Parameter	Description	Type	Size
<Integer>	Debug level.	string	

diagnose debug application fnbamd

FortiGate non-blocking auth daemon.

```
diagnose debug application fnbamd <Integer>
```

Parameter	Description	Type	Size
<Integer>	Debug level.	string	

diagnose debug application foauthd

FortiguardOverride auth daemon.

```
diagnose debug application foauthd <Integer>
```

Parameter	Description	Type	Size
<Integer>	Debug level.	string	

diagnose debug application forticldd

FortiCloud daemon.

```
diagnose debug application forticldd <Integer>
```

Parameter	Description	Type	Size
<Integer>	Debug level.	string	

diagnose debug application forticron

Forticron daemon.

```
diagnose debug application forticron <Integer>
```

Parameter	Description	Type	Size
<Integer>	Debug level.	string	

diagnose debug application fortilinkd

fortilink daemon

```
diagnose debug application fortilinkd <Integer>
```

Parameter	Description	Type	Size
<Integer>	Debug level.	string	

diagnose debug application fsd

Forti-start daemon.

```
diagnose debug application fsd <Integer>
```

Parameter	Description	Type	Size
<Integer>	Debug level.	string	

diagnose debug application fsso_ldap

FSSO LDAP daemon.

```
diagnose debug application fsso_ldap <Integer>
```

Parameter	Description	Type	Size
<Integer>	Debug level.	string	

diagnose debug application fssod

FSSO daemon.

```
diagnose debug application fssod <Integer>
```

Parameter	Description	Type	Size
<Integer>	Debug level.	string	

diagnose debug application fsvrd

FortiService daemon.

```
diagnose debug application fsvrd <Integer>
```

Parameter	Description	Type	Size
<Integer>	Debug level.	string	

diagnose debug application ftm-push

FTM-Push daemon.

```
diagnose debug application ftm-push <Integer>
```

Parameter	Description	Type	Size
<Integer>	Debug level.	string	

diagnose debug application garpd

VIP gratuitous ARP daemon.

```
diagnose debug application garpd <Integer>
```

Parameter	Description	Type	Size
<Integer>	Debug level.	string	

diagnose debug application gcpd

Google Cloud Platform daemon.

```
diagnose debug application gcpd <Integer>
```

Parameter	Description	Type	Size
<Integer>	Debug level.	string	

diagnose debug application hamonitord

HA monitor module.

```
diagnose debug application hamonitord <Integer>
```

Parameter	Description	Type	Size
<Integer>	Debug level.	string	

diagnose debug application harelay

HA relay module.

```
diagnose debug application harelay <Integer>
```

Parameter	Description	Type	Size
<Integer>	Debug level.	string	

diagnose debug application hasync

HA synchronization module.

```
diagnose debug application hasync <Integer>
```

Parameter	Description	Type	Size
<Integer>	Debug level.	string	

diagnose debug application hatalk

HA protocol module.

```
diagnose debug application hatalk <Integer>
```

Parameter	Description	Type	Size
<Integer>	Debug level.	string	

diagnose debug application httpsd

HTTPS daemon.

```
diagnose debug application httpsd <Integer>
```

Parameter	Description	Type	Size
<Integer>	Debug level. (Info = 0x01, Warning = 0x02, Error = 0x04, Critical = 0x08, All = -1, Warning/Error/Critical = 0x0E)	string	

diagnose debug application ibmd

IBM Cloud Infrastructure daemon.

```
diagnose debug application ibmd <Integer>
```

Parameter	Description	Type	Size
<Integer>	Debug level.	string	

diagnose debug application ike

IKE daemon.

```
diagnose debug application ike <Integer>
```

Parameter	Description	Type	Size
<Integer>	Debug level.	string	

diagnose debug application ikecrypt

Multi-process IKE crypto daemon.

```
diagnose debug application ikecrypt <Integer>
```

Parameter	Description	Type	Size
<Integer>	Debug level.	string	

diagnose debug application imap

IMAP proxy.

```
diagnose debug application imap <Integer>
```

Parameter	Description	Type	Size
<Integer>	Debug level.	string	

diagnose debug application init

System init process.

```
diagnose debug application init <Integer>
```

Parameter	Description	Type	Size
<Integer>	Debug level.	string	

diagnose debug application iotd

IoT device info daemon.

```
diagnose debug application iotd <Integer>
```

Parameter	Description	Type	Size
<Integer>	Debug level.	string	

diagnose debug application ipamd

IP Address Management daemon.

```
diagnose debug application ipamd <Integer>
```

Parameter	Description	Type	Size
<Integer>	Debug level.	string	

diagnose debug application ipamsd

IPAM server daemon.

```
diagnose debug application ipamsd <Integer>
```

Parameter	Description	Type	Size
<Integer>	Debug level.	string	

diagnose debug application ipldbd

Ipldbd daemon.

```
diagnose debug application ipldbd <Integer>
```

Parameter	Description	Type	Size
<Integer>	Debug level.	string	

diagnose debug application ipmc

Ipmc sensor daemon.

```
diagnose debug application ipmc <Integer>
```

Parameter	Description	Type	Size
<Integer>	Debug level.	string	

diagnose debug application ipsengine

IPS sensor.

```
diagnose debug application ipsengine <Integer>
```

Parameter	Description	Type	Size
<Integer>	Debug level.	string	

diagnose debug application ipsmonitor

IPS monitor.


```
diagnose debug application ipsmonitor <Integer>
```

Parameter	Description	Type	Size
<Integer>	Debug level.	string	

diagnose debug application ipsufd

IPS URL filter resolver daemon.

```
diagnose debug application ipsufd <Integer>
```

Parameter	Description	Type	Size
<Integer>	Debug level.	string	

diagnose debug application kmiglogd

Kernel Log daemon.

```
diagnose debug application kmiglogd <Integer>
```

Parameter	Description	Type	Size
<Integer>	Debug level.	string	

diagnose debug application kubed

Kubernetes daemon.

```
diagnose debug application kubed <Integer>
```

Parameter	Description	Type	Size
<Integer>	Debug level.	string	

diagnose debug application l2tp

L2TP daemon.

```
diagnose debug application l2tp <Integer>
```

Parameter	Description	Type	Size
<Integer>	Debug level.	string	

diagnose debug application link-monitor

Link monitor daemon.

```
diagnose debug application link-monitor <Integer>
```

Parameter	Description	Type	Size
<Integer>	Debug level.	string	

diagnose debug application link-monitor-passive

Link monitor daemon.

```
diagnose debug application link-monitor-passive <Integer>
```

Parameter	Description	Type	Size
<Integer>	Debug level.	string	

diagnose debug application lldptx

Link Layer Discovery Protocol (LLDP) Transmitter

```
diagnose debug application lldptx <Integer>
```

Parameter	Description	Type	Size
<Integer>	Debug level.	string	

diagnose debug application locallogd

locallogd daemon.

```
diagnose debug application locallogd <Integer>
```

Parameter	Description	Type	Size
<Integer>	Debug level.	string	

diagnose debug application lpmdd

LPM daemon.

```
diagnose debug application lpmdd <Integer>
```

Parameter	Description	Type	Size
<Integer>	Debug level.	string	

diagnose debug application lted

USB LTE daemon.

```
diagnose debug application lted <Integer>
```

Parameter	Description	Type	Size
<Integer>	Debug level.	string	

diagnose debug application miglogd

Log daemon.

```
diagnose debug application miglogd <Integer>
```

Parameter	Description	Type	Size
<Integer>	Debug level.	string	

diagnose debug application modemd

MODEM daemon.

```
diagnose debug application modemd <Integer>
```

Parameter	Description	Type	Size
<Integer>	Debug level.	string	

diagnose debug application mrd

Mobile router daemon.

```
diagnose debug application mrd <Integer>
```

Parameter	Description	Type	Size
<Integer>	Debug level.	string	

diagnose debug application netxd

NetX REST API daemon.

```
diagnose debug application netxd <Integer>
```

Parameter	Description	Type	Size
<Integer>	Debug level.	string	

diagnose debug application nntp

NNTP proxy.

```
diagnose debug application nntp <Integer>
```

Parameter	Description	Type	Size
<Integer>	Debug level.	string	

diagnose debug application nodejs

Node.js daemon.

```
diagnose debug application nodejs <Integer>
```

Parameter	Description	Type	Size
<Integer>	Debug level. (Info = 0x01, Warning = 0x02, Error = 0x04, All = -1, Warning/Error = 0x06)	string	

diagnose debug application npd

NP7 daemon.

```
diagnose debug application npd <Integer>
```

Parameter	Description	Type	Size
<Integer>	Debug level.	string	

diagnose debug application ntnxd

Nutanix Prism Central daemon.

```
diagnose debug application ntnxd <Integer>
```

Parameter	Description	Type	Size
<Integer>	Debug level.	string	

diagnose debug application ntpd

NTPd daemon.

```
diagnose debug application ntpd <Integer>
```

Parameter	Description	Type	Size
<Integer>	Debug level.	string	

diagnose debug application ocid

Oracle Cloud Infrastructure (OCI) daemon

```
diagnose debug application ocid <Integer>
```

Parameter	Description	Type	Size
<Integer>	Debug level.	string	

diagnose debug application ocvpn

Overlay Controller VPN.

```
diagnose debug application ocvpn <Integer>
```

Parameter	Description	Type	Size
<Integer>	Debug level.	string	

diagnose debug application openstackd

OpenStack SDN connector daemon.

```
diagnose debug application openstackd <Integer>
```

Parameter	Description	Type	Size
<Integer>	Debug level.	string	

diagnose debug application ovrd

Override daemon.

```
diagnose debug application ovrd <Integer>
```

Parameter	Description	Type	Size
<Integer>	Debug level.	string	

diagnose debug application pop3

POP3 proxy.

```
diagnose debug application pop3 <Integer>
```

Parameter	Description	Type	Size
<Integer>	Debug level.	string	

diagnose debug application ppp

PPP daemon.

```
diagnose debug application ppp <Integer>
```

Parameter	Description	Type	Size
<Integer>	Debug level.	string	

diagnose debug application pppoe

PPPoE client Daemon.

```
diagnose debug application pppoe <Integer>
```

Parameter	Description	Type	Size
<Integer>	Debug level.	string	

diagnose debug application pptp

PPTP daemon.

```
diagnose debug application pptp <Integer>
```

Parameter	Description	Type	Size
<Integer>	Debug level.	string	

diagnose debug application pptpc

PPTP client.

```
diagnose debug application pptpc <Integer>
```

Parameter	Description	Type	Size
<Integer>	Debug level.	string	

diagnose debug application proxy

Proxy.

```
diagnose debug application proxy <Integer>
```

Parameter	Description	Type	Size
<Integer>	Debug level.	string	

diagnose debug application ptpd

Precision Time Protocol daemon.

```
diagnose debug application ptpd <Integer>
```

Parameter	Description	Type	Size
<Integer>	Debug level.	string	

diagnose debug application quarantine

Quarantine daemon.

```
diagnose debug application quarantine <Integer>
```

Parameter	Description	Type	Size
<Integer>	Debug level.	string	

diagnose debug application radius-das

RADIUS DAS daemon.

```
diagnose debug application radius-das <Integer>
```

Parameter	Description	Type	Size
<Integer>	Debug level.	string	

diagnose debug application radiusd

RADIUS daemon.

```
diagnose debug application radiusd <Integer>
```

Parameter	Description	Type	Size
<Integer>	Debug level.	string	

diagnose debug application radvd

Router adv daemon.

```
diagnose debug application radvd <Integer>
```

Parameter	Description	Type	Size
<Integer>	Debug level.	string	

diagnose debug application reportd

report daemon

```
diagnose debug application reportd <Integer>
```

Parameter	Description	Type	Size
<Integer>	Debug level.	string	

diagnose debug application samld

SAML SSO daemon.

```
diagnose debug application samld <Integer> <verbose>
```

Parameter	Description	Type	Size
<Integer>	Debug level.	string	
<verbose>	Verbose output during process. (v, vv, vvv)	string	

diagnose debug application sapd

SAP Control daemon.

```
diagnose debug application sapd <Integer>
```

Parameter	Description	Type	Size
<Integer>	Debug level.	string	

diagnose debug application sccp

SCCP ALG.

```
diagnose debug application sccp <Integer>
```

Parameter	Description	Type	Size
<Integer>	Debug level.	string	

diagnose debug application scep

SCEP

```
diagnose debug application scep <Integer>
```

Parameter	Description	Type	Size
<Integer>	Debug level.	string	

diagnose debug application sdncd

SDN Connector daemon.

```
diagnose debug application sdncd <Integer>
```

Parameter	Description	Type	Size
<Integer>	Debug level.	string	

diagnose debug application sdwan

SD-WAN daemon.

```
diagnose debug application sdwan <Integer>
```

Parameter	Description	Type	Size
<Integer>	Debug level.	string	

diagnose debug application sepmd

Symantec EPM daemon.

```
diagnose debug application sepmd <Integer>
```

Parameter	Description	Type	Size
<Integer>	Debug level.	string	

diagnose debug application server-probe

Server probe daemon.

```
diagnose debug application server-probe <Integer>
```

Parameter	Description	Type	Size
<Integer>	Debug level.	string	

diagnose debug application sessionsync

Session sync daemon.

```
diagnose debug application sessionsync <Integer>
```

Parameter	Description	Type	Size
<Integer>	Debug level.	string	

diagnose debug application sflowd

sFlow protocol module.

```
diagnose debug application sflowd <Integer>
```

Parameter	Description	Type	Size
<Integer>	Debug level.	string	

diagnose debug application sfupgraded

Security Fabric Upgrade daemon.

```
diagnose debug application sfupgraded <Integer>
```

Parameter	Description	Type	Size
<Integer>	Debug level.	string	

diagnose debug application sip

SIP ALG.

```
diagnose debug application sip <Integer>
```

Parameter	Description	Type	Size
<Integer>	Debug level.	string	

diagnose debug application smbcd

SMB client daemon.

```
diagnose debug application smbcd <Integer>
```

Parameter	Description	Type	Size
<Integer>	Debug level.	string	

diagnose debug application smtp

SMTP proxy.

```
diagnose debug application smtp <Integer>
```

Parameter	Description	Type	Size
<Integer>	Debug level.	string	

diagnose debug application snmpd

SNMP daemon.

```
diagnose debug application snmpd <Integer>
```

Parameter	Description	Type	Size
<Integer>	Debug level.	string	

diagnose debug application spareblock

Set debug spare block count.

```
diagnose debug application spareblock <Integer>
```

Parameter	Description	Type	Size
<Integer>	Debug level.	string	

diagnose debug application speedtest

Speed test execution daemon.

```
diagnose debug application speedtest <Integer>
```

Parameter	Description	Type	Size
<Integer>	Debug level.	string	

diagnose debug application speedtestd

Speed test server daemon.

```
diagnose debug application speedtestd <Integer>
```

Parameter	Description	Type	Size
<Integer>	Debug level.	string	

diagnose debug application sshd

Sshd daemon.

```
diagnose debug application sshd <Integer>
```

Parameter	Description	Type	Size
<Integer>	Debug level.	string	

diagnose debug application sslvpn

SSL-VPN proxy daemon

```
diagnose debug application sslvpn <Integer>
```

Parameter	Description	Type	Size
<Integer>	Debug level.	string	

diagnose debug application syslogd

syslogd daemon.

```
diagnose debug application syslogd <Integer>
```

Parameter	Description	Type	Size
<Integer>	Debug level.	string	

diagnose debug application tvc

SSL-VPN client

```
diagnose debug application tvc <Integer>
```

Parameter	Description	Type	Size
<Integer>	Debug level.	string	

diagnose debug application update

Update daemon.

```
diagnose debug application update <Integer>
```

Parameter	Description	Type	Size
<Integer>	Debug level.	string	

diagnose debug application uploadd

Upload daemon.

```
diagnose debug application uploadd <Integer>
```

Parameter	Description	Type	Size
<Integer>	Debug level.	string	

diagnose debug application urlfilter

Urlfilter daemon.

```
diagnose debug application urlfilter <Integer>
```

Parameter	Description	Type	Size
<Integer>	Debug level.	string	

diagnose debug application vmwd

VMware vSphere daemon

```
diagnose debug application vmwd <Integer>
```

Parameter	Description	Type	Size
<Integer>	Debug level.	string	

diagnose debug application vned

Virtual network enabler daemon.

```
diagnose debug application vned <Integer>
```

Parameter	Description	Type	Size
<Integer>	Debug level.	string	

diagnose debug application vpd

VPN policy daemon.

```
diagnose debug application vpd <Integer>
```

Parameter	Description	Type	Size
<Integer>	Debug level.	string	

diagnose debug application vrrpd

VRRP daemon.

```
diagnose debug application vrrpd <Integer>
```

Parameter	Description	Type	Size
<Integer>	Debug level.	string	

diagnose debug application wabcs

WAN acceleration byte cache storage.

```
diagnose debug application wabcs <Integer>
```

Parameter	Description	Type	Size
<Integer>	Debug level.	string	

diagnose debug application waocs

WAN acceleration object cache storage.

```
diagnose debug application waocs <Integer>
```

Parameter	Description	Type	Size
<Integer>	Debug level.	string	

diagnose debug application wccpd

WCCP daemon.

```
diagnose debug application wccpd <Integer>
```

Parameter	Description	Type	Size
<Integer>	Debug level.	string	

diagnose debug application wf_monitor

WF monitor, parent of urlfilter daemon.

```
diagnose debug application wf_monitor <Integer>
```

Parameter	Description	Type	Size
<Integer>	Debug level.	string	

diagnose debug application wifi

WiFi setting.


```
diagnose debug application wifi <Integer>
```

Parameter	Description	Type	Size
<Integer>	Debug level.	string	

diagnose debug application wpa-show-keys

Dump keys in wpad or wpas log.

```
diagnose debug application wpa-show-keys <Integer>
```

Parameter	Description	Type	Size
<Integer>	Debug level.	string	

diagnose debug application wpa-timestamp

Dump timestamp in wpad or wpas log.

```
diagnose debug application wpa-timestamp <Integer>
```

Parameter	Description	Type	Size
<Integer>	Debug level.	string	

diagnose debug application wpad

Port access entity daemon.

```
diagnose debug application wpad <Integer>
```

Parameter	Description	Type	Size
<Integer>	Debug level.	string	

diagnose debug application wpad-crash-hexdump

Dump wpad crash in hexadecimal format.

```
diagnose debug application wpad-crash-hexdump <Integer>
```

Parameter	Description	Type	Size
<Integer>	Debug level.	string	

diagnose debug application zebos

ZebOS

```
diagnose debug application zebos <Integer>
```

Parameter	Description	Type	Size
<Integer>	Debug level.	string	

diagnose debug application zebos-launcher

ZebOS launcher daemon.

```
diagnose debug application zebos-launcher <Integer>
```

Parameter	Description	Type	Size
<Integer>	Debug level.	string	

diagnose debug authd

Authentication daemon.

```
diagnose debug authd
```

diagnose debug authd clear

Clear internal data structures and keep alive sessions.

```
diagnose debug authd clear
```

diagnose debug authd fsso

FSSO client module.

```
diagnose debug authd fsso
```

diagnose debug authd fsso add-address

Add FSAE dynamic addresses.

```
diagnose debug authd fsso add-address <adgrp1+adgrp2+..*adgrp> <xxx.xxx.xxx.xxx>  
<xxx.xxx.xxx.xxx>
```

Parameter	Description	Type	Size
<adgrp1+adgrp2+..*adgrp>	AD groups.	string	
<xxx.xxx.xxx.xxx>	IP start address.	string	
<xxx.xxx.xxx.xxx>	IP end address.	string	

diagnose debug authd fsso clear-logons

Clear logon information.

```
diagnose debug authd fsso clear-logons
```

diagnose debug authd fsso del-address

Delete FSAE dynamic addresses.

```
diagnose debug authd fsso del-address <adgrp1+adgrp2+..*adgrp> <xxx.xxx.xxx.xxx>  
<xxx.xxx.xxx.xxx>
```

Parameter	Description	Type	Size
<adgrp1+adgrp2+..*adgrp>	AD groups.	string	
<xxx.xxx.xxx.xxx>	IP start address.	string	
<xxx.xxx.xxx.xxx>	IP end address.	string	

diagnose debug authd fsso filter

Filters used for list or clear logons.

```
diagnose debug authd fsso filter
```

diagnose debug authd fsso filter clear

Clear all filters.

```
diagnose debug authd fsso filter clear
```

diagnose debug authd fsso filter group

Group name.

```
diagnose debug authd fsso filter group <name>
```

Parameter	Description	Type	Size
<name>	Group name.	string	

diagnose debug authd fsso filter server

FSSO agent name.

```
diagnose debug authd fsso filter server <name>
```

Parameter	Description	Type	Size
<name>	FSSO agent name.	string	

diagnose debug authd fsso filter source

Source IP address.

```
diagnose debug authd fsso filter source <xxx.xxx.xxx.xxx> <xxx.xxx.xxx.xxx>
```

Parameter	Description	Type	Size
<xxx.xxx.xxx.xxx>	Source IP (range from).	string	
<xxx.xxx.xxx.xxx>	Source IP (range to).	string	

diagnose debug authd fsso filter user

User name.

```
diagnose debug authd fsso filter user <name>
```

Parameter	Description	Type	Size
<name>	User name.	string	

diagnose debug authd fsso flush-address

Flush FSAE dynamic addresse.

```
diagnose debug authd fsso flush-address <name>
```

Parameter	Description	Type	Size
<name>	FSSO address name.	string	

diagnose debug authd fsso flush-address-all

Flush all of FSAE dynamic addresses.

```
diagnose debug authd fsso flush-address-all
```

diagnose debug authd fsso list

List current logons.

```
diagnose debug authd fsso list
```

diagnose debug authd fsso refresh-groups

Refresh group mappings.

```
diagnose debug authd fsso refresh-groups
```

diagnose debug authd fsso refresh-logons

Resync logon database.

```
diagnose debug authd fsso refresh-logons
```

diagnose debug authd fssso server-status

Show FSSO agent connection status.

```
diagnose debug authd fssso server-status
```

diagnose debug authd fssso show-address

Show FSAE dynamic addresses.

```
diagnose debug authd fssso show-address
```

diagnose debug authd fssso summary

Summary of current logons.

```
diagnose debug authd fssso summary
```

diagnose debug authd memory

Show authd memory usage information.

```
diagnose debug authd memory
```

diagnose debug aws-vpce

Print kernel aws vpce info.

```
diagnose debug aws-vpce
```

diagnose debug backtrace

Generate backtrace with <type>

```
diagnose debug backtrace
```

diagnose debug cli

Debug CLI.

```
diagnose debug cli <Integer>
```

Parameter	Description	Type	Size
<Integer>	Debug level (0 - 8).	string	

diagnose debug cloudinit

Cloudinit info.

```
diagnose debug cloudinit
```

diagnose debug cloudinit clear

Clear cloudinit log info.

```
diagnose debug cloudinit clear
```

diagnose debug cloudinit show

Show cloudinit log info.

```
diagnose debug cloudinit show
```

diagnose debug cmdb-trace

Trace CLI.

```
diagnose debug cmdb-trace <Integer>
```

Parameter	Description	Type	Size
<Integer>	Trace level (0 - 2).	string	

diagnose debug cmdb-walk

enable/disable cmdb-walk.

```
diagnose debug cmdb-walk <Integer>
```

Parameter	Description	Type	Size
<Integer>	walk value (0 - 1).	string	

diagnose debug comlog

Config console log feature.

```
diagnose debug comlog
```

diagnose debug comlog clear

Clear log.

```
diagnose debug comlog clear
```

diagnose debug comlog disable

Disable logging.

```
diagnose debug comlog disable
```

diagnose debug comlog enable

Enable logging.

```
diagnose debug comlog enable
```

diagnose debug comlog info

Get log information.

```
diagnose debug comlog info
```


diagnose debug config-error-log

Configure error log info.

```
diagnose debug config-error-log
```

diagnose debug config-error-log clear

Clear config error log.

```
diagnose debug config-error-log clear
```

diagnose debug config-error-log read

Display config error on console.

```
diagnose debug config-error-log read
```

diagnose debug console

console

```
diagnose debug console
```

diagnose debug console no-user-log-msg

Console does not show user log messages.

```
diagnose debug console no-user-log-msg
```

diagnose debug console no-user-log-msg disable

Disable console no user log message.

```
diagnose debug console no-user-log-msg disable
```

diagnose debug console no-user-log-msg enable

Enable console no user log message.

```
diagnose debug console no-user-log-msg enable
```

diagnose debug console retry-log-msg

Console does not drop user log messages.

```
diagnose debug console retry-log-msg
```

diagnose debug console retry-log-msg disable

Disable console resend of user log message.

```
diagnose debug console retry-log-msg disable
```

diagnose debug console retry-log-msg enable

Enable console resend of user log message.

```
diagnose debug console retry-log-msg enable
```

diagnose debug console send

Send out MODEM AT command.

```
diagnose debug console send <AT command> <character> <integer>
```

Parameter	Description	Type	Size
<AT command>	MODEM AT command to send.	string	
<character>	escape character (optional, default is '+')	string	
<integer>	Escape guard time in milli-second (1 - 10000, optional, default = 1000ms).	string	

diagnose debug console timestamp

timestamp

```
diagnose debug console timestamp
```

diagnose debug console timestamp disable

Disable timestamp.

```
diagnose debug console timestamp disable
```

diagnose debug console timestamp enable

Enable timestamp.

```
diagnose debug console timestamp enable
```

diagnose debug crashlog

Crash log info.

```
diagnose debug crashlog
```

diagnose debug crashlog clear

Clear crash log.

```
diagnose debug crashlog clear
```

diagnose debug crashlog get

Get crashlog.

```
diagnose debug crashlog get
```

diagnose debug crashlog history

Show process crash history.

```
diagnose debug crashlog history
```

diagnose debug crashlog interval

Change crash log interval in seconds.

```
diagnose debug crashlog interval <interval>
```

Parameter	Description	Type	Size
<interval>	Interval at which process crashes are written to storage (0 - 2147483647 sec, default = 3600, 0 = log all crashes).	string	

diagnose debug disable

Disable debug output.

```
diagnose debug disable
```

diagnose debug duration

Set duration of debug activities.

```
diagnose debug duration <Integer>
```

Parameter	Description	Type	Size
<Integer>	Duration in minutes, min = 1, max = 99999, 0 means unlimited.	string	

diagnose debug enable

Enable debug output.

```
diagnose debug enable
```

diagnose debug flow

Trace packet flow in kernel.

```
diagnose debug flow
```

diagnose debug flow filter

Trace packet with filter.

```
diagnose debug flow filter
```

diagnose debug flow filter addr

IP address.

```
diagnose debug flow filter addr <xxx.xxx.xxx.xxx> <xxx.xxx.xxx.xxx> <Enter> | or/and
```

Parameter	Description	Type	Size
<xxx.xxx.xxx.xxx>	Host IP (ip1/from).	string	
<xxx.xxx.xxx.xxx>	Host IP (ip2/to).	string	
<Enter> or/and	If or/and is specific, filter base on ip1 or/and ip2.	string	

diagnose debug flow filter clear

Clear filter.

```
diagnose debug flow filter clear
```

diagnose debug flow filter daddr

Destination IP address.

```
diagnose debug flow filter daddr <xxx.xxx.xxx.xxx> <xxx.xxx.xxx.xxx>
```

Parameter	Description	Type	Size
<xxx.xxx.xxx.xxx>	Destination IP (from).	string	
<xxx.xxx.xxx.xxx>	Destination IP (to).	string	

diagnose debug flow filter dport

Destination port.

```
diagnose debug flow filter dport <xxx> <xxx>
```

Parameter	Description	Type	Size
<xxx>	Destination port (from).	string	
<xxx>	Destination port (to).	string	

diagnose debug flow filter negate

Inverse filter.

```
diagnose debug flow filter negate
```

diagnose debug flow filter negate addr

Inverse host IP.

```
diagnose debug flow filter negate addr
```

diagnose debug flow filter negate daddr

Inverse dest IP.

```
diagnose debug flow filter negate daddr
```

diagnose debug flow filter negate dport

Inverse dest port.

```
diagnose debug flow filter negate dport
```

diagnose debug flow filter negate port

Inverse port.

```
diagnose debug flow filter negate port
```

diagnose debug flow filter negate proto

Inverse protocol.

```
diagnose debug flow filter negate proto
```

diagnose debug flow filter negate saddr

Inverse source IP.

```
diagnose debug flow filter negate saddr
```

diagnose debug flow filter negate sport

Inverse source port.

```
diagnose debug flow filter negate sport
```

diagnose debug flow filter negate vd

Inverse virtual domain.

```
diagnose debug flow filter negate vd
```

diagnose debug flow filter port

port

```
diagnose debug flow filter port <xxx> <xxx>
```

Parameter	Description	Type	Size
<xxx>	Port (from).	string	
<xxx>	Port (to).	string	

diagnose debug flow filter proto

Protocol number.

```
diagnose debug flow filter proto <xxx>
```

Parameter	Description	Type	Size
<xxx>	Protocol number.	string	

diagnose debug flow filter saddr

Source IP address.

```
diagnose debug flow filter saddr <xxx.xxx.xxx.xxx> <xxx.xxx.xxx.xxx>
```

Parameter	Description	Type	Size
<xxx.xxx.xxx.xxx>	Source IP (from).	string	
<xxx.xxx.xxx.xxx>	Source IP (to).	string	

diagnose debug flow filter sport

Source port.

```
diagnose debug flow filter sport <xxx> <xxx>
```

Parameter	Description	Type	Size
<xxx>	Source port (from).	string	
<xxx>	Source port (to).	string	

diagnose debug flow filter vd

Index of virtual domain.

```
diagnose debug flow filter vd <xxx>
```

Parameter	Description	Type	Size
<xxx>	Index of virtual domain.	string	

diagnose debug flow filter vd-name

Name of virtual domain.

```
diagnose debug flow filter vd-name <...>
```


Parameter	Description	Type	Size
<...>	Name of virtual domain.	string	

diagnose debug flow filter6

Trace packet with IPv6 filter.

```
diagnose debug flow filter6
```

diagnose debug flow filter6 addr

IPv6 address.

```
diagnose debug flow filter6 addr <xxx:xxx::xxx:xxx> <xxx:xxx::xxx:xxx>
```

Parameter	Description	Type	Size
<xxx:xxx::xxx:xxx>	Host IPv6 (from).	string	
<xxx:xxx::xxx:xxx>	Host IPv6 (to).	string	

diagnose debug flow filter6 clear

Clear IPv6 filter.

```
diagnose debug flow filter6 clear
```

diagnose debug flow filter6 daddr

Destination IP address.

```
diagnose debug flow filter6 daddr <xxx:xxx::xxx:xxx> <xxx:xxx::xxx:xxx>
```

Parameter	Description	Type	Size
<xxx:xxx::xxx:xxx>	Destination IP (from).	string	
<xxx:xxx::xxx:xxx>	Destination IP (to).	string	

diagnose debug flow filter6 dport

Destination port.

```
diagnose debug flow filter6 dport <xxx> <xxx>
```

Parameter	Description	Type	Size
<xxx>	Destination port (from).	string	
<xxx>	Destination port (to).	string	

diagnose debug flow filter6 negate

Inverse IPv6 filter.

```
diagnose debug flow filter6 negate
```

diagnose debug flow filter6 negate addr

Inverse host IP.

```
diagnose debug flow filter6 negate addr
```

diagnose debug flow filter6 negate daddr

Inverse dest IP.

```
diagnose debug flow filter6 negate daddr
```

diagnose debug flow filter6 negate dport

Inverse dest port.

```
diagnose debug flow filter6 negate dport
```

diagnose debug flow filter6 negate port

Inverse port.

```
diagnose debug flow filter6 negate port
```

diagnose debug flow filter6 negate proto

Inverse protocol.

```
diagnose debug flow filter6 negate proto
```

diagnose debug flow filter6 negate saddr

Inverse source IP.

```
diagnose debug flow filter6 negate saddr
```

diagnose debug flow filter6 negate sport

Inverse source port.

```
diagnose debug flow filter6 negate sport
```

diagnose debug flow filter6 negate vd

Inverse virtual domain.

```
diagnose debug flow filter6 negate vd
```

diagnose debug flow filter6 port

port

```
diagnose debug flow filter6 port <xxx> <xxx>
```

Parameter	Description	Type	Size
<xxx>	Port (from).	string	
<xxx>	Port (to).	string	

diagnose debug flow filter6 proto

Protocol number.

```
diagnose debug flow filter6 proto <xxx>
```

Parameter	Description	Type	Size
<xxx>	Protocol number.	string	

diagnose debug flow filter6 saddr

Source IP address.

```
diagnose debug flow filter6 saddr <xxx:xxx::xxx:xxx> <xxx:xxx::xxx:xxx>
```

Parameter	Description	Type	Size
<xxx:xxx::xxx:xxx>	Source IP (from).	string	
<xxx:xxx::xxx:xxx>	Source IP (to).	string	

diagnose debug flow filter6 sport

Source port.

```
diagnose debug flow filter6 sport <xxx> <xxx>
```

Parameter	Description	Type	Size
<xxx>	Source port (from).	string	
<xxx>	Source port (to).	string	

diagnose debug flow filter6 vd

Index of virtual domain.

```
diagnose debug flow filter6 vd <xxx>
```

Parameter	Description	Type	Size
<xxx>	Index of virtual domain.	string	

diagnose debug flow filter6 vd-name

Name of virtual domain.

```
diagnose debug flow filter6 vd-name <...>
```

Parameter	Description	Type	Size
<...>	Name of virtual domain.	string	

diagnose debug flow show

Enable/disable display of trace on console.

```
diagnose debug flow show
```

diagnose debug flow show function-name

Enable/disable display function name.

```
diagnose debug flow show function-name
```

diagnose debug flow show function-name disable

Disable display of function name.

```
diagnose debug flow show function-name disable
```

diagnose debug flow show function-name enable

Enable display of function name.

```
diagnose debug flow show function-name enable
```

diagnose debug flow show iprope

Enable/disable trace iprope match.

```
diagnose debug flow show iprope
```

diagnose debug flow show iprope disable

Disable trace iprope match.

```
diagnose debug flow show iprope disable
```

diagnose debug flow show iprope enable

Enable trace iprope match.

```
diagnose debug flow show iprope enable
```

diagnose debug flow trace

Start/stop trace.

```
diagnose debug flow trace
```

diagnose debug flow trace start

Start trace.

```
diagnose debug flow trace start <xxx>
```

Parameter	Description	Type	Size
<xxx>	Repeat number.	string	

diagnose debug flow trace start6

Start IPv6 trace.

```
diagnose debug flow trace start6 <xxx>
```

Parameter	Description	Type	Size
<xxx>	Repeat number.	string	

diagnose debug flow trace stop

Stop trace.

```
diagnose debug flow trace stop
```

diagnose debug flow trace stop6

Stop IPv6 trace.

```
diagnose debug flow trace stop6
```

diagnose debug fortilink-report

Generate FortiLink debug report.

```
diagnose debug fortilink-report
```

diagnose debug fortilink-report all

Generate FortiLink debug report for all switches.

```
diagnose debug fortilink-report all
```

diagnose debug fortilink-report switch-group

Generate FortiLink debug report for switch group.

```
diagnose debug fortilink-report switch-group <switch-group>
```

Parameter	Description	Type	Size
<switch-group>	Switch group name.	string	

diagnose debug fortilink-report switch-id

Generate FortiLink debug report for switch by specific switch ID.

```
diagnose debug fortilink-report switch-id <switch-id>
```

Parameter	Description	Type	Size
<switch-id>	Switch ID.	string	

diagnose debug fortism

Fortinet security module.

```
diagnose debug fortism
```

diagnose debug fortism enable

Enable Fortinet security module for test purpose.

```
diagnose debug fortism enable
```

diagnose debug fsso-polling

FSSO active directory poll module.

```
diagnose debug fsso-polling
```

diagnose debug fsso-polling client

Show FSSO AD Server Clients.

```
diagnose debug fsso-polling client
```

diagnose debug fsso-polling detail

Show FSSO AD Server Detail.

```
diagnose debug fsso-polling detail <id>
```

Parameter	Description	Type	Size
<id>	AD Server Entry ID.	string	

diagnose debug fsso-polling group

Show FSSO LDAP groups for AD users.

```
diagnose debug fsso-polling group <id> <name>
```


Parameter	Description	Type	Size
<id>	AD Server Entry ID.	string	
<name>	AD Server user.	string	

diagnose debug fsso-polling refresh-user

Refresh FSSO AD Server users.

```
diagnose debug fsso-polling refresh-user <id>
```

Parameter	Description	Type	Size
<id>	AD Server Entry ID.	string	

diagnose debug fsso-polling set-log-source

Source of event log.

```
diagnose debug fsso-polling set-log-source <id> <src>
```

Parameter	Description	Type	Size
<id>	AD Server Entry ID.	string	
<src>	0: security, 1:application.	string	

diagnose debug fsso-polling summary

Show FSSO AD Server Summary.

```
diagnose debug fsso-polling summary
```

diagnose debug fsso-polling user

Show FSSO AD Server users.

```
diagnose debug fsso-polling user <id>
```

Parameter	Description	Type	Size
<id>	AD Server Entry ID.	string	

diagnose debug info

Show active debug level settings.

```
diagnose debug info
```

diagnose debug intf-band-error

Show error counter of interface bandwidth.

```
diagnose debug intf-band-error
```

diagnose debug kernel

kernel

```
diagnose debug kernel
```

diagnose debug kernel ha

Debug kernel HA level.

```
diagnose debug kernel ha <Integer>
```

Parameter	Description	Type	Size
<Integer>	Kernel HA level (0 = disable, 1-7 = higher level).	string	

diagnose debug kernel level

Debug kernel level.

```
diagnose debug kernel level <Integer>
```

Parameter	Description	Type	Size
<Integer>	Kernel level.	string	

diagnose debug nsxt

NSX-T info.

```
diagnose debug nsxt
```

diagnose debug nsxt service-chain

Show NSX-T service chain.

```
diagnose debug nsxt service-chain
```

diagnose debug nsxt setting

Show NSX-T setting.

```
diagnose debug nsxt setting
```

diagnose debug rating

Display rating info.

```
diagnose debug rating <refresh-rate>
```

Parameter	Description	Type	Size
<refresh-rate>	Frequency to refresh server list (sec).	string	

diagnose debug remote-extender

remote-extender

```
diagnose debug remote-extender
```

diagnose debug remote-extender extenderd

Debug extenderd level.

```
diagnose debug remote-extender extenderd <Integer>
```

Parameter	Description	Type	Size
<Integer>	extenderd debug level.	string	

diagnose debug remote-extender modem-manager

Debug modem-manager level.

```
diagnose debug remote-extender modem-manager <Integer>
```

Parameter	Description	Type	Size
<Integer>	modem-manager debug level.	string	

diagnose debug report

Report for tech support.

```
diagnose debug report
```

diagnose debug report reset

Reset debug report.

```
diagnose debug report reset
```

diagnose debug reset

Reset all debug level to default.

```
diagnose debug reset
```

diagnose debug sdnc

sdnc

```
diagnose debug sdnc
```

diagnose debug sdnc valgrind

Valgrind analysis.

```
diagnose debug sdnc valgrind
```

diagnose debug sdnc valgrind disable

Force daemon to restart.

```
diagnose debug sdnc valgrind disable
```

diagnose debug sdnc valgrind enable

Force daemon to restart.

```
diagnose debug sdnc valgrind enable
```

diagnose debug sdnc valgrind log

Valgrind logs.

```
diagnose debug sdnc valgrind log
```

diagnose debug sdnc valgrind log clear

Clear logs.

```
diagnose debug sdnc valgrind log clear
```

diagnose debug sdnc valgrind log show

Show logs.

```
diagnose debug sdnc valgrind log show
```

diagnose debug sdnc valgrind memcheck

Force daemon to restart.

```
diagnose debug sdnc valgrind memcheck
```

diagnose debug sdnc valgrind memcheck_less

Force daemon to restart.

```
diagnose debug sdnc valgrind memcheck_less
```

diagnose debug sdnc valgrind status

Show valgrind status.

```
diagnose debug sdnc valgrind status
```

diagnose debug sql-log-error

SQL log database error info

```
diagnose debug sql-log-error
```

diagnose debug sql-log-error clear

clear sql log database error log

```
diagnose debug sql-log-error clear
```

diagnose debug sql-log-error read

display sql log database error on console

```
diagnose debug sql-log-error read
```

diagnose debug sql-log-error status

show sql log database error status

```
diagnose debug sql-log-error status
```

diagnose debug traffic

Traffic statistic data

```
diagnose debug traffic
```

diagnose debug traffic history

Dump interface traffic history data.

```
diagnose debug traffic history <String> <Integer>
```

Parameter	Description	Type	Size
<String>	Interface name	string	
<Integer>	Period, hour=0, day=1, week=2.	string	

diagnose debug traffic interface

List traffic monitor interface.

```
diagnose debug traffic interface
```

diagnose debug traffic peek

Display interface traffic real-time data.

```
diagnose debug traffic peek <String> <Integer>
```

Parameter	Description	Type	Size
<String>	Interface name	string	
<Integer>	Disable or enable, disable=0, enable=1.	string	

diagnose debug urlfilter

urlfilter

```
diagnose debug urlfilter
```

diagnose debug urlfilter src-addr

Enable debug messages for selected source IP address.

```
diagnose debug urlfilter src-addr <IP address>
```

Parameter	Description	Type	Size
<IP address>	dot delimited IP address or "stop"	string	

diagnose debug urlfilter test-url

Find the result returned from the URL filter cache for a URL.

```
diagnose debug urlfilter test-url <url>
```

Parameter	Description	Type	Size
<url>	URL to test.	string	

diagnose debug urlfilter valgrind

Valgrind analysis.

```
diagnose debug urlfilter valgrind
```

diagnose debug urlfilter valgrind disable

Force daemon to restart.

```
diagnose debug urlfilter valgrind disable
```


diagnose debug urlfilter valgrind enable

Force daemon to restart.

```
diagnose debug urlfilter valgrind enable
```

diagnose debug urlfilter valgrind log

Valgrind logs.

```
diagnose debug urlfilter valgrind log
```

diagnose debug urlfilter valgrind log clear

Clear logs.

```
diagnose debug urlfilter valgrind log clear
```

diagnose debug urlfilter valgrind log show

Show logs.

```
diagnose debug urlfilter valgrind log show
```

diagnose debug urlfilter valgrind memcheck

Force daemon to restart.

```
diagnose debug urlfilter valgrind memcheck
```

diagnose debug urlfilter valgrind memcheck_less

Force daemon to restart.

```
diagnose debug urlfilter valgrind memcheck_less
```

diagnose debug urlfilter valgrind status

Show valgrind status.

```
diagnose debug urlfilter valgrind status
```

diagnose debug user

Local/admin user name

```
diagnose debug user
```

diagnose debug user hash

Display hashed user name.

```
diagnose debug user hash <String>
```

Parameter	Description	Type	Size
<String>	user name	string	

diagnose debug user list

List local/admin user name.

```
diagnose debug user list
```

diagnose debug vm-print-license

Print license info

```
diagnose debug vm-print-license
```

diagnose disktest

Disk test

This topic includes the following commands:

- [diagnose disktest block on page 2444](#)
- [diagnose disktest block 1 on page 2444](#)
- [diagnose disktest block 16 on page 2444](#)
- [diagnose disktest block 256 on page 2444](#)
- [diagnose disktest block 4 on page 2444](#)
- [diagnose disktest block 64 on page 2445](#)
- [diagnose disktest device on page 2445](#)
- [diagnose disktest run on page 2445](#)
- [diagnose disktest size on page 2445](#)
- [diagnose disktest time on page 2445](#)

diagnose disktest block

Block size of each read/write operation.

```
diagnose disktest block
```

diagnose disktest block 1

1M

```
diagnose disktest block 1
```

diagnose disktest block 16

16M

```
diagnose disktest block 16
```

diagnose disktest block 256

256M

```
diagnose disktest block 256
```

diagnose disktest block 4

4M

```
diagnose disktest block 4
```

diagnose disktest block 64

64M

```
diagnose disktest block 64
```

diagnose disktest device

Device to test.

```
diagnose disktest device
```

diagnose disktest run

Run test with specified cycles (default = no limit).

```
diagnose disktest run <Integer>
```

Parameter	Description	Type	Size
<Integer>	Enter test cycles (default = no limit).	string	

diagnose disktest size

Test size limit for each cycle (default = no limit).

```
diagnose disktest size <Integer>
```

Parameter	Description	Type	Size
<Integer>	Enter test size limit for each cycle in MB (default = no limit).	string	

diagnose disktest time

Test time limit for each cycle (default = no limit).

```
diagnose disktest time <Integer>
```

Parameter	Description	Type	Size
<Integer>	Enter test time limit for each cycle in seconds (default = no limit).	string	

diagnose dpdk config

DPDK config.

This topic includes the following commands:

- [diagnose dpdk config show on page 2446](#)

diagnose dpdk config show

Show DPDK configs.

```
diagnose dpdk config show
```

diagnose dpdk log clear

Clear DPDK system logs - please select which log to clear.

This topic includes the following commands:

- [diagnose dpdk log clear early-init on page 2446](#)

diagnose dpdk log clear early-init

Clear DPDK early init logs.

```
diagnose dpdk log clear early-init
```

diagnose dpdk log show

Show DPDK system logs - please select which log to show.

This topic includes the following commands:

- [diagnose dpdk log show early-init on page 2446](#)

diagnose dpdk log show early-init

DPDK early init logs.

```
diagnose dpdk log show early-init
```

diagnose dpdk performance

DPDK performance status, e.g. CPU usage.

This topic includes the following commands:

- [diagnose dpdk performance show on page 2447](#)

diagnose dpdk performance show

Show DPDK performance status.

```
diagnose dpdk performance show
```

diagnose dpdk statistics clear

Clear all DPDK statistics.

This topic includes the following commands:

- [diagnose dpdk statistics clear all on page 2447](#)

diagnose dpdk statistics clear all

Clear all DPDK statistics.

```
diagnose dpdk statistics clear all
```

diagnose dpdk statistics show

Show DPDK statistics - please select which stats to show.

This topic includes the following commands:

- [diagnose dpdk statistics show engine on page 2448](#)
- [diagnose dpdk statistics show ipsec on page 2448](#)
- [diagnose dpdk statistics show memory on page 2448](#)

- [diagnose dpdk statistics show port on page 2448](#)
- [diagnose dpdk statistics show vnp on page 2448](#)

diagnose dpdk statistics show engine

Show per-engine DPDK statistics.

```
diagnose dpdk statistics show engine
```

diagnose dpdk statistics show ipsec

Show IPSec SA table and SPI session table statistics.

```
diagnose dpdk statistics show ipsec
```

diagnose dpdk statistics show memory

Show DPDK hugepage memory statistics.

```
diagnose dpdk statistics show memory
```

diagnose dpdk statistics show port

Show per-port DPDK statistics.

```
diagnose dpdk statistics show port
```

diagnose dpdk statistics show vnp

Show per-VNP engine DPDK statistics.

```
diagnose dpdk statistics show vnp
```

diagnose dsl

Diagnose command for ECNT dsl

This topic includes the following commands:

- [diagnose dsl led on page 2449](#)
- [diagnose dsl reset on page 2449](#)
- [diagnose dsl show on page 2449](#)

diagnose dsl led

Test xDSL LED

```
diagnose dsl led <arg> <arg>
```

Parameter	Description	Type	Size
<arg>	1: START LED TEST 2: XDSL LED OFF 3: XDSL LED ON 4: END LED TEST	string	
<arg>	arg	string	

diagnose dsl reset

reset dsl

```
diagnose dsl reset <arg> <arg>
```

Parameter	Description	Type	Size
<arg>	0:reset, 1:release	string	
<arg>	arg	string	

diagnose dsl show

Show basic DSL modem information.

```
diagnose dsl show <arg> <arg>
```

Parameter	Description	Type	Size
<arg>	0:firminfo, 1:dslinfo	string	
<arg>	arg	string	

diagnose emailfilter

emailfilter

This topic includes the following commands:

- [diagnose emailfilter bword on page 2450](#)
- [diagnose emailfilter bword matchfilter on page 2450](#)
- [diagnose emailfilter fortishield on page 2450](#)
- [diagnose emailfilter fortishield servers on page 2450](#)
- [diagnose emailfilter fortishield statistics on page 2451](#)
- [diagnose emailfilter fortishield statistics flush on page 2451](#)
- [diagnose emailfilter fortishield statistics list on page 2451](#)

diagnose emailfilter bword

Spam banned word match filter.

```
diagnose emailfilter bword
```

diagnose emailfilter bword matchfilter

Filtered list display.

```
diagnose emailfilter bword matchfilter <filter string>
```

Parameter	Description	Type	Size
<filter string>	Filter string from end of spam filter banned word log line. For example: '1-n8 4 0 1 4 10 nC 4'	string	

diagnose emailfilter fortishield

FortiGuard

```
diagnose emailfilter fortishield
```

diagnose emailfilter fortishield servers

FortiGuard-AntiSpam server status.

```
diagnose emailfilter fortishield servers <refresh-rate>
```

Parameter	Description	Type	Size
<refresh-rate>	Frequency to refresh server list (sec).	string	

diagnose emailfilter fortishield statistics

FortiGuard-AntiSpam cache and daemon statistics.

```
diagnose emailfilter fortishield statistics
```

diagnose emailfilter fortishield statistics flush

Flush cache and daemon statistics.

```
diagnose emailfilter fortishield statistics flush
```

diagnose emailfilter fortishield statistics list

Display server status, cache and daemon statistics.

```
diagnose emailfilter fortishield statistics list
```

diagnose endpoint

Endpoint compliance diagnostics.

This topic includes the following commands:

- [diagnose endpoint avatar on page 2453](#)
- [diagnose endpoint avatar allow-nodisk on page 2454](#)
- [diagnose endpoint avatar delete-archived on page 2454](#)
- [diagnose endpoint avatar find on page 2454](#)
- [diagnose endpoint avatar find fingerprint on page 2454](#)
- [diagnose endpoint avatar find link on page 2454](#)
- [diagnose endpoint avatar list on page 2455](#)
- [diagnose endpoint avatar list active on page 2455](#)
- [diagnose endpoint avatar list archived on page 2455](#)

- [diagnose endpoint avatar list fingerprint on page 2455](#)
- [diagnose endpoint avatar purge-all on page 2456](#)
- [diagnose endpoint avatar purge-archived on page 2456](#)
- [diagnose endpoint debug-zone on page 2456](#)
- [diagnose endpoint debug-zone background-debug on page 2456](#)
- [diagnose endpoint debug-zone dump on page 2456](#)
- [diagnose endpoint debug-zone set-lls-quota on page 2456](#)
- [diagnose endpoint ec-shared on page 2457](#)
- [diagnose endpoint ec-shared find on page 2457](#)
- [diagnose endpoint ec-shared list on page 2457](#)
- [diagnose endpoint fctems on page 2457](#)
- [diagnose endpoint fctems api-status on page 2457](#)
- [diagnose endpoint fctems api-status clear on page 2458](#)
- [diagnose endpoint fctems get-pub-addr on page 2458](#)
- [diagnose endpoint fctems info on page 2458](#)
- [diagnose endpoint fctems info pause on page 2458](#)
- [diagnose endpoint fctems info pre-master-key on page 2458](#)
- [diagnose endpoint fctems info protocol on page 2459](#)
- [diagnose endpoint fctems info repeat on page 2459](#)
- [diagnose endpoint fctems info repeat data-in on page 2459](#)
- [diagnose endpoint fctems info repeat data-out on page 2459](#)
- [diagnose endpoint fctems info repeat header-in on page 2460](#)
- [diagnose endpoint fctems info repeat header-out on page 2460](#)
- [diagnose endpoint fctems info repeat ssl-data-in on page 2460](#)
- [diagnose endpoint fctems info repeat ssl-data-out on page 2460](#)
- [diagnose endpoint fctems info repeat textinfo on page 2460](#)
- [diagnose endpoint fctems info reset on page 2461](#)
- [diagnose endpoint fctems info resume on page 2461](#)
- [diagnose endpoint fctems json on page 2461](#)
- [diagnose endpoint fctems json deep-inspect-cert-sync on page 2461](#)
- [diagnose endpoint fctems json gateway-mac-request on page 2461](#)
- [diagnose endpoint fctems queue-complete-calls on page 2461](#)
- [diagnose endpoint fctems test-authorization on page 2462](#)
- [diagnose endpoint fctems test-connectivity on page 2462](#)
- [diagnose endpoint fctems wss-cert-skip-check on page 2462](#)
- [diagnose endpoint filter on page 2462](#)
- [diagnose endpoint filter avatar-fingerprint on page 2463](#)
- [diagnose endpoint filter clear on page 2463](#)
- [diagnose endpoint filter ems-sn on page 2463](#)
- [diagnose endpoint filter ftcl-uid on page 2463](#)
- [diagnose endpoint filter list on page 2463](#)
- [diagnose endpoint filter show-large-data on page 2464](#)
- [diagnose endpoint lls-comm on page 2464](#)

- [diagnose endpoint lls-comm connect on page 2464](#)
- [diagnose endpoint lls-comm disconnect on page 2464](#)
- [diagnose endpoint lls-comm recv on page 2464](#)
- [diagnose endpoint lls-comm send on page 2465](#)
- [diagnose endpoint lls-comm send echo on page 2465](#)
- [diagnose endpoint lls-comm send echo echo on page 2465](#)
- [diagnose endpoint lls-comm send general on page 2465](#)
- [diagnose endpoint lls-comm send general get-index on page 2465](#)
- [diagnose endpoint lls-comm send general register on page 2465](#)
- [diagnose endpoint lls-comm send general unregister on page 2466](#)
- [diagnose endpoint lls-comm send ping on page 2466](#)
- [diagnose endpoint lls-comm send ping set-interval on page 2466](#)
- [diagnose endpoint lls-comm send ztna on page 2466](#)
- [diagnose endpoint lls-comm send ztna find-ip-vdom on page 2466](#)
- [diagnose endpoint lls-comm send ztna find-uid on page 2467](#)
- [diagnose endpoint lls-comm send ztna message-format on page 2467](#)
- [diagnose endpoint lls-comm send ztna subscribe-all on page 2467](#)
- [diagnose endpoint lls-comm send ztna unsubscribe-all on page 2468](#)
- [diagnose endpoint lls-comm send ztna unsubscribe-uid on page 2468](#)
- [diagnose endpoint lls-comm status on page 2468](#)
- [diagnose endpoint record on page 2468](#)
- [diagnose endpoint record delete on page 2468](#)
- [diagnose endpoint record list on page 2469](#)
- [diagnose endpoint record summary on page 2469](#)
- [diagnose endpoint record update-by-json on page 2469](#)
- [diagnose endpoint tags on page 2469](#)
- [diagnose endpoint tags remove-by-id on page 2470](#)
- [diagnose endpoint tags remove-by-name on page 2470](#)
- [diagnose endpoint tags remove-by-name-legacy on page 2470](#)
- [diagnose endpoint tags remove-by-sn on page 2470](#)
- [diagnose endpoint tags test-common-tag-update on page 2471](#)
- [diagnose endpoint tags test-update on page 2471](#)

diagnose endpoint avatar

FortiClient avatar.

```
diagnose endpoint avatar
```

diagnose endpoint avatar allow-nodisk

Allow no disk for avatar

```
diagnose endpoint avatar allow-nodisk [enable|disable]
```

Parameter	Description	Type	Size
[enable disable]	Allow saving avatars on non-harddisk storage.	string	

diagnose endpoint avatar delete-archived

Delete an archived avatar

```
diagnose endpoint avatar delete-archived <ftcl-uid> <user-name>
```

Parameter	Description	Type	Size
<ftcl-uid>	FortiClient UID	string	
<user-name>	User name	string	

diagnose endpoint avatar find

Find avatar location

```
diagnose endpoint avatar find
```

diagnose endpoint avatar find fingerprint

Find avatar fingerprint location

```
diagnose endpoint avatar find fingerprint <fingerprint>
```

Parameter	Description	Type	Size
<fingerprint>	Avatar fingerprint	string	

diagnose endpoint avatar find link

Find avatar link location

```
diagnose endpoint avatar find link <ftcl-uid> <user-name>
```

Parameter	Description	Type	Size
<ftcl-uid>	FortiClient UID	string	
<user-name>	User name	string	

diagnose endpoint avatar list

Display avatars

```
diagnose endpoint avatar list
```

diagnose endpoint avatar list active

Display active avatars

```
diagnose endpoint avatar list active <number>
```

Parameter	Description	Type	Size
<number>	Number of files to display per page.	string	

diagnose endpoint avatar list archived

Display archived avatars

```
diagnose endpoint avatar list archived <number>
```

Parameter	Description	Type	Size
<number>	Number of files to display per page.	string	

diagnose endpoint avatar list fingerprint

Display fingerprint avatars

```
diagnose endpoint avatar list fingerprint <number>
```

Parameter	Description	Type	Size
<number>	Number of files to display per page.	string	

diagnose endpoint avatar purge-all

Purge ALL avatars

```
diagnose endpoint avatar purge-all
```

diagnose endpoint avatar purge-archived

Purge all archived avatars

```
diagnose endpoint avatar purge-archived
```

diagnose endpoint debug-zone

Debug Zone.

```
diagnose endpoint debug-zone
```

diagnose endpoint debug-zone background-debug

Background Debugs.

```
diagnose endpoint debug-zone background-debug <val>
```

Parameter	Description	Type	Size
<val>	Value (enable disable)	string	

diagnose endpoint debug-zone dump

Dump all debug zone info.

```
diagnose endpoint debug-zone dump
```

diagnose endpoint debug-zone set-lls-quota

Set send quota for each socket

```
diagnose endpoint debug-zone set-lls-quota <quota>
```

Parameter	Description	Type	Size
<quota>	Quota in bytes	string	

diagnose endpoint ec-shared

FortiClient shared record.

```
diagnose endpoint ec-shared
```

diagnose endpoint ec-shared find

Find shared record.

```
diagnose endpoint ec-shared find <ipv4-address> <ENTER|vfid>
```

Parameter	Description	Type	Size
<ipv4-address>	Endpoint IPv4 address.	string	
<ENTER vfid>	VDOM ID of the client.	string	

diagnose endpoint ec-shared list

List shared records.

```
diagnose endpoint ec-shared list <number>
```

Parameter	Description	Type	Size
<number>	Number of records to display per page.	string	

diagnose endpoint fctems

FortiClient EMS.

```
diagnose endpoint fctems
```

diagnose endpoint fctems api-status

Tools to diagnose EMS API status.


```
diagnose endpoint fctems api-status
```

diagnose endpoint fctems api-status clear

Clear EMS API status.

```
diagnose endpoint fctems api-status clear <fctems>
```

Parameter	Description	Type	Size
<fctems>	FortiClient EMS table entry name in CMDB.	string	

diagnose endpoint fctems get-pub-addr

Get FortiClient EMS public address.

```
diagnose endpoint fctems get-pub-addr <fctems>
```

Parameter	Description	Type	Size
<fctems>	FortiClient EMS table entry id in CMDB.	string	

diagnose endpoint fctems info

Get info from FortiClient EMS calls.

```
diagnose endpoint fctems info
```

diagnose endpoint fctems info pause

Pause getting info.

```
diagnose endpoint fctems info pause
```

diagnose endpoint fctems info pre-master-key

Pre-master Key.

```
diagnose endpoint fctems info pre-master-key [enable|disable]
```

Parameter	Description	Type	Size
[enable disable]	enable/disable	string	

diagnose endpoint fctems info protocol

Protocol.

```
diagnose endpoint fctems info protocol [none|https|wss|all]
```

Parameter	Description	Type	Size
[none https wss all]	none/https/wss/all	string	

diagnose endpoint fctems info repeat

Get/Set repetitions for each infotype.

```
diagnose endpoint fctems info repeat
```

diagnose endpoint fctems info repeat data-in

data in.

```
diagnose endpoint fctems info repeat data-in <num>
```

Parameter	Description	Type	Size
<num>	Integer in the range of [0, 255].	string	

diagnose endpoint fctems info repeat data-out

data out.

```
diagnose endpoint fctems info repeat data-out <num>
```

Parameter	Description	Type	Size
<num>	Integer in the range of [0, 255].	string	

diagnose endpoint fctems info repeat header-in

header in.

```
diagnose endpoint fctems info repeat header-in <num>
```

Parameter	Description	Type	Size
<num>	Integer in the range of [0, 255].	string	

diagnose endpoint fctems info repeat header-out

header out.

```
diagnose endpoint fctems info repeat header-out <num>
```

Parameter	Description	Type	Size
<num>	Integer in the range of [0, 255].	string	

diagnose endpoint fctems info repeat ssl-data-in

SSL data in.

```
diagnose endpoint fctems info repeat ssl-data-in <num>
```

Parameter	Description	Type	Size
<num>	Integer in the range of [0, 255].	string	

diagnose endpoint fctems info repeat ssl-data-out

SSL data out.

```
diagnose endpoint fctems info repeat ssl-data-out <num>
```

Parameter	Description	Type	Size
<num>	Integer in the range of [0, 255].	string	

diagnose endpoint fctems info repeat textinfo

text info.

```
diagnose endpoint fctems info repeat textinfo <num>
```

Parameter	Description	Type	Size
<num>	Integer in the range of [0, 255].	string	

diagnose endpoint fctems info reset

Reset fctems info.

```
diagnose endpoint fctems info reset
```

diagnose endpoint fctems info resume

Resume/Start getting info.

```
diagnose endpoint fctems info resume
```

diagnose endpoint fctems json

FortiClient EMS REST-API JSON test.

```
diagnose endpoint fctems json
```

diagnose endpoint fctems json deep-inspect-cert-sync

Print deep inspection certificate sync json.

```
diagnose endpoint fctems json deep-inspect-cert-sync
```

diagnose endpoint fctems json gateway-mac-request

Print gateway-info json.

```
diagnose endpoint fctems json gateway-mac-request
```

diagnose endpoint fctems queue-complete-calls

Add complete (un)quarantine call(s) to FCEMSD queue.

```
diagnose endpoint fctems queue-complete-calls <call>[,<call>[,...]]
```

Parameter	Description	Type	Size
<call>[,<call>[,...]]	Comma separated list of calls. Run without the argument for more help.	string	

diagnose endpoint fctems test-authorization

Authorization test for FortiClient EMS.

```
diagnose endpoint fctems test-authorization <fctems>
```

Parameter	Description	Type	Size
<fctems>	FortiClient EMS table entry id in CMDB.	string	

diagnose endpoint fctems test-connectivity

Connectivity test for FortiClient EMS.

```
diagnose endpoint fctems test-connectivity <fctems>
```

Parameter	Description	Type	Size
<fctems>	FortiClient EMS table entry id in CMDB.	string	

diagnose endpoint fctems wss-cert-skip-check

Skip WebSocketSecure server certificate check.

```
diagnose endpoint fctems wss-cert-skip-check [yes|no]
```

Parameter	Description	Type	Size
[yes no]	yes/no	string	

diagnose endpoint filter

Debug filter for fcnacd.

```
diagnose endpoint filter
```

diagnose endpoint filter avatar-fingerprint

Avatar fingerprint to filter by.

```
diagnose endpoint filter avatar-fingerprint <avatar-fingerprint>
```

Parameter	Description	Type	Size
<avatar-fingerprint>	Avatar fingerprint.	string	

diagnose endpoint filter clear

Erase the current filter.

```
diagnose endpoint filter clear
```

diagnose endpoint filter ems-sn

FortiClient EMS serial-number to filter by.

```
diagnose endpoint filter ems-sn <ems-sn>
```

Parameter	Description	Type	Size
<ems-sn>	EMS serial-number.	string	

diagnose endpoint filter ftcl-uid

FortiClient UID to filter by.

```
diagnose endpoint filter ftcl-uid <ftcl-uid>
```

Parameter	Description	Type	Size
<ftcl-uid>	FortiClient UID.	string	

diagnose endpoint filter list

Display the current filter.

```
diagnose endpoint filter list
```

diagnose endpoint filter show-large-data

Show large data.

```
diagnose endpoint filter show-large-data [yes/no]
```

Parameter	Description	Type	Size
[yes/no]	Yes or no.	string	

diagnose endpoint lls-comm

Long-Lived Socket Communication.

```
diagnose endpoint lls-comm
```

diagnose endpoint lls-comm connect

Connect.

```
diagnose endpoint lls-comm connect
```

diagnose endpoint lls-comm disconnect

Disconnect.

```
diagnose endpoint lls-comm disconnect
```

diagnose endpoint lls-comm recv

Receive Messages.

```
diagnose endpoint lls-comm recv <repeat>
```

Parameter	Description	Type	Size
<repeat>	Repeat number of receives	string	

diagnose endpoint lls-comm send

Send Message.

```
diagnose endpoint lls-comm send
```

diagnose endpoint lls-comm send echo

Echo long-lived socket channel

```
diagnose endpoint lls-comm send echo
```

diagnose endpoint lls-comm send echo echo

Echo

```
diagnose endpoint lls-comm send echo echo <msg>
```

Parameter	Description	Type	Size
<msg>	Message to echo	string	

diagnose endpoint lls-comm send general

General long-lived socket channel

```
diagnose endpoint lls-comm send general
```

diagnose endpoint lls-comm send general get-index

Get Long-lived socket channel index.

```
diagnose endpoint lls-comm send general get-index
```

diagnose endpoint lls-comm send general register

Register to Long-lived Socket channel(s)

```
diagnose endpoint lls-comm send general register <channel-mask>
```


Parameter	Description	Type	Size
<channel-mask>	Channel Mask in decimal, octal or hexadecimal	string	

diagnose endpoint lls-comm send general unregister

Unregister from Long-lived Socket channel(s)

```
diagnose endpoint lls-comm send general unregister <channel-mask>
```

Parameter	Description	Type	Size
<channel-mask>	Channel Mask in decimal, octal or hexadecimal	string	

diagnose endpoint lls-comm send ping

Ping long-lived socket channel

```
diagnose endpoint lls-comm send ping
```

diagnose endpoint lls-comm send ping set-interval

Set interval

```
diagnose endpoint lls-comm send ping set-interval <interval>
```

Parameter	Description	Type	Size
<interval>	Period in units of 1/100 seconds	string	

diagnose endpoint lls-comm send ztna

ZTNA long-lived socket channel

```
diagnose endpoint lls-comm send ztna
```

diagnose endpoint lls-comm send ztna find-ip-vdom

Find by IP and VDOM

```
diagnose endpoint lls-comm send ztna find-ip-vdom <ip> <vdom>
```

Parameter	Description	Type	Size
<ip>	IPv4 or IPv6 address of client	string	
<vdom>	VDOM name	string	

diagnose endpoint lls-comm send ztna find-uid

Find by FortiClient UID and EMS SN

```
diagnose endpoint lls-comm send ztna find-uid <ftct-uid> <emssn> <ems-tenant-id>
```

Parameter	Description	Type	Size
<ftct-uid>	Client UID	string	
<emssn>	EMS Serial Number	string	
<ems-tenant-id>	EMS Tenant ID	string	

diagnose endpoint lls-comm send ztna message-format

Select if wad header is sent

```
diagnose endpoint lls-comm send ztna message-format <index>
```

Parameter	Description	Type	Size
<index>	0: standard 1: wad informer	string	

diagnose endpoint lls-comm send ztna subscribe-all

Subscribe to all FortiClients on selected LLS bits

```
diagnose endpoint lls-comm send ztna subscribe-all <mask>
```

Parameter	Description	Type	Size
<mask>	Bit mask	string	

diagnose endpoint lls-comm send ztna unsubscribe-all

Unsubscribe to all FortiClients on issuing LLS

```
diagnose endpoint lls-comm send ztna unsubscribe-all
```

diagnose endpoint lls-comm send ztna unsubscribe-uid

Unsubscribe from FortiClient UID

```
diagnose endpoint lls-comm send ztna unsubscribe-uid <ftct-uid> <emssn> <ems-tenant-id>
```

Parameter	Description	Type	Size
<ftct-uid>	Client UID	string	
<emssn>	EMS Serial Number	string	
<ems-tenant-id>	EMS_Tenant ID	string	

diagnose endpoint lls-comm status

Status.

```
diagnose endpoint lls-comm status
```

diagnose endpoint record

Endpoint records.

```
diagnose endpoint record
```

diagnose endpoint record delete

Delete endpoint records.

```
diagnose endpoint record delete <ipv4-address>
```

Parameter	Description	Type	Size
<ipv4-address>	Source IPv4 address.	string	

diagnose endpoint record list

List endpoint records.

```
diagnose endpoint record list <ipv4-address> <mac-address> <forticlient-uid>
```

Parameter	Description	Type	Size
<ipv4-address>	Source IPv4 address ("any" for all IP addresses).	string	
<mac-address>	Source MAC address ("any" for all MAC addresses).	string	
<forticlient-uid>	FortiClient UID ("any" for all UID's).	string	

diagnose endpoint record summary

List summary of endpoint records.

```
diagnose endpoint record summary
```

diagnose endpoint record update-by-json

Add endpoint record by JSON.

```
diagnose endpoint record update-by-json <uid> <ems-sn> <ems-tenant-id> <json>
```

Parameter	Description	Type	Size
<uid>	FortiClient UID.	string	
<ems-sn>	FortiClient EMS serial number.	string	
<ems-tenant-id>	FortiClient EMS tenant ID.	string	
<json>	JSON string.	string	

diagnose endpoint tags

Tags.

```
diagnose endpoint tags
```

diagnose endpoint tags remove-by-id

Remove Dynamic address tags by EMS ID.

```
diagnose endpoint tags remove-by-id <EMS-ID>
```

Parameter	Description	Type	Size
<EMS-ID>	EMS ID.	string	

diagnose endpoint tags remove-by-name

Remove specific tag by EMS ID and name.

```
diagnose endpoint tags remove-by-name <TAG-Name> <EMS-ID>
```

Parameter	Description	Type	Size
<TAG-Name>	Tag name.	string	
<EMS-ID>	EMS ID.	string	

diagnose endpoint tags remove-by-name-legacy

Remove specific tag by Serial Number and name (LEGACY).

```
diagnose endpoint tags remove-by-name-legacy <TAG-Name> <SN>
```

Parameter	Description	Type	Size
<TAG-Name>	Tag name.	string	
<SN>	Serial Number.	string	

diagnose endpoint tags remove-by-sn

Remove Dynamic address tags by Serial Number (LEGACY).

```
diagnose endpoint tags remove-by-sn <SN>
```

Parameter	Description	Type	Size
<SN>	Serial Number.	string	

diagnose endpoint tags test-common-tag-update

Test update tags for FortiClient EMS

```
diagnose endpoint tags test-common-tag-update <TAG-INFO-JSON>
```

Parameter	Description	Type	Size
<TAG-INFO-JSON>	JSON string for commands.	string	

diagnose endpoint tags test-update

Test update tags.

```
diagnose endpoint tags test-update <EMS-SN> <TAG-INFO-JSON> <TAG-MEMBERS-JSON>
```

Parameter	Description	Type	Size
<EMS-SN>	FortiClient EMS Serial Number.	string	
<TAG-INFO-JSON>	JSON string for tag_info.	string	
<TAG-MEMBERS-JSON>	JSON string for tag_members.	string	

diagnose extender

Diagnostics command of extender

This topic includes the following commands:

- [diagnose extender atcmd on page 2471](#)
- [diagnose extender cmd on page 2472](#)
- [diagnose extender modem-list on page 2472](#)

diagnose extender atcmd

AT Command.

```
diagnose extender atcmd <at-command> <mark> <sn> [1|2]
```

Parameter	Description	Type	Size
<at-command>	AT command.	string	
<mark>	Change mark to '?' in AT command.	string	
<sn>	Serial number of FortiExtender.	string	
[1 2]	modem ID.	string	

diagnose extender cmd

Generic AT command.

```
diagnose extender cmd <Integer> <sn> [1|2]
```

Parameter	Description	Type	Size
<Integer>	A number mapping a generic AT command.	string	
<sn>	Serial number of FortiExtender.	string	
[1 2]	modem ID.	string	

diagnose extender modem-list

List of supported modems for FortiExtender.

```
diagnose extender modem-list
```

diagnose fdsm

FortiCloud/FortiManager Service.

This topic includes the following commands:

- [diagnose fdsm account-info on page 2473](#)
- [diagnose fdsm central-mgmt-status on page 2473](#)
- [diagnose fdsm cfg-diff on page 2473](#)
- [diagnose fdsm cfg-download on page 2474](#)
- [diagnose fdsm cfg-list on page 2474](#)
- [diagnose fdsm cfg-upload on page 2474](#)
- [diagnose fdsm contract-controller-update on page 2474](#)
- [diagnose fdsm fap-fsw-contract-download on page 2475](#)

- [diagnose fdsm fc-installer-download on page 2475](#)
- [diagnose fdsm fds-update on page 2475](#)
- [diagnose fdsm fmg-auto-discovery-status on page 2475](#)
- [diagnose fdsm fortiap-download on page 2475](#)
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- [diagnose fdsm fortisw-latest-ver on page 2477](#)
- [diagnose fdsm ftk-activate on page 2477](#)
- [diagnose fdsm image-download on page 2477](#)
- [diagnose fdsm image-list on page 2477](#)
- [diagnose fdsm image-upgrade-matrix on page 2478](#)
- [diagnose fdsm log-controller-update on page 2478](#)
- [diagnose fdsm message-update on page 2478](#)
- [diagnose fdsm modem-list on page 2478](#)
- [diagnose fdsm report-download on page 2478](#)
- [diagnose fdsm report-list on page 2478](#)
- [diagnose fdsm sslvpn-man-upgrade-package-download on page 2479](#)
- [diagnose fdsm sslvpn-package-download on page 2479](#)

diagnose fdsm account-info

FortiCloud account information.

```
diagnose fdsm account-info
```

diagnose fdsm central-mgmt-status

Central management registration status.

```
diagnose fdsm central-mgmt-status
```

diagnose fdsm cfg-diff

Configuration difference.

```
diagnose fdsm cfg-diff <revision1> <revision2>
```


Parameter	Description	Type	Size
<revision1>	Revision	string	
<revision2>	Revision	string	

diagnose fdsm cfg-download

Download configuration.

```
diagnose fdsm cfg-download <type> <revision>
```

Parameter	Description	Type	Size
<type>	Configuration type (normal, template, script).	string	
<revision>	Revision	string	

diagnose fdsm cfg-list

Download configuration list.

```
diagnose fdsm cfg-list <type>
```

Parameter	Description	Type	Size
<type>	Configuration type (normal, template, script).	string	

diagnose fdsm cfg-upload

Upload configuration.

```
diagnose fdsm cfg-upload <comments>
```

Parameter	Description	Type	Size
<comments>	Comments	string	

diagnose fdsm contract-controller-update

Update contract controller.

```
diagnose fdsm contract-controller-update
```

diagnose fdsm fap-fsw-contract-download

FAP/FSW contract information.

```
diagnose fdsm fap-fsw-contract-download <serial1*serial2*...>
```

Parameter	Description	Type	Size
<serial1*serial2*...>	Serial numbers of FAP/FSW devices	string	

diagnose fdsm fc-installer-download

Download FortiClient installer.

```
diagnose fdsm fc-installer-download <id>
```

Parameter	Description	Type	Size
<id>	Installer ID.	string	

diagnose fdsm fds-update

Perform FortiGuard update.

```
diagnose fdsm fds-update
```

diagnose fdsm fmg-auto-discovery-status

FortiManager auto-discovery status.

```
diagnose fdsm fmg-auto-discovery-status
```

diagnose fdsm fortiap-download

Download FortiAP image.

```
diagnose fdsm fortiap-download <id>
```

Parameter	Description	Type	Size
<id>	Image ID	string	

diagnose fdsm fortiap-latest-ver

Get most recent FortiAP build information.

```
diagnose fdsm fortiap-latest-ver <model>
```

Parameter	Description	Type	Size
<model>	Model name	string	

diagnose fdsm forticlient-net-info

FortiClient net information.

```
diagnose fdsm forticlient-net-info
```

diagnose fdsm forticlient-update

FortiClient update.

```
diagnose fdsm forticlient-update
```

diagnose fdsm fortisex-download

Download FortiExtender image.

```
diagnose fdsm fortisex-download <id>
```

Parameter	Description	Type	Size
<id>	Image ID	string	

diagnose fdsm fortisex-latest-ver

Get most recent FortiExtender build information.

```
diagnose fdsm fortisex-latest-ver <model>
```

Parameter	Description	Type	Size
<model>	Model name	string	

diagnose fdsm fortisw-download

Download FortiSwitch image.

```
diagnose fdsm fortisw-download <id>
```

Parameter	Description	Type	Size
<id>	Image ID	string	

diagnose fdsm fortisw-latest-ver

Get most recent FortiSwitch build information.

```
diagnose fdsm fortisw-latest-ver <model>
```

Parameter	Description	Type	Size
<model>	Model name	string	

diagnose fdsm ftk-activate

FortiToken activation.

```
diagnose fdsm ftk-activate
```

diagnose fdsm image-download

Download image.

```
diagnose fdsm image-download <id>
```

Parameter	Description	Type	Size
<id>	Image ID.	string	

diagnose fdsm image-list

Download image list.

```
diagnose fdsm image-list
```

diagnose fdsm image-upgrade-matrix

Download image upgrade matrix.

```
diagnose fdsm image-upgrade-matrix
```

diagnose fdsm log-controller-update

Perform log update.

```
diagnose fdsm log-controller-update
```

diagnose fdsm message-update

Perform message update.

```
diagnose fdsm message-update
```

diagnose fdsm modem-list

MODEM list.

```
diagnose fdsm modem-list
```

diagnose fdsm report-download

Download report.

```
diagnose fdsm report-download <oid>
```

Parameter	Description	Type	Size
<oid>	OID	string	

diagnose fdsm report-list

Download report list.

```
diagnose fdsm report-list <vdom>
```

Parameter	Description	Type	Size
<vdom>	VDOM Name.	string	

diagnose fdsm sslvpn-man-upgrade-package-download

Download SSL-VPN manual upgrade package.

```
diagnose fdsm sslvpn-man-upgrade-package-download <id>
```

Parameter	Description	Type	Size
<id>	Package ID.	string	

diagnose fdsm sslvpn-package-download

Download SSL-VPN package.

```
diagnose fdsm sslvpn-package-download <id>
```

Parameter	Description	Type	Size
<id>	Package ID.	string	

diagnose firewall

Firewall

This topic includes the following commands:

- [diagnose firewall acl on page 2485](#)
- [diagnose firewall acl clearcounter on page 2485](#)
- [diagnose firewall acl clearcounter6 on page 2485](#)
- [diagnose firewall acl counter on page 2486](#)
- [diagnose firewall acl counter6 on page 2486](#)
- [diagnose firewall auth on page 2486](#)
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diagnose firewall acl

ACL

```
diagnose firewall acl
```

diagnose firewall acl clearcounter

Clear ACL packet counter.

```
diagnose firewall acl clearcounter <xx>
```

Parameter	Description	Type	Size
<xx>	ACL policy ID	string	

diagnose firewall acl clearcounter6

Clear ACL6 packet counter.

```
diagnose firewall acl clearcounter6 <xx>
```

Parameter	Description	Type	Size
<xx>	ACL policy ID	string	

diagnose firewall acl counter

Show number of packets dropped by ACL.

```
diagnose firewall acl counter <xx>
```

Parameter	Description	Type	Size
<xx>	ACL policy ID	string	

diagnose firewall acl counter6

Show number of packets dropped by ACL6.

```
diagnose firewall acl counter6 <xx>
```

Parameter	Description	Type	Size
<xx>	ACL policy ID	string	

diagnose firewall auth

Authenticated users.

```
diagnose firewall auth
```

diagnose firewall auth clear

Clear authenticated IPv4 users.

```
diagnose firewall auth clear
```

diagnose firewall auth filter

Filters used to list entries.

```
diagnose firewall auth filter
```

diagnose firewall auth filter clear

Clear all filters.

```
diagnose firewall auth filter clear
```

diagnose firewall auth filter group

Group name.

```
diagnose firewall auth filter group <name>
```

Parameter	Description	Type	Size
<name>	Group name.	string	

diagnose firewall auth filter mac

MAC address.

```
diagnose firewall auth filter mac <xx:xx:xx:xx:xx:xx>
```

Parameter	Description	Type	Size
<xx:xx:xx:xx:xx:xx>	MAC address.	string	

diagnose firewall auth filter method

method

```
diagnose firewall auth filter method <method> <method> <method> <method> <method> <method>
```

Parameter	Description	Type	Size
<method>	Valid method name: fsso, rsso, ntlm, fw, wsso, disclaimer, fsso_citrix, sso_guest.	string	
<method>	Valid method name: fsso, rsso, ntlm, fw, wsso, email, disclaimer, fsso_citrix, sso_guest.	string	
<method>	Valid method name: fsso, rsso, ntlm, fw, wsso, email, disclaimer, fsso_citrix, sso_guest.	string	

Parameter	Description	Type	Size
<method>	Valid method name: fsso, rsso, ntlm, fw, wssso, email, disclaimer, fsso_citrix, sso_guest.	string	
<method>	Valid method name: fsso, rsso, ntlm, fw, wssso, email, disclaimer, fsso_citrix, sso_guest.	string	
<method>	Valid method name: fsso, rsso, ntlm, fw, wssso, email, disclaimer, fsso_citrix, sso_guest.	string	

diagnose firewall auth filter policy

Policy ID.

```
diagnose firewall auth filter policy <xxx>
```

Parameter	Description	Type	Size
<xxx>	Policy ID.	string	

diagnose firewall auth filter source

IPv4 source address.

```
diagnose firewall auth filter source <xxx.xxx.xxx.xxx> <xxx.xxx.xxx.xxx>
```

Parameter	Description	Type	Size
<xxx.xxx.xxx.xxx>	IPv4 source (range from).	string	
<xxx.xxx.xxx.xxx>	IPv4 source (range to).	string	

diagnose firewall auth filter source6

IPv6 source address.

```
diagnose firewall auth filter source6 <xxxx::xxxx> <xxxx::xxxx>
```

Parameter	Description	Type	Size
<xxxx::xxxx>	IPv6 source (range from).	string	
<xxxx::xxxx>	IPv6 source (range to).	string	

diagnose firewall auth filter user

User name.

```
diagnose firewall auth filter user <name>
```

Parameter	Description	Type	Size
<name>	User name.	string	

diagnose firewall auth ipv6

Authenticated IPv6 users.

```
diagnose firewall auth ipv6
```

diagnose firewall auth ipv6 clear

Clear authenticated IPv6 users.

```
diagnose firewall auth ipv6 clear
```

diagnose firewall auth ipv6 list

List authenticated IPv6 users.

```
diagnose firewall auth ipv6 list
```

diagnose firewall auth list

List authenticated IPv4 users.

```
diagnose firewall auth list
```

diagnose firewall auth mac

Authenticated MAC users.

```
diagnose firewall auth mac
```


diagnose firewall auth mac clear

Clear authenticated MAC users.

```
diagnose firewall auth mac clear
```

diagnose firewall auth mac list

List authenticated MAC users.

```
diagnose firewall auth mac list
```

diagnose firewall blocking

Blocking information.

```
diagnose firewall blocking
```

diagnose firewall blocking list

List information.

```
diagnose firewall blocking list <xxx.xxx.xxx.xxx>
```

Parameter	Description	Type	Size
<xxx.xxx.xxx.xxx>	Source IP.	string	

diagnose firewall dns-xlate

DNS translation.

```
diagnose firewall dns-xlate
```

diagnose firewall dns-xlate mapping

DNS translation mapping.

```
diagnose firewall dns-xlate mapping
```

diagnose firewall dns-xlate mapping list

List dynamic DNS mapping.

```
diagnose firewall dns-xlate mapping list
```

diagnose firewall dns-xlate pool

DNS translation pool.

```
diagnose firewall dns-xlate pool
```

diagnose firewall dns-xlate pool list

List DNS translation pool.

```
diagnose firewall dns-xlate pool list
```

diagnose firewall dynamic

Show dynamic addresses.

```
diagnose firewall dynamic
```

diagnose firewall dynamic address

Get summary of one or all dynamic addresses.

```
diagnose firewall dynamic address <name>
```

Parameter	Description	Type	Size
<name>	Dynamic address name. (Optional)	string	

diagnose firewall dynamic list

Get list of one or all dynamic addresses.

```
diagnose firewall dynamic list <name>
```

Parameter	Description	Type	Size
<name>	Dynamic address name. (Optional)	string	

diagnose firewall dynamic6

Show IPv6 dynamic addresses.

```
diagnose firewall dynamic6
```

diagnose firewall dynamic6 address

Get summary of IPv6 dynamic addresses.

```
diagnose firewall dynamic6 address <name>
```

Parameter	Description	Type	Size
<name>	Dynamic address name.	string	

diagnose firewall dynamic6 list

List all IPv6 dynamic addresses.

```
diagnose firewall dynamic6 list <name>
```

Parameter	Description	Type	Size
<name>	Dynamic address name.	string	

diagnose firewall fqdn

fqdn

```
diagnose firewall fqdn
```

diagnose firewall fqdn get-ip

Get and display one IP FQDN address.

```
diagnose firewall fqdn get-ip <name>
```

Parameter	Description	Type	Size
<name>	Address Name	string	

diagnose firewall fqdn get-mac

Get and display one MAC FQDN address.

```
diagnose firewall fqdn get-mac <name>
```

Parameter	Description	Type	Size
<name>	Address Name	string	

diagnose firewall fqdn getinfo-ip

Get info of IP FQDN address

```
diagnose firewall fqdn getinfo-ip <name>
```

Parameter	Description	Type	Size
<name>	name	string	

diagnose firewall fqdn getinfo-mac

Get info of MAC FQDN address

```
diagnose firewall fqdn getinfo-mac <name>
```

Parameter	Description	Type	Size
<name>	name	string	

diagnose firewall fqdn list-all

List FQDN.

```
diagnose firewall fqdn list-all
```

diagnose firewall fqdn list-ip

List IP FQDN.

```
diagnose firewall fqdn list-ip
```

diagnose firewall fqdn list-mac

List MAC FQDN.

```
diagnose firewall fqdn list-mac
```

diagnose firewall fqdn6

IPv6 FQDN.

```
diagnose firewall fqdn6
```

diagnose firewall fqdn6 list

List all IPv6 FQDN.

```
diagnose firewall fqdn6 list
```

diagnose firewall internet-service

Internet service in the kernel.

```
diagnose firewall internet-service
```

diagnose firewall internet-service list

List Internet Service.

```
diagnose firewall internet-service list <section>
```

Parameter	Description	Type	Size
<section>	Internet Service table section.(0: entry, 1: index, <integer>: singularity)	string	

diagnose firewall internet-service-app-ctrl

Application control internet service in the kernel.

```
diagnose firewall internet-service-app-ctrl
```

diagnose firewall internet-service-app-ctrl list

List application control entries in the kernel.

```
diagnose firewall internet-service-app-ctrl list <ID>
```

Parameter	Description	Type	Size
<ID>	Application Control ID.	string	

diagnose firewall internet-service-cache

Internet Service database cache entries in the kernel.

```
diagnose firewall internet-service-cache
```

diagnose firewall internet-service-cache list

List Internet Service database cache entries in the kernel.

```
diagnose firewall internet-service-cache list
```

diagnose firewall internet-service-custom

Custom Internet Service in the kernel.

```
diagnose firewall internet-service-custom
```

diagnose firewall internet-service-custom list

List Custom Internet Service.

```
diagnose firewall internet-service-custom list <name>
```

Parameter	Description	Type	Size
<name>	Custom Internet Service name.	string	

diagnose firewall internet-service-disable

Internet Service disable entries in the kernel.

```
diagnose firewall internet-service-disable
```

diagnose firewall internet-service-disable list

List Internet Service disable entries.

```
diagnose firewall internet-service-disable list <ID>
```

Parameter	Description	Type	Size
<ID>	Internet Service ID.	string	

diagnose firewall internet-service-extension

Internet Service extension in the kernel.

```
diagnose firewall internet-service-extension
```

diagnose firewall internet-service-extension list

List Internet Service extension.

```
diagnose firewall internet-service-extension list <ID>
```

Parameter	Description	Type	Size
<ID>	Internet Service ID.	string	

diagnose firewall internet-service-prio-id

Internet service ID in firewall policy, shaping policy, SD-WAN rule, static route, and router policy.

```
diagnose firewall internet-service-prio-id
```

diagnose firewall internet-service-prio-id list

List Internet Service Priority ID.

```
diagnose firewall internet-service-prio-id list
```

diagnose firewall internet-service6

Internet service6 in the kernel.

```
diagnose firewall internet-service6
```

diagnose firewall internet-service6 list

List Internet Service6.

```
diagnose firewall internet-service6 list <section>
```

Parameter	Description	Type	Size
<section>	Internet Service6 table section.(0: entry, 1: index, <integer>: singularity)	string	

diagnose firewall internet-service6-cache

Internet Service database cache entries for IPv6 in the kernel.

```
diagnose firewall internet-service6-cache
```

diagnose firewall internet-service6-cache list

List Internet Service database cache entries for IPv6 in the kernel.

```
diagnose firewall internet-service6-cache list
```

diagnose firewall internet-service6-custom

Custom Internet Service6 in the kernel.

```
diagnose firewall internet-service6-custom
```


diagnose firewall internet-service6-custom list

List Custom Internet Service.

```
diagnose firewall internet-service6-custom list <name>
```

Parameter	Description	Type	Size
<name>	Custom Internet Service name.	string	

diagnose firewall internet-service6-disable

Internet Service6 disable entries in the kernel.

```
diagnose firewall internet-service6-disable
```

diagnose firewall internet-service6-disable list

List Internet Service6 disable entries.

```
diagnose firewall internet-service6-disable list <ID>
```

Parameter	Description	Type	Size
<ID>	Internet Service6 ID.	string	

diagnose firewall internet-service6-extension

Internet Service6 extension in the kernel.

```
diagnose firewall internet-service6-extension
```

diagnose firewall internet-service6-extension list

List Internet Service6 extension.

```
diagnose firewall internet-service6-extension list <ID>
```

Parameter	Description	Type	Size
<ID>	Internet Service6 ID.	string	

diagnose firewall internet-service6-prio-id

Internet service ID in firewall policy, SD-WAN rule, and router policy.

```
diagnose firewall internet-service6-prio-id
```

diagnose firewall internet-service6-prio-id list

List Internet Service6 Priority ID.

```
diagnose firewall internet-service6-prio-id list
```

diagnose firewall ip-translation

IP translation.

```
diagnose firewall ip-translation
```

diagnose firewall ip-translation list

List IP translation table.

```
diagnose firewall ip-translation list
```

diagnose firewall ipgeo

IP geolocation.

```
diagnose firewall ipgeo
```

diagnose firewall ipgeo copyright-notice

Copyright note.

```
diagnose firewall ipgeo copyright-notice
```

diagnose firewall ipgeo country-list

List all countries.

```
diagnose firewall ipgeo country-list
```

diagnose firewall ipgeo ip-list

List IP info of country.

```
diagnose firewall ipgeo ip-list <name>
```

Parameter	Description	Type	Size
<name>	Country ID.	string	

diagnose firewall ipgeo ip2country

Get country info for the IP.

```
diagnose firewall ipgeo ip2country <ip>
```

Parameter	Description	Type	Size
<ip>	IPv4/IPv6 address.	string	

diagnose firewall ipgeo ip6-list

List IPv6 info of country.

```
diagnose firewall ipgeo ip6-list <name>
```

Parameter	Description	Type	Size
<name>	Country ID.	string	

diagnose firewall ipgeo override

Print out all user defined IP geolocation data.

```
diagnose firewall ipgeo override
```

diagnose firewall iplist

IP list.

```
diagnose firewall iplist
```

diagnose firewall iplist list

list

```
diagnose firewall iplist list
```

diagnose firewall iplist list optimized

List optimized iplist.

```
diagnose firewall iplist list optimized
```

diagnose firewall iplist6

IPv6 list.

```
diagnose firewall iplist6
```

diagnose firewall iplist6 list

list

```
diagnose firewall iplist6 list
```

diagnose firewall iplist6 list optimized

List optimized iplist6.

```
diagnose firewall iplist6 list optimized
```

diagnose firewall ipmac

ipmac

```
diagnose firewall ipmac
```

diagnose firewall ipmac add

add

```
diagnose firewall ipmac add <xxx.xxx.xxx.xxx> <xx:xx:xx:xx:xx:xx> <drop|accept>
```

Parameter	Description	Type	Size
<xxx.xxx.xxx.xxx>	IP address.	string	
<xx:xx:xx:xx:xx:xx>	MAC address.	string	
<drop accept>	action	string	

diagnose firewall ipmac delete

delete

```
diagnose firewall ipmac delete <xxx.xxx.xxx.xxx> <xx:xx:xx:xx:xx:xx>
```

Parameter	Description	Type	Size
<xxx.xxx.xxx.xxx>	IP address.	string	
<xx:xx:xx:xx:xx:xx>	MAC address.	string	

diagnose firewall ipmac list

list

```
diagnose firewall ipmac list
```

diagnose firewall ipmac status

status

```
diagnose firewall ipmac status
```

diagnose firewall ippool

One-to-one/PBA IP pool.

```
diagnose firewall ippool
```

diagnose firewall ippool list

list

```
diagnose firewall ippool list
```

diagnose firewall ippool list nat-ip

List allocated IP in ippool.

```
diagnose firewall ippool list nat-ip
```

diagnose firewall ippool list pba

List PBA in ippool.

```
diagnose firewall ippool list pba
```

diagnose firewall ippool list user

List users of ippool.

```
diagnose firewall ippool list user
```

diagnose firewall ippool stats

statistics

```
diagnose firewall ippool stats
```

diagnose firewall ippool-all

Any IP pool.

```
diagnose firewall ippool-all
```

diagnose firewall ippool-all list

list

```
diagnose firewall ippool-all list
```

diagnose firewall ippool-all stats

statistics

```
diagnose firewall ippool-all stats <name>
```

Parameter	Description	Type	Size
<name>	pool name	string	

diagnose firewall ippool-fixed-range

Fixed range IP pool.

```
diagnose firewall ippool-fixed-range
```

diagnose firewall ippool-fixed-range list

list

```
diagnose firewall ippool-fixed-range list
```

diagnose firewall ippool-fixed-range list natip

NAT IP.

```
diagnose firewall ippool-fixed-range list natip <xxx.xxx.xxx.xxx>[-<xxx.xxx.xxx.xxx>]  
<Enter>|<port>
```

Parameter	Description	Type	Size
<xxx.xxx.xxx.xxx>[-<xxx.xxx.xxx.xxx>]	NAT IP/IP range NAT IP/IP Range + port.	string	
<Enter> <port>	port	string	

diagnose firewall iprope

iprope

```
diagnose firewall iprope
```

diagnose firewall iprope appctrl

List application control lists.

```
diagnose firewall iprope appctrl
```

diagnose firewall iprope appctrl list

List application control lists.

```
diagnose firewall iprope appctrl list
```

diagnose firewall iprope appctrl shaper

application control app shapers.

```
diagnose firewall iprope appctrl shaper
```

diagnose firewall iprope appctrl shaper list

List application control app shapers.

```
diagnose firewall iprope appctrl shaper list
```

diagnose firewall iprope appctrl stats

Application control app statistics.


```
diagnose firewall iprope appctrl stats
```

diagnose firewall iprope appctrl stats clear

Clear application control app statistics.

```
diagnose firewall iprope appctrl stats clear
```

diagnose firewall iprope appctrl stats list

List application control app statistics.

```
diagnose firewall iprope appctrl stats list
```

diagnose firewall iprope appctrl status

Application control list status.

```
diagnose firewall iprope appctrl status
```

diagnose firewall iprope clear

Clear policy statistic.

```
diagnose firewall iprope clear
```

diagnose firewall iprope list

List.

```
diagnose firewall iprope list <No.>
```

Parameter	Description	Type	Size
<No.>	Number, hexadecimal.	string	

diagnose firewall iprope lookup

Lookup firewall policy that matches provided criteria.

```
diagnose firewall iprope lookup <src_ip> <src_port> <dst_ip> <dst_port> <protocol> <device>
```

Parameter	Description	Type	Size
<src_ip>	Source IP address.	string	
<src_port>	Source port.	string	
<dst_ip>	Destination IP address.	string	
<dst_port>	Destination port.	string	
<protocol>	Protocol.	string	
<device>	Source interface.	string	

diagnose firewall iprope show

Show policy statistic.

```
diagnose firewall iprope show
```

diagnose firewall iprope state

state

```
diagnose firewall iprope state
```

diagnose firewall iprope6

iprope6

```
diagnose firewall iprope6
```

diagnose firewall iprope6 clear

Clear policy statistic.

```
diagnose firewall iprope6 clear
```

diagnose firewall iprope6 list

list

```
diagnose firewall iprope6 list <No.>
```

Parameter	Description	Type	Size
<No.>	Number, hexadecimal.	string	

diagnose firewall iprope6 lookup

Lookup firewall policy that matches provided criteria.

```
diagnose firewall iprope6 lookup <src_ip> <src_port> <dst_ip> <dst_port> <protocol> <device>
```

Parameter	Description	Type	Size
<src_ip>	Source IP address.	string	
<src_port>	Source port.	string	
<dst_ip>	Destination IP address.	string	
<dst_port>	Destination port.	string	
<protocol>	Protocol.	string	
<device>	Source interface.	string	

diagnose firewall iprope6 show

Show policy statistic.

```
diagnose firewall iprope6 show
```

diagnose firewall iprope6 state

state

```
diagnose firewall iprope6 state
```

diagnose firewall ipv6-ehf

IPv6 extension header filter.

```
diagnose firewall ipv6-ehf
```

diagnose firewall ipv6-ehf list

List ipv6-eh-filter.

```
diagnose firewall ipv6-ehf list
```

diagnose firewall network-service-dynamic

Dynamic Network Service in the kernel.

```
diagnose firewall network-service-dynamic
```

diagnose firewall network-service-dynamic list

List Dynamic Network Service.

```
diagnose firewall network-service-dynamic list <name>
```

Parameter	Description	Type	Size
<name>	Dynamic Network Service name.	string	

diagnose firewall ngfw-fix-application

Next Generation Firewall (NGFW) Applications handled by Kernel.

```
diagnose firewall ngfw-fix-application
```

diagnose firewall ngfw-fix-application list

List Kernel-handled NGFW applications.

```
diagnose firewall ngfw-fix-application list
```

diagnose firewall packet

Packet statistics.

```
diagnose firewall packet
```

diagnose firewall packet distribution

Show distribution statistics.

```
diagnose firewall packet distribution
```

diagnose firewall proute

Policy route.

```
diagnose firewall proute
```

diagnose firewall proute clear

Clear policy routing stats.

```
diagnose firewall proute clear <number>
```

Parameter	Description	Type	Size
<number>	Policy route ID.	string	

diagnose firewall proute list

List policy routing.

```
diagnose firewall proute list <number>
```

Parameter	Description	Type	Size
<number>	Policy route ID.	string	

diagnose firewall proute show

Show policy routing stats.

```
diagnose firewall proute show <number>
```

Parameter	Description	Type	Size
<number>	Policy route ID.	string	

diagnose firewall proute6

IPv6 policy route.

```
diagnose firewall proute6
```

diagnose firewall proute6 clear

Clear IPv6 policy routing stats.

```
diagnose firewall proute6 clear <number>
```

Parameter	Description	Type	Size
<number>	Policy route ID.	string	

diagnose firewall proute6 list

List IPv6 policy routing.

```
diagnose firewall proute6 list
```

diagnose firewall proute6 show

Show IPv6 policy routing stats.

```
diagnose firewall proute6 show <number>
```

Parameter	Description	Type	Size
<number>	Policy route ID.	string	

diagnose firewall schedule

schedule

```
diagnose firewall schedule
```

diagnose firewall schedule debug

Set policy schedule debug level.

```
diagnose firewall schedule debug <level>
```

Parameter	Description	Type	Size
<level>	debug level (0-2)	string	

diagnose firewall schedule list

List schedule.

```
diagnose firewall schedule list
```

diagnose firewall schedule reload

Reload schedule.

```
diagnose firewall schedule reload
```

diagnose firewall sf-addresses

Security Fabric device addresses.

```
diagnose firewall sf-addresses
```

diagnose firewall sf-addresses list

List IP addresses of Fortinet devices configured in the Security Fabric.

```
diagnose firewall sf-addresses list
```

diagnose firewall shaper

shapers

```
diagnose firewall shaper
```

diagnose firewall shaper dynamic-shaper

Dynamic shapers.

```
diagnose firewall shaper dynamic-shaper
```

diagnose firewall shaper dynamic-shaper flush

Flush all dynamic shapers.

```
diagnose firewall shaper dynamic-shaper flush
```

diagnose firewall shaper dynamic-shaper list

List Dynamic shapers.

```
diagnose firewall shaper dynamic-shaper list
```

diagnose firewall shaper dynamic-shaper list ip

IPv4 address.

```
diagnose firewall shaper dynamic-shaper list ip <IP addr>
```

Parameter	Description	Type	Size
<IP addr>	IPv4 Adress xxx.xxx.xxx.xxx.	string	

diagnose firewall shaper dynamic-shaper list ipv6

IPv6 address.

```
diagnose firewall shaper dynamic-shaper list ipv6 <IPv6 addr>
```

Parameter	Description	Type	Size
<IPv6 addr>	IPv6 Adress xxxx:xxxx:xxxx:xxxx:xxxx:xxxx:xxxx:xxxx	string	

diagnose firewall shaper dynamic-shaper list user

User name.

```
diagnose firewall shaper dynamic-shaper list user <string>
```

Parameter	Description	Type	Size
<string>	User name.	string	

diagnose firewall shaper dynamic-shaper stats

Dynamic shapers statistic.

```
diagnose firewall shaper dynamic-shaper stats
```

diagnose firewall shaper per-ip-shaper

Traffic shapers.

```
diagnose firewall shaper per-ip-shaper
```

diagnose firewall shaper per-ip-shaper clear

Per-IP clear statistic data.

```
diagnose firewall shaper per-ip-shaper clear
```

diagnose firewall shaper per-ip-shaper list

List per-IP shapers.

```
diagnose firewall shaper per-ip-shaper list
```

diagnose firewall shaper per-ip-shaper state

Per-IP shapers state.

```
diagnose firewall shaper per-ip-shaper state
```

diagnose firewall shaper per-ip-shaper stats

Per-IP shapers statistic.

```
diagnose firewall shaper per-ip-shaper stats
```

diagnose firewall shaper traffic-shaper

Traffic shapers.

```
diagnose firewall shaper traffic-shaper
```

diagnose firewall shaper traffic-shaper list

List traffic shapers.

```
diagnose firewall shaper traffic-shaper list
```

diagnose firewall shaper traffic-shaper state

Global traffic shaper state.

```
diagnose firewall shaper traffic-shaper state
```

diagnose firewall shaper traffic-shaper stats

Traffic shaper statistics.

```
diagnose firewall shaper traffic-shaper stats
```

diagnose firewall shaper traffic-shaper stats clear

Clear traffic shaper statistics.

```
diagnose firewall shaper traffic-shaper stats clear <name>
```

Parameter	Description	Type	Size
<name>	Name of traffic shaper to clear.	string	

diagnose firewall shaper traffic-shaper stats list

List traffic shaper statistics.

```
diagnose firewall shaper traffic-shaper stats list
```

diagnose firewall uuid

UUID list.

```
diagnose firewall uuid
```

diagnose firewall uuid list

list

```
diagnose firewall uuid list <type>
```

Parameter	Description	Type	Size
<type>	UUID category.	string	

diagnose firewall vendor-mac

Vendor MAC in the kernel.

```
diagnose firewall vendor-mac
```

diagnose firewall vendor-mac list

List Vendor MAC Entries.

```
diagnose firewall vendor-mac list
```

diagnose firewall vip

VIP diagnostics.

```
diagnose firewall vip
```

diagnose firewall vip realserver

Load balance real servers.

```
diagnose firewall vip realserver
```

diagnose firewall vip realserver clear

Clear firewall VIP, VIP6 real server statistics.

```
diagnose firewall vip realserver clear
```

diagnose firewall vip realserver clear vip

Clear VIP real server statistics.

```
diagnose firewall vip realserver clear vip <name> <IPv4|IPv6|all>
```

Parameter	Description	Type	Size
<name>	firewall VIP name.	string	
<IPv4 IPv6 all>	IPv4 address x.x.x.x or IPv6 address x:x:x:x:x:x of the real server, use "all" to clear statistics of all real servers of this VIP.	string	

diagnose firewall vip realserver clear vip6

Clear VIP6 real server statistics.

```
diagnose firewall vip realserver clear vip6 <name> <IPv4|IPv6|all>
```

Parameter	Description	Type	Size
<name>	Firewall VIP6 name.	string	
<IPv4 IPv6 all>	IPv4 address x.x.x.x or IPv6 address x:x:x:x:x:x of the real server, use "all" to clear statistics of all real servers of this VIP6.	string	

diagnose firewall vip realserver down

Change address down.

```
diagnose firewall vip realserver down <name> <xxx.xxx.xxx.xxx>
```

Parameter	Description	Type	Size
<name>	IP address.	string	
<xxx.xxx.xxx.xxx>	IP address.	string	

diagnose firewall vip realserver healthcheck

Server health check.

```
diagnose firewall vip realserver healthcheck
```

diagnose firewall vip realserver healthcheck stats

Health check statistics.

```
diagnose firewall vip realserver healthcheck stats
```

diagnose firewall vip realserver healthcheck stats clear

Clear health check statistics.

```
diagnose firewall vip realserver healthcheck stats clear
```

diagnose firewall vip realserver healthcheck stats show

Show health check statistics.

```
diagnose firewall vip realserver healthcheck stats show
```

diagnose firewall vip realserver list

list

```
diagnose firewall vip realserver list
```

diagnose firewall vip realserver up

Change address up.

```
diagnose firewall vip realserver up <name> <xxx.xxx.xxx.xxx>
```

Parameter	Description	Type	Size
<name>	IP address.	string	
<xxx.xxx.xxx.xxx>	IP address.	string	

diagnose firewall vip virtual-server

Virtual-server diagnostics.

```
diagnose firewall vip virtual-server
```

diagnose firewall vip virtual-server filter

Filter for various virtual server diagnostics.

```
diagnose firewall vip virtual-server filter
```

diagnose firewall vip virtual-server filter clear

Erase the current filter.

```
diagnose firewall vip virtual-server filter clear
```

diagnose firewall vip virtual-server filter dst

Destination address range to filter by.

```
diagnose firewall vip virtual-server filter dst <ip-address> <ip-address>
```

Parameter	Description	Type	Size
<ip-address>	Destination IP address (from).	string	
<ip-address>	Destination IP address (to).	string	

diagnose firewall vip virtual-server filter dst-port

Destination port range to filter by.

```
diagnose firewall vip virtual-server filter dst-port <port> <port>
```

Parameter	Description	Type	Size
<port>	Destination port (from).	string	
<port>	Destination port (to).	string	

diagnose firewall vip virtual-server filter list

Display the current filter.

```
diagnose firewall vip virtual-server filter list
```

diagnose firewall vip virtual-server filter name

VIP name to filter by.

```
diagnose firewall vip virtual-server filter name <name>
```

Parameter	Description	Type	Size
<name>	Name to filter by.	string	

diagnose firewall vip virtual-server filter negate

Negate the specified filter parameter.

```
diagnose firewall vip virtual-server filter negate
```

diagnose firewall vip virtual-server filter negate dst-addr

Negate IPv4 destination address.

```
diagnose firewall vip virtual-server filter negate dst-addr
```

diagnose firewall vip virtual-server filter negate dst-port

Negate destination port.

```
diagnose firewall vip virtual-server filter negate dst-port
```

diagnose firewall vip virtual-server filter negate name

Negate name.

```
diagnose firewall vip virtual-server filter negate name
```

diagnose firewall vip virtual-server filter negate src-addr

Negate IPv4 source address.

```
diagnose firewall vip virtual-server filter negate src-addr
```

diagnose firewall vip virtual-server filter negate src-port

Negate source port.

```
diagnose firewall vip virtual-server filter negate src-port
```

diagnose firewall vip virtual-server filter negate vd

Negate virtual domain.

```
diagnose firewall vip virtual-server filter negate vd
```

diagnose firewall vip virtual-server filter negate worker

Negate worker index.

```
diagnose firewall vip virtual-server filter negate worker
```


diagnose firewall vip virtual-server filter src

Source address range to filter by.

```
diagnose firewall vip virtual-server filter src <ip-address> <ip-address>
```

Parameter	Description	Type	Size
<ip-address>	Source IP address (from).	string	
<ip-address>	Source IP address (to).	string	

diagnose firewall vip virtual-server filter src-port

Source port range to filter by.

```
diagnose firewall vip virtual-server filter src-port <port> <port>
```

Parameter	Description	Type	Size
<port>	Source port (from).	string	
<port>	Source port (to).	string	

diagnose firewall vip virtual-server filter vd

Index of virtual domain. -1 matches all.

```
diagnose firewall vip virtual-server filter vd <index>
```

Parameter	Description	Type	Size
<index>	Index of virtual domain. -1 matches all.	string	

diagnose firewall vip virtual-server filter worker

Index of worker. -1 matches all.

```
diagnose firewall vip virtual-server filter worker <index>
```

Parameter	Description	Type	Size
<index>	Index of worker. -1 matches all.	string	

diagnose firewall vip virtual-server real-server

Real-server diagnostics.

```
diagnose firewall vip virtual-server real-server
```

diagnose firewall vip virtual-server real-server list

List servers.

```
diagnose firewall vip virtual-server real-server list
```

diagnose firewall vip virtual-server stats

Statistics.

```
diagnose firewall vip virtual-server stats
```

diagnose firewall vip virtual-server stats clear

Clear all statistics.

```
diagnose firewall vip virtual-server stats clear
```

diagnose firewall vip virtual-server stats crypto-clear

Clear SSL crypto statistics.

```
diagnose firewall vip virtual-server stats crypto-clear
```

diagnose firewall vip virtual-server stats http

HTTP statistics.

```
diagnose firewall vip virtual-server stats http
```

diagnose firewall vip virtual-server stats http all

Per-process HTTP statistics.

```
diagnose firewall vip virtual-server stats http all
```

diagnose firewall vip virtual-server stats http clear

Clear HTTP statistics.

```
diagnose firewall vip virtual-server stats http clear
```

diagnose firewall vip virtual-server stats http list

List HTTP statistics.

```
diagnose firewall vip virtual-server stats http list
```

diagnose firewall vip virtual-server stats list

List all statistics.

```
diagnose firewall vip virtual-server stats list
```

diagnose firewall vip virtual-server stats operational

Operational info and statistics.

```
diagnose firewall vip virtual-server stats operational
```

diagnose firewall vip virtual-server stats operational all

Display per-process operational info and statistics.

```
diagnose firewall vip virtual-server stats operational all
```

diagnose firewall vip virtual-server stats operational list

Display operational info and statistics.

```
diagnose firewall vip virtual-server stats operational list
```

diagnose firewall vip virtual-server stats ssl

SSL statistics.

```
diagnose firewall vip virtual-server stats ssl
```

diagnose firewall vip virtual-server stats ssl all

Per-process SSL statistics.

```
diagnose firewall vip virtual-server stats ssl all
```

diagnose firewall vip virtual-server stats ssl clear

Clear SSL statistics.

```
diagnose firewall vip virtual-server stats ssl clear
```

diagnose firewall vip virtual-server stats ssl list

List SSL statistics.

```
diagnose firewall vip virtual-server stats ssl list
```

diagnose firewall vip virtual-server stats summary

Summary statistics.

```
diagnose firewall vip virtual-server stats summary
```

diagnose firewall vip virtual-server stats summary all

Per-process summary statistics.

```
diagnose firewall vip virtual-server stats summary all
```

diagnose firewall vip virtual-server stats summary clear

Clear summary statistics.

```
diagnose firewall vip virtual-server stats summary clear
```

diagnose firewall vip virtual-server stats summary list

List summary statistics.

```
diagnose firewall vip virtual-server stats summary list
```

diagnose firewall vip virtual-server test

Tests for internal use.

```
diagnose firewall vip virtual-server test
```

diagnose firewall vip virtual-server test benchmark

Crypto performance tests.

```
diagnose firewall vip virtual-server test benchmark
```

diagnose firewall vip virtual-server test benchmark dh-make-key

DH make-key.

```
diagnose firewall vip virtual-server test benchmark dh-make-key
```

diagnose firewall vip virtual-server test benchmark dh-make-secret

DH make-key & make-secret.

```
diagnose firewall vip virtual-server test benchmark dh-make-secret
```

diagnose firewall vip virtual-server test benchmark rand

RAND.

```
diagnose firewall vip virtual-server test benchmark rand
```

diagnose firewall vip virtual-server test benchmark rsa

RSA decryption.

```
diagnose firewall vip virtual-server test benchmark rsa
```

diagnose firewall vip virtual-server test benchmark rsa-mskb

RSA decrypt & MSKB.

```
diagnose firewall vip virtual-server test benchmark rsa-mskb
```

diagnose firewall vip virtual-server test key-exchange

Use synchronous/asynchronous key-exchange.

```
diagnose firewall vip virtual-server test key-exchange
```

diagnose firewall vip virtual-server test key-exchange async

Asynchronous key-exchange.

```
diagnose firewall vip virtual-server test key-exchange async
```

diagnose firewall vip virtual-server test key-exchange sync

Synchronous key-exchange (default).

```
diagnose firewall vip virtual-server test key-exchange sync
```

diagnose firewall vip virtual-server test next-proto

Enable/disable next-proto negotiation.

```
diagnose firewall vip virtual-server test next-proto
```

diagnose firewall vip virtual-server test next-proto disable

Disable next-proto negotiation.

```
diagnose firewall vip virtual-server test next-proto disable
```

diagnose firewall vip virtual-server test next-proto enable

Enable next-proto negotiation.

```
diagnose firewall vip virtual-server test next-proto enable
```

diagnose firewall vip virtual-server test rsa-blinding

Enable/disable RSA blinding.

```
diagnose firewall vip virtual-server test rsa-blinding
```

diagnose firewall vip virtual-server test rsa-blinding disable

Disable RSA blinding.

```
diagnose firewall vip virtual-server test rsa-blinding disable
```

diagnose firewall vip virtual-server test rsa-blinking enable

Enable RSA blinding (default).

```
diagnose firewall vip virtual-server test rsa-blinking enable
```

diagnose firewall vip virtual-server test ssl

SSL.

```
diagnose firewall vip virtual-server test ssl
```

diagnose firewall vip virtual-server test ssl async

Asynchronous SSL (default).

```
diagnose firewall vip virtual-server test ssl async
```

diagnose firewall vip virtual-server test ssl sync

Synchronous SSL.

```
diagnose firewall vip virtual-server test ssl sync
```

diagnose forticare

FortiCare Service.

This topic includes the following commands:

- [diagnose forticare cnreg-code-list on page 2530](#)
- [diagnose forticare direct-registration on page 2530](#)
- [diagnose forticare direct-registration country-data on page 2530](#)
- [diagnose forticare direct-registration organization-list on page 2530](#)
- [diagnose forticare direct-registration product-deregister on page 2530](#)
- [diagnose forticare direct-registration product-registration on page 2531](#)
- [diagnose forticare direct-registration product-transfer on page 2531](#)
- [diagnose forticare direct-registration reseller-list on page 2531](#)

diagnose forticare cnreg-code-list

List known ISO 3166-1 numeric country/region codes.

```
diagnose forticare cnreg-code-list
```

diagnose forticare direct-registration

Direct registration port.

```
diagnose forticare direct-registration
```

diagnose forticare direct-registration country-data

Country data operation.

```
diagnose forticare direct-registration country-data <cnreg-code>
```

Parameter	Description	Type	Size
<cnreg-code>	ISO 3166-1 numeric country/region code.	string	

diagnose forticare direct-registration organization-list

Organization list operation.

```
diagnose forticare direct-registration organization-list
```

diagnose forticare direct-registration product-deregister

Unit deregistration operation.

```
diagnose forticare direct-registration product-deregister <accountID> <password>
```

Parameter	Description	Type	Size
<accountID>	FortiCare user account ID.	string	
<password>	FortiCare user account password.	string	

diagnose forticare direct-registration product-registration

Product registration operation.

```
diagnose forticare direct-registration product-registration
```

diagnose forticare direct-registration product-transfer

Product transfer operation.

```
diagnose forticare direct-registration product-transfer <old-accountID> <password> <new-accountID>  
<password>
```

Parameter	Description	Type	Size
<old-accountID>	Old user account ID.	string	
<password>	Old user account password.	string	
<new-accountID>	New user account ID.	string	
<password>	New user account password.	string	

diagnose forticare direct-registration reseller-list

Reseller list operation.

```
diagnose forticare direct-registration reseller-list <cnreg-code>
```

Parameter	Description	Type	Size
<cnreg-code>	ISO 3166-1 numeric country/region code.	string	

diagnose forticlient

forticlient

This topic includes the following commands:

- [diagnose forticlient add-connection on page 2532](#)
- [diagnose forticlient close-all-connection on page 2532](#)
- [diagnose forticlient close-connection on page 2532](#)

diagnose forticlient add-connection

Add test FortiClient connection.

```
diagnose forticlient add-connection <name> <user> <id> <host os> <ip>
```

Parameter	Description	Type	Size
<name>	FortiClient name.	string	
<user>	User name.	string	
<id>	Client ID.	string	
<host os>	Host OS.	string	
<ip>	Source IP.	string	

diagnose forticlient close-all-connection

Close all test FortiClient connection.

```
diagnose forticlient close-all-connection
```

diagnose forticlient close-connection

Close test FortiClient connection.

```
diagnose forticlient close-connection <handle>
```

Parameter	Description	Type	Size
<handle>	FortiClient connection handle. Type enter to list current handles.	string	

diagnose fortiguard-resources

FortiGuard resources.

This topic includes the following commands:

- [diagnose fortiguard-resources delete on page 2534](#)
- [diagnose fortiguard-resources delete app-categories on page 2534](#)
- [diagnose fortiguard-resources delete app-info on page 2534](#)
- [diagnose fortiguard-resources delete fortiap-end-of-support on page 2534](#)

- [diagnose fortiguard-resources delete fortitxtender-end-of-support on page 2534](#)
- [diagnose fortiguard-resources delete fortigate-end-of-support on page 2535](#)
- [diagnose fortiguard-resources delete fortiswitch-end-of-support on page 2535](#)
- [diagnose fortiguard-resources delete ips-information on page 2535](#)
- [diagnose fortiguard-resources delete prefix-links on page 2535](#)
- [diagnose fortiguard-resources delete sprite-isdb on page 2535](#)
- [diagnose fortiguard-resources delete sprite-map on page 2535](#)
- [diagnose fortiguard-resources delete static-links on page 2536](#)
- [diagnose fortiguard-resources delete wf-categories on page 2536](#)
- [diagnose fortiguard-resources downloads on page 2536](#)
- [diagnose fortiguard-resources downloads disable on page 2536](#)
- [diagnose fortiguard-resources downloads enable on page 2536](#)
- [diagnose fortiguard-resources info on page 2536](#)
- [diagnose fortiguard-resources info app-categories on page 2537](#)
- [diagnose fortiguard-resources info app-info on page 2537](#)
- [diagnose fortiguard-resources info fortiap-end-of-support on page 2537](#)
- [diagnose fortiguard-resources info fortitxtender-end-of-support on page 2537](#)
- [diagnose fortiguard-resources info fortigate-end-of-support on page 2537](#)
- [diagnose fortiguard-resources info fortiswitch-end-of-support on page 2538](#)
- [diagnose fortiguard-resources info ips-information on page 2538](#)
- [diagnose fortiguard-resources info prefix-links on page 2538](#)
- [diagnose fortiguard-resources info sprite-isdb.css on page 2538](#)
- [diagnose fortiguard-resources info sprite-isdb.png on page 2538](#)
- [diagnose fortiguard-resources info sprite-map.css on page 2538](#)
- [diagnose fortiguard-resources info sprite-map.png on page 2539](#)
- [diagnose fortiguard-resources info static-links on page 2539](#)
- [diagnose fortiguard-resources info wf-categories on page 2539](#)
- [diagnose fortiguard-resources update on page 2539](#)
- [diagnose fortiguard-resources update app-categories on page 2539](#)
- [diagnose fortiguard-resources update app-info on page 2539](#)
- [diagnose fortiguard-resources update fortiap-end-of-support on page 2540](#)
- [diagnose fortiguard-resources update fortitxtender-end-of-support on page 2540](#)
- [diagnose fortiguard-resources update fortigate-end-of-support on page 2540](#)
- [diagnose fortiguard-resources update fortiswitch-end-of-support on page 2540](#)
- [diagnose fortiguard-resources update ips-information on page 2540](#)
- [diagnose fortiguard-resources update prefix-links on page 2541](#)
- [diagnose fortiguard-resources update sprite-isdb on page 2541](#)
- [diagnose fortiguard-resources update sprite-map on page 2541](#)
- [diagnose fortiguard-resources update static-links on page 2541](#)
- [diagnose fortiguard-resources update wf-categories on page 2541](#)

diagnose fortiguard-resources delete

Deletes all downloaded files for a FortiGuard resource, restores the original copy if available.

```
diagnose fortiguard-resources delete
```

diagnose fortiguard-resources delete app-categories

Application categories.

```
diagnose fortiguard-resources delete app-categories
```

diagnose fortiguard-resources delete app-info

Application info for a given ID. If no ID given, deletes all application info resources.

```
diagnose fortiguard-resources delete app-info <id>
```

Parameter	Description	Type	Size
<id>	ID of application to be deleted.	string	

diagnose fortiguard-resources delete fortiap-end-of-support

FortiAP product life cycle information.

```
diagnose fortiguard-resources delete fortiap-end-of-support
```

diagnose fortiguard-resources delete fortiextender-end-of-support

FortiExtender product life cycle information.

```
diagnose fortiguard-resources delete fortiextender-end-of-support
```

diagnose fortiguard-resources delete fortigate-end-of-support

FortiGate product life cycle information.

```
diagnose fortiguard-resources delete fortigate-end-of-support
```

diagnose fortiguard-resources delete fortiswitch-end-of-support

FortiSwitch product life cycle information.

```
diagnose fortiguard-resources delete fortiswitch-end-of-support
```

diagnose fortiguard-resources delete ips-information

IPS information for a given ID. If no ID given, deletes all IPS info resources.

```
diagnose fortiguard-resources delete ips-information <id>
```

Parameter	Description	Type	Size
<id>	ID of IPS to be deleted.	string	

diagnose fortiguard-resources delete prefix-links

Prefix links.

```
diagnose fortiguard-resources delete prefix-links
```

diagnose fortiguard-resources delete sprite-isdb

Application icon sprite ISDB (CSS & PNG).

```
diagnose fortiguard-resources delete sprite-isdb
```

diagnose fortiguard-resources delete sprite-map

Application icon sprite map (CSS & PNG).

```
diagnose fortiguard-resources delete sprite-map
```

diagnose fortiguard-resources delete static-links

Static links.

```
diagnose fortiguard-resources delete static-links
```

diagnose fortiguard-resources delete wf-categories

Web filter categories.

```
diagnose fortiguard-resources delete wf-categories
```

diagnose fortiguard-resources downloads

Settings for download of FortiGuard resources.

```
diagnose fortiguard-resources downloads
```

diagnose fortiguard-resources downloads disable

Disable GUI downloading of resources from FortiGuard.

```
diagnose fortiguard-resources downloads disable
```

diagnose fortiguard-resources downloads enable

Enable GUI downloading of resources from FortiGuard.

```
diagnose fortiguard-resources downloads enable
```

diagnose fortiguard-resources info

View file information of a downloaded FortiGuard resource.

```
diagnose fortiguard-resources info
```

diagnose fortiguard-resources info app-categories

Application categories.

```
diagnose fortiguard-resources info app-categories
```

diagnose fortiguard-resources info app-info

Application info for a given ID.

```
diagnose fortiguard-resources info app-info <id>
```

Parameter	Description	Type	Size
<id>	ID of application to be retrieved.	string	

diagnose fortiguard-resources info fortiap-end-of-support

FortiAP product life cycle information.

```
diagnose fortiguard-resources info fortiap-end-of-support
```

diagnose fortiguard-resources info fortiextender-end-of-support

FortiExtender product life cycle information.

```
diagnose fortiguard-resources info fortiextender-end-of-support
```

diagnose fortiguard-resources info fortigate-end-of-support

FortiGate product life cycle information.

```
diagnose fortiguard-resources info fortigate-end-of-support
```


diagnose fortiguard-resources info fortiswitch-end-of-support

FortiSwitch product life cycle information.

```
diagnose fortiguard-resources info fortiswitch-end-of-support
```

diagnose fortiguard-resources info ips-information

IPS information for a given ID.

```
diagnose fortiguard-resources info ips-information <id>
```

Parameter	Description	Type	Size
<id>	ID of IPS to be retrieved.	string	

diagnose fortiguard-resources info prefix-links

Prefix links.

```
diagnose fortiguard-resources info prefix-links
```

diagnose fortiguard-resources info sprite-isdb.css

Application icon sprite ISDB (CSS).

```
diagnose fortiguard-resources info sprite-isdb.css
```

diagnose fortiguard-resources info sprite-isdb.png

Application icon sprite ISDB (PNG).

```
diagnose fortiguard-resources info sprite-isdb.png
```

diagnose fortiguard-resources info sprite-map.css

Application icon sprite map (CSS).

```
diagnose fortiguard-resources info sprite-map.css
```

diagnose fortiguard-resources info sprite-map.png

Application icon sprite map (PNG).

```
diagnose fortiguard-resources info sprite-map.png
```

diagnose fortiguard-resources info static-links

Static links.

```
diagnose fortiguard-resources info static-links
```

diagnose fortiguard-resources info wf-categories

Web filter categories.

```
diagnose fortiguard-resources info wf-categories
```

diagnose fortiguard-resources update

Deletes cached files and force downloads the FortiGuard resource (ignores GUI enable/disable).

```
diagnose fortiguard-resources update
```

diagnose fortiguard-resources update app-categories

Application categories.

```
diagnose fortiguard-resources update app-categories
```

diagnose fortiguard-resources update app-info

Application info for a given ID.

```
diagnose fortiguard-resources update app-info <id>
```

Parameter	Description	Type	Size
<id>	ID of application to be retrieved.	string	

diagnose fortiguard-resources update fortiap-end-of-support

FortiAP product life cycle information.

```
diagnose fortiguard-resources update fortiap-end-of-support
```

diagnose fortiguard-resources update fortiextender-end-of-support

FortiExtender product life cycle information.

```
diagnose fortiguard-resources update fortiextender-end-of-support
```

diagnose fortiguard-resources update fortigate-end-of-support

FortiGate product life cycle information.

```
diagnose fortiguard-resources update fortigate-end-of-support
```

diagnose fortiguard-resources update fortiswitch-end-of-support

FortiSwitch product life cycle information.

```
diagnose fortiguard-resources update fortiswitch-end-of-support
```

diagnose fortiguard-resources update ips-information

IPS information for a given ID.

```
diagnose fortiguard-resources update ips-information <id>
```

Parameter	Description	Type	Size
<id>	ID of IPS to be retrieved.	string	

diagnose fortiguard-resources update prefix-links

Prefix links.

```
diagnose fortiguard-resources update prefix-links
```

diagnose fortiguard-resources update sprite-isdb

Application icon sprite ISDB (CSS & PNG).

```
diagnose fortiguard-resources update sprite-isdb
```

diagnose fortiguard-resources update sprite-map

Application icon sprite map (CSS & PNG).

```
diagnose fortiguard-resources update sprite-map
```

diagnose fortiguard-resources update static-links

Static links.

```
diagnose fortiguard-resources update static-links
```

diagnose fortiguard-resources update wf-categories

Web filter categories.

```
diagnose fortiguard-resources update wf-categories
```

diagnose fortitoken

FortiToken

This topic includes the following commands:

- [diagnose fortitoken debug on page 2542](#)
- [diagnose fortitoken debug disable on page 2542](#)
- [diagnose fortitoken debug enable on page 2542](#)
- [diagnose fortitoken info on page 2542](#)
- [diagnose fortitoken test on page 2542](#)

diagnose fortitoken debug

Debug enable/disable.

```
diagnose fortitoken debug
```

diagnose fortitoken debug disable

Disable debug output.

```
diagnose fortitoken debug disable
```

diagnose fortitoken debug enable

Enable debug output.

```
diagnose fortitoken debug enable
```

diagnose fortitoken info

Show current drift and status for each FortiToken.

```
diagnose fortitoken info <id>
```

Parameter	Description	Type	Size
<id>	FortiToken ID.	string	

diagnose fortitoken test

Test FortiToken with screen setting for drift of internal clock.

```
diagnose fortitoken test <id> <code> <next code> <screen size>
```

Parameter	Description	Type	Size
<id>	FortiToken ID.	string	
<code>	FortiToken code.	string	
<next code>	Next FortiToken code.	string	
<screen size>	Screen size for drift of internal clock.	string	

diagnose fortitoken-cloud

FortiToken Cloud Service.

This topic includes the following commands:

- [diagnose fortitoken-cloud clear on page 2543](#)
- [diagnose fortitoken-cloud debug on page 2543](#)
- [diagnose fortitoken-cloud debug disable on page 2544](#)
- [diagnose fortitoken-cloud debug enable on page 2544](#)
- [diagnose fortitoken-cloud debug info on page 2544](#)
- [diagnose fortitoken-cloud delete on page 2544](#)
- [diagnose fortitoken-cloud migrate-ftm on page 2544](#)
- [diagnose fortitoken-cloud server on page 2545](#)
- [diagnose fortitoken-cloud set-http on page 2545](#)
- [diagnose fortitoken-cloud show on page 2545](#)
- [diagnose fortitoken-cloud sync on page 2545](#)

diagnose fortitoken-cloud clear

Clear server connection settings for diagnostics.

```
diagnose fortitoken-cloud clear
```

diagnose fortitoken-cloud debug

Enable/disable debug output.

```
diagnose fortitoken-cloud debug
```

diagnose fortitoken-cloud debug disable

Disable debug output.

```
diagnose fortitoken-cloud debug disable
```

diagnose fortitoken-cloud debug enable

Enable debug output.

```
diagnose fortitoken-cloud debug enable
```

diagnose fortitoken-cloud debug info

Debug status.

```
diagnose fortitoken-cloud debug info
```

diagnose fortitoken-cloud delete

Command to delete a user.

```
diagnose fortitoken-cloud delete <string> <string>
```

Parameter	Description	Type	Size
<string>	User name.	string	
<string>	VDOM name.	string	

diagnose fortitoken-cloud migrate-ftm

Perform FTM license migration.

```
diagnose fortitoken-cloud migrate-ftm <string> <string> <string>
```

Parameter	Description	Type	Size
<string>	Enter command: show, start, abort, add-users, delete-users, ftm2ftc.	string	
<string>	FTM license number.	string	

Parameter	Description	Type	Size
<string>	<return> or VDOM name if add-users delete-users and ftm2ftc.	string	

diagnose fortitoken-cloud server

IP address port number and https.

```
diagnose fortitoken-cloud server <xxx.xxx.xxx.xxx> <xxx>
```

Parameter	Description	Type	Size
<xxx.xxx.xxx.xxx>	IP address.	string	
<xxx>	Port number <0-65535>.	string	

diagnose fortitoken-cloud set-http

Set HTTP status return code for diagnostics only.

```
diagnose fortitoken-cloud set-http <number>
```

Parameter	Description	Type	Size
<number>	Status code (value < 300 clears the error diagnostics).	string	

diagnose fortitoken-cloud show

Display diagnostics information.

```
diagnose fortitoken-cloud show <string> <string> <string>
```

Parameter	Description	Type	Size
<string>	Enter <server service realm users user>.	string	
<string>	Enter username to get user information otherwise enter return.	string	
<string>	Enter VDOM name if getting user information.	string	

diagnose fortitoken-cloud sync

Synchronize user information with FortiToken Cloud.


```
diagnose fortitoken-cloud sync <user type>
```

Parameter	Description	Type	Size
<user type>	Enter <return>, all, local, or remote.	string	

diagnose fortiview

Fortiview backend diagnostic

This topic includes the following commands:

- [diagnose fortiview device on page 2546](#)
- [diagnose fortiview result on page 2546](#)
- [diagnose fortiview sortby on page 2546](#)
- [diagnose fortiview time on page 2546](#)
- [diagnose fortiview view on page 2547](#)

diagnose fortiview device

device

```
diagnose fortiview device
```

diagnose fortiview result

result

```
diagnose fortiview result
```

diagnose fortiview sortby

sortby

```
diagnose fortiview sortby
```

diagnose fortiview time

time

```
diagnose fortiview time
```

diagnose fortiview view

view

```
diagnose fortiview view
```

diagnose geoip

Diagnose geography IP database and service.

This topic includes the following commands:

- [diagnose geoip delete-geoip-db on page 2547](#)
- [diagnose geoip geoip-query on page 2547](#)
- [diagnose geoip ip2country on page 2547](#)
- [diagnose geoip iprange on page 2548](#)
- [diagnose geoip iprange6 on page 2548](#)

diagnose geoip delete-geoip-db

Delete geography IP database currently saved on this FortiGate unit.

```
diagnose geoip delete-geoip-db
```

diagnose geoip geoip-query

Query FortiGuard service for geography information based on IP address.

```
diagnose geoip geoip-query <ip>
```

Parameter	Description	Type	Size
<ip>	IPv4 address.	string	

diagnose geoip ip2country

Query local geography IP database for country information based on IP address.

```
diagnose geoip ip2country <ip>
```

Parameter	Description	Type	Size
<ip>	IPv4/IPv6 address.	string	

diagnose geoip iprange

List IP ranges of specified country.

```
diagnose geoip iprange
```

diagnose geoip iprange6

List IPv6 ranges of specified country.

```
diagnose geoip iprange6
```

diagnose hardware

hardware

This topic includes the following commands:

- [diagnose hardware certificate on page 2550](#)
- [diagnose hardware deviceinfo on page 2550](#)
- [diagnose hardware deviceinfo cp8 on page 2550](#)
- [diagnose hardware deviceinfo cp8 brief on page 2550](#)
- [diagnose hardware deviceinfo cp8 cmdq0 on page 2551](#)
- [diagnose hardware deviceinfo cp8 cmdq1 on page 2551](#)
- [diagnose hardware deviceinfo cp8 cmdq2 on page 2551](#)
- [diagnose hardware deviceinfo cp8 cmdq3 on page 2551](#)
- [diagnose hardware deviceinfo cp8 registers on page 2551](#)
- [diagnose hardware deviceinfo disk on page 2551](#)
- [diagnose hardware deviceinfo nic on page 2552](#)
- [diagnose hardware deviceinfo psu on page 2552](#)
- [diagnose hardware getcbp on page 2552](#)
- [diagnose hardware ioport on page 2552](#)
- [diagnose hardware ioport byte on page 2552](#)
- [diagnose hardware ioport long on page 2552](#)
- [diagnose hardware ioport word on page 2553](#)

- [diagnose hardware lspci on page 2553](#)
- [diagnose hardware mii on page 2553](#)
- [diagnose hardware setcbp on page 2553](#)
- [diagnose hardware setpci on page 2553](#)
- [diagnose hardware shared-port on page 2553](#)
- [diagnose hardware sysinfo on page 2554](#)
- [diagnose hardware sysinfo conserve on page 2554](#)
- [diagnose hardware sysinfo cpu on page 2554](#)
- [diagnose hardware sysinfo interrupts on page 2554](#)
- [diagnose hardware sysinfo iomem on page 2554](#)
- [diagnose hardware sysinfo ioports on page 2554](#)
- [diagnose hardware sysinfo memory on page 2555](#)
- [diagnose hardware sysinfo mtrr on page 2555](#)
- [diagnose hardware sysinfo slab on page 2555](#)
- [diagnose hardware test on page 2555](#)
- [diagnose hardware test asic on page 2555](#)
- [diagnose hardware test asic eei on page 2555](#)
- [diagnose hardware test asic ssl on page 2556](#)
- [diagnose hardware test bios on page 2556](#)
- [diagnose hardware test bios checksum on page 2556](#)
- [diagnose hardware test bios license on page 2556](#)
- [diagnose hardware test bios sysid on page 2556](#)
- [diagnose hardware test cpu on page 2556](#)
- [diagnose hardware test cpu model on page 2557](#)
- [diagnose hardware test disk on page 2557](#)
- [diagnose hardware test disk file-data on page 2557](#)
- [diagnose hardware test disk file-data2 on page 2557](#)
- [diagnose hardware test disk file-varlog on page 2557](#)
- [diagnose hardware test disk hdd-block-wrv on page 2557](#)
- [diagnose hardware test info on page 2558](#)
- [diagnose hardware test led on page 2558](#)
- [diagnose hardware test led nic-led on page 2558](#)
- [diagnose hardware test led sys-led on page 2558](#)
- [diagnose hardware test memory on page 2558](#)
- [diagnose hardware test memory bit-flip on page 2558](#)
- [diagnose hardware test memory bit-shift on page 2559](#)
- [diagnose hardware test memory random on page 2559](#)
- [diagnose hardware test memory sequence on page 2559](#)
- [diagnose hardware test memory solid-bits on page 2559](#)
- [diagnose hardware test network on page 2559](#)
- [diagnose hardware test network detect on page 2559](#)
- [diagnose hardware test network init on page 2560](#)
- [diagnose hardware test network loopback on page 2560](#)

- [diagnose hardware test npu on page 2560](#)
- [diagnose hardware test npu np6-ddr on page 2560](#)
- [diagnose hardware test pci on page 2560](#)
- [diagnose hardware test pci device-check on page 2560](#)
- [diagnose hardware test pci list on page 2561](#)
- [diagnose hardware test stress on page 2561](#)
- [diagnose hardware test stress output on page 2561](#)
- [diagnose hardware test stress start on page 2561](#)
- [diagnose hardware test stress stop on page 2561](#)
- [diagnose hardware test suite on page 2561](#)
- [diagnose hardware test system on page 2562](#)
- [diagnose hardware test system cpu-config on page 2562](#)
- [diagnose hardware test system memory-config on page 2562](#)
- [diagnose hardware test system network-config on page 2562](#)
- [diagnose hardware test system storage-config on page 2562](#)
- [diagnose hardware test usb on page 2562](#)
- [diagnose hardware test usb 2.0 on page 2563](#)

diagnose hardware certificate

Verify certificates.

```
diagnose hardware certificate
```

diagnose hardware deviceinfo

Get device information.

```
diagnose hardware deviceinfo
```

diagnose hardware deviceinfo cp8

Display cp8 information.

```
diagnose hardware deviceinfo cp8
```

diagnose hardware deviceinfo cp8 brief

```
diagnose hardware deviceinfo cp8 brief
```

diagnose hardware deviceinfo cp8 cmdq0

```
diagnose hardware deviceinfo cp8 cmdq0
```

diagnose hardware deviceinfo cp8 cmdq1

```
diagnose hardware deviceinfo cp8 cmdq1
```

diagnose hardware deviceinfo cp8 cmdq2

```
diagnose hardware deviceinfo cp8 cmdq2
```

diagnose hardware deviceinfo cp8 cmdq3

```
diagnose hardware deviceinfo cp8 cmdq3
```

diagnose hardware deviceinfo cp8 registers

```
diagnose hardware deviceinfo cp8 registers
```

diagnose hardware deviceinfo disk

Display information of all disks.

```
diagnose hardware deviceinfo disk
```

diagnose hardware deviceinfo nic

Display NIC information.

```
diagnose hardware deviceinfo nic
```

diagnose hardware deviceinfo psu

Display power supply information.

```
diagnose hardware deviceinfo psu
```

diagnose hardware getcbp

Get current CBP mode state.

```
diagnose hardware getcbp
```

diagnose hardware ioport

Read/write data via IO port.

```
diagnose hardware ioport
```

diagnose hardware ioport byte

Read/write byte via IO port.

```
diagnose hardware ioport byte
```

diagnose hardware ioport long

Read/write long via IO port.

```
diagnose hardware ioport long
```

diagnose hardware ioport word

Read/write word via IO port.

```
diagnose hardware ioport word
```

diagnose hardware lspci

List PCI parameters.

```
diagnose hardware lspci
```

diagnose hardware mii

Access mii registers.

```
diagnose hardware mii
```

diagnose hardware setcbp

Set CBP mode before CBP tests.

```
diagnose hardware setcbp
```

diagnose hardware setpci

Set PCI parameters.

```
diagnose hardware setpci
```

diagnose hardware shared-port

get/set shared port medium type

```
diagnose hardware shared-port
```


diagnose hardware sysinfo

Get system information.

```
diagnose hardware sysinfo
```

diagnose hardware sysinfo conserve

Display information about memory conservation status.

```
diagnose hardware sysinfo conserve
```

diagnose hardware sysinfo cpu

Display detailed information for all installed CPU(s).

```
diagnose hardware sysinfo cpu
```

diagnose hardware sysinfo interrupts

Display system interrupts information.

```
diagnose hardware sysinfo interrupts
```

diagnose hardware sysinfo iomem

Display memory map of I/O ports.

```
diagnose hardware sysinfo iomem
```

diagnose hardware sysinfo ioports

Display address list of I/O ports.

```
diagnose hardware sysinfo ioports
```

diagnose hardware sysinfo memory

Display system memory information.

```
diagnose hardware sysinfo memory
```

diagnose hardware sysinfo mtrr

Display memory type range register.

```
diagnose hardware sysinfo mtrr
```

diagnose hardware sysinfo slab

Display memory allocation information.

```
diagnose hardware sysinfo slab
```

diagnose hardware test

hardware test.

```
diagnose hardware test
```

diagnose hardware test asic

Perform ASIC related test.

```
diagnose hardware test asic
```

diagnose hardware test asic eei

FortiASIC EEI Test

```
diagnose hardware test asic eei
```

diagnose hardware test asic ssl

FortiASIC SSL Test

```
diagnose hardware test asic ssl
```

diagnose hardware test bios

Perform BIOS related test.

```
diagnose hardware test bios
```

diagnose hardware test bios checksum

BIOS Image Checksum

```
diagnose hardware test bios checksum
```

diagnose hardware test bios license

Check License

```
diagnose hardware test bios license
```

diagnose hardware test bios sysid

Check System ID

```
diagnose hardware test bios sysid
```

diagnose hardware test cpu

Perform CPU related test.

```
diagnose hardware test cpu
```

diagnose hardware test cpu model

Check CPU Model

```
diagnose hardware test cpu model
```

diagnose hardware test disk

Perform disk related test.

```
diagnose hardware test disk
```

diagnose hardware test disk file-data

File Test (data)

```
diagnose hardware test disk file-data
```

diagnose hardware test disk file-data2

File Test (data2)

```
diagnose hardware test disk file-data2
```

diagnose hardware test disk file-varlog

Logdisk File Test

```
diagnose hardware test disk file-varlog
```

diagnose hardware test disk hdd-block-wrv

HDD Single Block Write/Read/Verify Test

```
diagnose hardware test disk hdd-block-wrv
```

diagnose hardware test info

Show test parameters etc.

```
diagnose hardware test info
```

diagnose hardware test led

Perform LED related test.

```
diagnose hardware test led
```

diagnose hardware test led nic-led

Network Interface Led Test

```
diagnose hardware test led nic-led
```

diagnose hardware test led sys-led

System Led Test

```
diagnose hardware test led sys-led
```

diagnose hardware test memory

Perform memory related test.

```
diagnose hardware test memory
```

diagnose hardware test memory bit-flip

Memory Bit Flip

```
diagnose hardware test memory bit-flip
```

diagnose hardware test memory bit-shift

Memory Bit Shift

```
diagnose hardware test memory bit-shift
```

diagnose hardware test memory random

Memory Random Value

```
diagnose hardware test memory random
```

diagnose hardware test memory sequence

Memory Sequential Value

```
diagnose hardware test memory sequence
```

diagnose hardware test memory solid-bits

Memory Solid Bits

```
diagnose hardware test memory solid-bits
```

diagnose hardware test network

Perform network related test.

```
diagnose hardware test network
```

diagnose hardware test network detect

Network Interface Link Detection

```
diagnose hardware test network detect
```

diagnose hardware test network init

Network Interface Initialization

```
diagnose hardware test network init
```

diagnose hardware test network loopback

Network Interface Loopback Test

```
diagnose hardware test network loopback
```

diagnose hardware test npu

Perform NPU related test.

```
diagnose hardware test npu
```

diagnose hardware test npu np6-ddr

NP6 DDR Test

```
diagnose hardware test npu np6-ddr
```

diagnose hardware test pci

Perform PCI related test.

```
diagnose hardware test pci
```

diagnose hardware test pci device-check

PCI Device Check

```
diagnose hardware test pci device-check
```

diagnose hardware test pci list

PCI Device List

```
diagnose hardware test pci list
```

diagnose hardware test stress

Stress test.

```
diagnose hardware test stress
```

diagnose hardware test stress output

Enable or disable stress output.

```
diagnose hardware test stress output
```

diagnose hardware test stress start

Start stress tests.

```
diagnose hardware test stress start
```

diagnose hardware test stress stop

Stop stress tests.

```
diagnose hardware test stress stop
```

diagnose hardware test suite

Run a test suite.

```
diagnose hardware test suite <all|pcba|stress|rack-burn-in>
```

Parameter	Description	Type	Size
<all pcba stress rack-burn-in>	Run a test suite.	string	

diagnose hardware test system

Perform system related test.

```
diagnose hardware test system
```

diagnose hardware test system cpu-config

CPU Configuration Check

```
diagnose hardware test system cpu-config
```

diagnose hardware test system memory-config

Memory Configuration Check

```
diagnose hardware test system memory-config
```

diagnose hardware test system network-config

Network Configuration Check

```
diagnose hardware test system network-config
```

diagnose hardware test system storage-config

Storage Configuration Check

```
diagnose hardware test system storage-config
```

diagnose hardware test usb

Perform USB related test

```
diagnose hardware test usb
```

diagnose hardware test usb 2.0

USB 2.0 Test

```
diagnose hardware test usb 2.0
```

diagnose internet-service

Internet Service Database.

This topic includes the following commands:

- [diagnose internet-service id on page 2563](#)
- [diagnose internet-service id-summary on page 2563](#)
- [diagnose internet-service info on page 2564](#)
- [diagnose internet-service match on page 2564](#)
- [diagnose internet-service sld on page 2564](#)
- [diagnose internet-service status-read on page 2564](#)

diagnose internet-service id

Internet Service ID.

```
diagnose internet-service id <id>
```

Parameter	Description	Type	Size
<id>	Internet Service ID(a nonzero integer).	string	

diagnose internet-service id-summary

Internet Service ID summary.

```
diagnose internet-service id-summary <id>
```

Parameter	Description	Type	Size
<id>	Internet Service ID(a nonzero integer)	string	

diagnose internet-service info

VD and 3T information, include vdomname, protocol, port and IP address

```
diagnose internet-service info <vdomname> <proto> <port> <ip> <priority-id-list>
```

Parameter	Description	Type	Size
<vdomname>	VDOM name	string	
<proto>	Service protocol(0-255) for instance: tcp is 6	string	
<port>	Service port(0-65535).	string	
<ip>	Service IP address.	string	
<priority-id-list>	List of Internet Service ID as priority match.	string	

diagnose internet-service match

Find all matched Internet Services for a specific IP address and netmask.

```
diagnose internet-service match <vdomname> <ip> <netmask>
```

Parameter	Description	Type	Size
<vdomname>	VDOM name.	string	
<ip>	IP address.	string	
<netmask>	netmask.	string	

diagnose internet-service sld

Find second level domain for a specific IP address in the ISDB.

```
diagnose internet-service sld <vdomname> <ip>
```

Parameter	Description	Type	Size
<vdomname>	VDOM name.	string	
<ip>	IP address.	string	

diagnose internet-service status-read

read internet service loading status

```
diagnose internet-service status-read
```

diagnose internet-service6

Internet Service Database.

This topic includes the following commands:

- [diagnose internet-service6 id on page 2565](#)
- [diagnose internet-service6 id-summary on page 2565](#)
- [diagnose internet-service6 info on page 2565](#)
- [diagnose internet-service6 match on page 2566](#)

diagnose internet-service6 id

Internet Service ID.

```
diagnose internet-service6 id <id>
```

Parameter	Description	Type	Size
<id>	Internet Service ID(a nonzero integer).	string	

diagnose internet-service6 id-summary

Internet Service ID summary.

```
diagnose internet-service6 id-summary <id>
```

Parameter	Description	Type	Size
<id>	Internet Service ID(a nonzero integer)	string	

diagnose internet-service6 info

VD and 3T information, include vdname, protocol, port and IP address

```
diagnose internet-service6 info <vdname> <proto> <port> <ip> <priority-id-list>
```

Parameter	Description	Type	Size
<vdname>	VDOM name	string	
<proto>	Service protocol(0-255) for instance: tcp is 6	string	
<port>	Service port(0-65535).	string	
<ip>	Service IP address.	string	
<priority-id-list>	List of Internet Service ID as priority match.	string	

diagnose internet-service6 match

Find all matched Internet Services for a specific IP address and prefix.

```
diagnose internet-service6 match <vdname> <ip> <prefix>
```

Parameter	Description	Type	Size
<vdname>	VDOM name.	string	
<ip>	IP address.	string	
<prefix>	prefix.	string	

diagnose internet-service-name

Internet Service Name diagnose commands.

This topic includes the following commands:

- [diagnose internet-service-name check-duplicate on page 2566](#)
- [diagnose internet-service-name cleanup on page 2567](#)
- [diagnose internet-service-name list on page 2567](#)

diagnose internet-service-name check-duplicate

Check duplicate name for same Internet Service information.

```
diagnose internet-service-name check-duplicate
```

diagnose internet-service-name cleanup

Clean up unused obsolete Internet Service name.

```
diagnose internet-service-name cleanup
```

diagnose internet-service-name list

Search Internet Service name by detailed information.

```
diagnose internet-service-name list <internet-service-id> <country/aread-id> <region-id> <city-id>
```

Parameter	Description	Type	Size
<internet-service-id>	Internet Service ID to be checked.	string	
<country/aread-id>	Country ID of Internet Service location.	string	
<region-id>	Region ID of Internet Service location.	string	
<city-id>	City ID of Internet Service location.	string	

diagnose ip address

IP addresses.

This topic includes the following commands:

- [diagnose ip address add on page 2567](#)
- [diagnose ip address delete on page 2568](#)
- [diagnose ip address list on page 2568](#)

diagnose ip address add

Add IP address.

```
diagnose ip address add <intf-name> <XXX.XXX.XXX.XXX> <XXX.XXX.XXX.XXX>
```

Parameter	Description	Type	Size
<intf-name>	Interface Name.	string	
<XXX.XXX.XXX.XXX>	IP address.	string	
<XXX.XXX.XXX.XXX>	IP network mask.	string	

diagnose ip address delete

Delete IP address.

```
diagnose ip address delete <intf-name> <XXX.XXX.XXX.XXX>
```

Parameter	Description	Type	Size
<intf-name>	Interface Name.	string	
<XXX.XXX.XXX.XXX>	IP address.	string	

diagnose ip address list

List IP addresses.

```
diagnose ip address list
```

diagnose ip arp

ARP table.

This topic includes the following commands:

- [diagnose ip arp add on page 2568](#)
- [diagnose ip arp delete on page 2569](#)
- [diagnose ip arp list on page 2569](#)

diagnose ip arp add

Add an ARP entry.

```
diagnose ip arp add <intf-name> <XXX.XXX.XXX.XXX> <XX:XX:XX:XX:XX:XX>
```

Parameter	Description	Type	Size
<intf-name>	Interface Name.	string	
<XXX.XXX.XXX.XXX>	IP address.	string	
<XX:XX:XX:XX:XX:XX>	MAC address.	string	

diagnose ip arp delete

Delete an ARP entry.

```
diagnose ip arp delete <intf-name> <XXX.XXX.XXX.XXX>
```

Parameter	Description	Type	Size
<intf-name>	Interface Name.	string	
<XXX.XXX.XXX.XXX>	IP address.	string	

diagnose ip arp list

Show ARP table.

```
diagnose ip arp list
```

diagnose ip gre-tunnel

tunnels

This topic includes the following commands:

- [diagnose ip gre-tunnel flush on page 2569](#)
- [diagnose ip gre-tunnel list on page 2569](#)

diagnose ip gre-tunnel flush

Flush tunnels.

```
diagnose ip gre-tunnel flush
```

diagnose ip gre-tunnel list

Show tunnels.

```
diagnose ip gre-tunnel list
```


diagnose ip ipip-tunnel

tunnels

This topic includes the following commands:

- [diagnose ip ipip-tunnel flush on page 2570](#)
- [diagnose ip ipip-tunnel list on page 2570](#)

diagnose ip ipip-tunnel flush

Flush tunnels.

```
diagnose ip ipip-tunnel flush
```

diagnose ip ipip-tunnel list

Show tunnels.

```
diagnose ip ipip-tunnel list
```

diagnose ip multicast

Multicast information.

This topic includes the following commands:

- [diagnose ip multicast get-igmp-limit on page 2570](#)
- [diagnose ip multicast group-membership on page 2571](#)
- [diagnose ip multicast mac on page 2571](#)
- [diagnose ip multicast mfc-add on page 2571](#)
- [diagnose ip multicast mfc-del on page 2571](#)
- [diagnose ip multicast mfc-flush on page 2572](#)
- [diagnose ip multicast mroute on page 2572](#)
- [diagnose ip multicast status on page 2572](#)
- [diagnose ip multicast vif on page 2572](#)

diagnose ip multicast get-igmp-limit

Get max IGMP states.

```
diagnose ip multicast get-igmp-limit
```

diagnose ip multicast group-membership

Multicast group membership.

```
diagnose ip multicast group-membership
```

diagnose ip multicast mac

Multicast MAC listing.

```
diagnose ip multicast mac
```

diagnose ip multicast mfc-add

add multicast forwarding cache

```
diagnose ip multicast mfc-add <in-port> <src-ip> <group-ip> <out-ports-map>
```

Parameter	Description	Type	Size
<in-port>	vif index of ingress	string	
<src-ip>	Source IP.	string	
<group-ip>	multicast group IP	string	
<out-ports-map>	vif index map of egress ports, e.g. 0xff	string	

diagnose ip multicast mfc-del

delete multicast forwarding cache

```
diagnose ip multicast mfc-del <src-ip> <group-ip>
```

Parameter	Description	Type	Size
<src-ip>	Source IP.	string	
<group-ip>	multicast group IP	string	

diagnose ip multicast mfc-flush

Flush multicast routes.

```
diagnose ip multicast mfc-flush
```

diagnose ip multicast mroute

Multicast FIB.

```
diagnose ip multicast mroute
```

diagnose ip multicast status

Multicast status.

```
diagnose ip multicast status
```

diagnose ip multicast vif

Multicast VIF device info.

```
diagnose ip multicast vif
```

diagnose ip proute

Policy routing.

This topic includes the following commands:

- [diagnose ip proute match on page 2572](#)

diagnose ip proute match

Match policy route.

```
diagnose ip proute match <XXX.XXX.XXX.XXX> <address string> <intf-name> <1-255> <0-65535>
```

Parameter	Description	Type	Size
<XXX.XXX.XXX.XXX>	Destination IP address.	string	
<address string>	Source IP or MAC address.	string	
<intf-name>	Interface Name.	string	
<1-255>	Protocol.	string	
<0-65535>	Destination port.	string	

diagnose ip route

Routing table.

This topic includes the following commands:

- [diagnose ip route add on page 2573](#)
- [diagnose ip route bulk-add on page 2574](#)
- [diagnose ip route bulk-delete on page 2574](#)
- [diagnose ip route bulk-list on page 2574](#)
- [diagnose ip route delete on page 2575](#)
- [diagnose ip route list on page 2575](#)
- [diagnose ip route match on page 2575](#)
- [diagnose ip route verify on page 2576](#)

diagnose ip route add

Add static route.

```
diagnose ip route add <intf-name> <XXX.XXX.XXX.XXX> <XXX.XXX.XXX.XXX> <XXX.XXX.XXX.XXX> <1-255>
<0-4294967295> <verify> <ha>
```

Parameter	Description	Type	Size
<intf-name>	Interface Name.	string	
<XXX.XXX.XXX.XXX>	IP address.	string	
<XXX.XXX.XXX.XXX>	IP network mask.	string	
<XXX.XXX.XXX.XXX>	Nexthop IP address.	string	
<1-255>	Route distance.	string	
<0-4294967295>	Route priority.	string	

Parameter	Description	Type	Size
<verify>	Verify operation.	string	
<ha>	HA protocol	string	

diagnose ip route bulk-add

Add a set of static routes.

```
diagnose ip route bulk-add <intf-name> <XXX.XXX.XXX.XXX> <XXX.XXX.XXX.XXX> <0-32> <0-32>  
<XXX.XXX.XXX.XXX> <1-255> <0-4294967295> <Total number of routes to add.> <verify>
```

Parameter	Description	Type	Size
<intf-name>	Interface Name.	string	
<XXX.XXX.XXX.XXX>	Start IP address.	string	
<XXX.XXX.XXX.XXX>	End IP address.	string	
<0-32>	Prefix length start.	string	
<0-32>	Prefix length end.	string	
<XXX.XXX.XXX.XXX>	Nexthop IP address.	string	
<1-255>	Route distance.	string	
<0-4294967295>	Route priority.	string	
<Total number of routes to add.>	.	string	
<verify>	Verify operation.	string	

diagnose ip route bulk-delete

Delete the set of static routes added by bulk-add.

```
diagnose ip route bulk-delete <verify>
```

Parameter	Description	Type	Size
<verify>	Verify operation.	string	

diagnose ip route bulk-list

List the set of static routes added by bulk-add.

```
diagnose ip route bulk-list <all>
```

Parameter	Description	Type	Size
<all>	List all bulk route added.	string	

diagnose ip route delete

Delete static route.

```
diagnose ip route delete <intf-name> <XXX.XXX.XXX.XXX> <XXX.XXX.XXX.XXX> <XXX.XXX.XXX.XXX> <1-255>  
<0-4294967295> <verify> <ha>
```

Parameter	Description	Type	Size
<intf-name>	Interface Name.	string	
<XXX.XXX.XXX.XXX>	IP address.	string	
<XXX.XXX.XXX.XXX>	IP network mask.	string	
<XXX.XXX.XXX.XXX>	Nextthop IP address.	string	
<1-255>	Route distance.	string	
<0-4294967295>	Route priority.	string	
<verify>	Verify operation.	string	
<ha>	HA protocol	string	

diagnose ip route list

List routing table.

```
diagnose ip route list
```

diagnose ip route match

Match kernel route.

```
diagnose ip route match <XXX.XXX.XXX.XXX> <XXX.XXX.XXX.XXX> <intf-name> <intf-name> <0-31>
```

Parameter	Description	Type	Size
<XXX.XXX.XXX.XXX>	Destination address.	string	
<XXX.XXX.XXX.XXX>	Source address.	string	
<intf-name>	Outgoing interface.	string	

Parameter	Description	Type	Size
<intf-name>	Incoming interface.	string	
<0-31>	VRF.	string	

diagnose ip route verify

Verify static route.

```
diagnose ip route verify <intf-name> <XXX.XXX.XXX.XXX> <XXX.XXX.XXX.XXX> <XXX.XXX.XXX.XXX> <1-255>  
<0-4294967295>
```

Parameter	Description	Type	Size
<intf-name>	Interface Name.	string	
<XXX.XXX.XXX.XXX>	IP address.	string	
<XXX.XXX.XXX.XXX>	IP network mask.	string	
<XXX.XXX.XXX.XXX>	Nexthop IP address.	string	
<1-255>	Route distance.	string	
<0-4294967295>	Route priority.	string	

diagnose ip router bfd

BFD debug.

This topic includes the following commands:

- [diagnose ip router bfd all on page 2576](#)
- [diagnose ip router bfd cmdb on page 2577](#)
- [diagnose ip router bfd events on page 2577](#)
- [diagnose ip router bfd filter on page 2577](#)
- [diagnose ip router bfd fsm on page 2577](#)
- [diagnose ip router bfd nl on page 2577](#)
- [diagnose ip router bfd packet on page 2577](#)
- [diagnose ip router bfd show on page 2578](#)

diagnose ip router bfd all

Enable/disable all debugging.

```
diagnose ip router bfd all
```

diagnose ip router bfd cmdb

Enable/disable BFD CMDB debug.

```
diagnose ip router bfd cmdb
```

diagnose ip router bfd events

Enable/disable BFD events debug.

```
diagnose ip router bfd events
```

diagnose ip router bfd filter

Destination/neighbor IP to filter debug, or "clear".

```
diagnose ip router bfd filter
```

diagnose ip router bfd fsm

Enable/disable BFD finite state machine debug.

```
diagnose ip router bfd fsm
```

diagnose ip router bfd nl

Enable/disable BFD ZebOS debug.

```
diagnose ip router bfd nl
```

diagnose ip router bfd packet

Enable/disable BFD packets debug.

```
diagnose ip router bfd packet
```


diagnose ip router bfd show

Show status of BFD debug.

```
diagnose ip router bfd show
```

diagnose ip router bgp

BGP protocol.

This topic includes the following commands:

- [diagnose ip router bgp all on page 2578](#)
- [diagnose ip router bgp dampening on page 2578](#)
- [diagnose ip router bgp events on page 2579](#)
- [diagnose ip router bgp filters on page 2579](#)
- [diagnose ip router bgp fsm on page 2579](#)
- [diagnose ip router bgp keepalives on page 2579](#)
- [diagnose ip router bgp level on page 2579](#)
- [diagnose ip router bgp level critical on page 2579](#)
- [diagnose ip router bgp level error on page 2580](#)
- [diagnose ip router bgp level info on page 2580](#)
- [diagnose ip router bgp level none on page 2580](#)
- [diagnose ip router bgp level warn on page 2580](#)
- [diagnose ip router bgp nsm on page 2580](#)
- [diagnose ip router bgp set-filter on page 2580](#)
- [diagnose ip router bgp show on page 2581](#)
- [diagnose ip router bgp updates on page 2581](#)

diagnose ip router bgp all

Enable all debugging.

```
diagnose ip router bgp all
```

diagnose ip router bgp dampening

BGP dampening.

```
diagnose ip router bgp dampening
```

diagnose ip router bgp events

BGP events.

```
diagnose ip router bgp events
```

diagnose ip router bgp filters

BGP filters.

```
diagnose ip router bgp filters
```

diagnose ip router bgp fsm

BGP finite state machine.

```
diagnose ip router bgp fsm
```

diagnose ip router bgp keepalives

BGP keep alive messages.

```
diagnose ip router bgp keepalives
```

diagnose ip router bgp level

Debug level.

```
diagnose ip router bgp level
```

diagnose ip router bgp level critical

Critical level.

```
diagnose ip router bgp level critical
```

diagnose ip router bgp level error

Error level.

```
diagnose ip router bgp level error
```

diagnose ip router bgp level info

Information level.

```
diagnose ip router bgp level info
```

diagnose ip router bgp level none

None level.

```
diagnose ip router bgp level none
```

diagnose ip router bgp level warn

Warning level.

```
diagnose ip router bgp level warn
```

diagnose ip router bgp nsm

BGP NSM information.

```
diagnose ip router bgp nsm
```

diagnose ip router bgp set-filter

Set BGP debug output filter.

```
diagnose ip router bgp set-filter
```

diagnose ip router bgp show

Show status of BGP debugging.

```
diagnose ip router bgp show
```

diagnose ip router bgp updates

BGP updates.

```
diagnose ip router bgp updates
```

diagnose ip router command

Send command to routing daemon.

This topic includes the following commands:

- [diagnose ip router command show on page 2581](#)
- [diagnose ip router command show-vrf on page 2581](#)

diagnose ip router command show

Send show command to imi.

```
diagnose ip router command show
```

diagnose ip router command show-vrf

Send show command to imi (in virtual router).

```
diagnose ip router command show-vrf
```

diagnose ip router igmp

IGMP debug.

This topic includes the following commands:

- [diagnose ip router igmp all on page 2582](#)
- [diagnose ip router igmp decode on page 2582](#)
- [diagnose ip router igmp encode on page 2582](#)
- [diagnose ip router igmp events on page 2582](#)
- [diagnose ip router igmp fsm on page 2583](#)
- [diagnose ip router igmp level on page 2583](#)
- [diagnose ip router igmp level critical on page 2583](#)
- [diagnose ip router igmp level error on page 2583](#)
- [diagnose ip router igmp level info on page 2583](#)
- [diagnose ip router igmp level none on page 2583](#)
- [diagnose ip router igmp level warn on page 2584](#)
- [diagnose ip router igmp show on page 2584](#)
- [diagnose ip router igmp tib on page 2584](#)

diagnose ip router igmp all

All debugging.

```
diagnose ip router igmp all
```

diagnose ip router igmp decode

Decode debugging.

```
diagnose ip router igmp decode
```

diagnose ip router igmp encode

Encode debugging.

```
diagnose ip router igmp encode
```

diagnose ip router igmp events

Events debugging.

```
diagnose ip router igmp events
```

diagnose ip router igmp fsm

FSM debugging.

```
diagnose ip router igmp fsm
```

diagnose ip router igmp level

Debug level.

```
diagnose ip router igmp level
```

diagnose ip router igmp level critical

Critical level.

```
diagnose ip router igmp level critical
```

diagnose ip router igmp level error

Error level.

```
diagnose ip router igmp level error
```

diagnose ip router igmp level info

Information level.

```
diagnose ip router igmp level info
```

diagnose ip router igmp level none

None level.

```
diagnose ip router igmp level none
```

diagnose ip router igmp level warn

Warning level.

```
diagnose ip router igmp level warn
```

diagnose ip router igmp show

Show status of IGMP debugging.

```
diagnose ip router igmp show
```

diagnose ip router igmp tib

TIB (tree-info-base) debugging.

```
diagnose ip router igmp tib
```

diagnose ip router isis

IS-IS protocol.

This topic includes the following commands:

- [diagnose ip router isis all on page 2585](#)
- [diagnose ip router isis events on page 2585](#)
- [diagnose ip router isis ifsm on page 2585](#)
- [diagnose ip router isis level on page 2585](#)
- [diagnose ip router isis level critical on page 2585](#)
- [diagnose ip router isis level error on page 2585](#)
- [diagnose ip router isis level info on page 2586](#)
- [diagnose ip router isis level none on page 2586](#)
- [diagnose ip router isis level warn on page 2586](#)
- [diagnose ip router isis lsp on page 2586](#)
- [diagnose ip router isis n fsm on page 2586](#)
- [diagnose ip router isis nsm on page 2586](#)
- [diagnose ip router isis pdu on page 2587](#)
- [diagnose ip router isis show on page 2587](#)
- [diagnose ip router isis spf on page 2587](#)

diagnose ip router isis all

Enable all debugging.

```
diagnose ip router isis all
```

diagnose ip router isis events

IS-IS Events.

```
diagnose ip router isis events
```

diagnose ip router isis ifsm

IS-IS Interface State Machine.

```
diagnose ip router isis ifsm
```

diagnose ip router isis level

Debug level.

```
diagnose ip router isis level
```

diagnose ip router isis level critical

Critical level.

```
diagnose ip router isis level critical
```

diagnose ip router isis level error

Error level.

```
diagnose ip router isis level error
```


diagnose ip router isis level info

Information level.

```
diagnose ip router isis level info
```

diagnose ip router isis level none

None level.

```
diagnose ip router isis level none
```

diagnose ip router isis level warn

Warning level.

```
diagnose ip router isis level warn
```

diagnose ip router isis lsp

IS-IS Link State PDU.

```
diagnose ip router isis lsp
```

diagnose ip router isis nfsm

IS-IS Neighbor State Machine.

```
diagnose ip router isis nfsm
```

diagnose ip router isis nsm

IS-IS NSM information.

```
diagnose ip router isis nsm
```

diagnose ip router isis pdu

IS-IS Protocol Data Unit.

```
diagnose ip router isis pdu
```

diagnose ip router isis show

Show IS-IS debugging.

```
diagnose ip router isis show
```

diagnose ip router isis spf

IS-IS SPF Calculation.

```
diagnose ip router isis spf
```

diagnose ip router ospf

OSPF protocol.

This topic includes the following commands:

- [diagnose ip router ospf all on page 2588](#)
- [diagnose ip router ospf events on page 2588](#)
- [diagnose ip router ospf ifsm on page 2588](#)
- [diagnose ip router ospf level on page 2588](#)
- [diagnose ip router ospf level critical on page 2588](#)
- [diagnose ip router ospf level error on page 2588](#)
- [diagnose ip router ospf level info on page 2589](#)
- [diagnose ip router ospf level none on page 2589](#)
- [diagnose ip router ospf level warn on page 2589](#)
- [diagnose ip router ospf lsa on page 2589](#)
- [diagnose ip router ospf n fsm on page 2589](#)
- [diagnose ip router ospf nsm on page 2589](#)
- [diagnose ip router ospf packet on page 2590](#)
- [diagnose ip router ospf route on page 2590](#)
- [diagnose ip router ospf show on page 2590](#)

diagnose ip router ospf all

Enable all debugging.

```
diagnose ip router ospf all
```

diagnose ip router ospf events

OSPF events.

```
diagnose ip router ospf events
```

diagnose ip router ospf ifsm

OSPF Interface State Machine.

```
diagnose ip router ospf ifsm
```

diagnose ip router ospf level

Debug level.

```
diagnose ip router ospf level
```

diagnose ip router ospf level critical

Critical level.

```
diagnose ip router ospf level critical
```

diagnose ip router ospf level error

Error level.

```
diagnose ip router ospf level error
```

diagnose ip router ospf level info

Information level.

```
diagnose ip router ospf level info
```

diagnose ip router ospf level none

None level.

```
diagnose ip router ospf level none
```

diagnose ip router ospf level warn

Warning level.

```
diagnose ip router ospf level warn
```

diagnose ip router ospf lsa

OSPF Link State Advertisement.

```
diagnose ip router ospf lsa
```

diagnose ip router ospf nfsm

OSPF Neighbor State Machine.

```
diagnose ip router ospf nfsm
```

diagnose ip router ospf nsm

OSPF NSM interface.

```
diagnose ip router ospf nsm
```

diagnose ip router ospf packet

OSPF Packets.

```
diagnose ip router ospf packet
```

diagnose ip router ospf route

OSPF route information.

```
diagnose ip router ospf route
```

diagnose ip router ospf show

Show status of OSPF debugging.

```
diagnose ip router ospf show
```

diagnose ip router pim-dm

PIM dense-mode.

This topic includes the following commands:

- [diagnose ip router pim-dm all on page 2591](#)
- [diagnose ip router pim-dm context on page 2591](#)
- [diagnose ip router pim-dm decode on page 2591](#)
- [diagnose ip router pim-dm encode on page 2591](#)
- [diagnose ip router pim-dm fsm on page 2591](#)
- [diagnose ip router pim-dm level on page 2591](#)
- [diagnose ip router pim-dm level critical on page 2592](#)
- [diagnose ip router pim-dm level error on page 2592](#)
- [diagnose ip router pim-dm level info on page 2592](#)
- [diagnose ip router pim-dm level none on page 2592](#)
- [diagnose ip router pim-dm level warn on page 2592](#)
- [diagnose ip router pim-dm mrt on page 2592](#)
- [diagnose ip router pim-dm nexthop on page 2593](#)
- [diagnose ip router pim-dm nsm on page 2593](#)
- [diagnose ip router pim-dm show on page 2593](#)
- [diagnose ip router pim-dm vif on page 2593](#)

diagnose ip router pim-dm all

All debugging.

```
diagnose ip router pim-dm all
```

diagnose ip router pim-dm context

VF-VRF context debugging.

```
diagnose ip router pim-dm context
```

diagnose ip router pim-dm decode

Message decode debugging.

```
diagnose ip router pim-dm decode
```

diagnose ip router pim-dm encode

Message encode debugging.

```
diagnose ip router pim-dm encode
```

diagnose ip router pim-dm fsm

FSM debugging.

```
diagnose ip router pim-dm fsm
```

diagnose ip router pim-dm level

Debug level.

```
diagnose ip router pim-dm level
```

diagnose ip router pim-dm level critical

Critical level.

```
diagnose ip router pim-dm level critical
```

diagnose ip router pim-dm level error

Error level.

```
diagnose ip router pim-dm level error
```

diagnose ip router pim-dm level info

Information level.

```
diagnose ip router pim-dm level info
```

diagnose ip router pim-dm level none

None level.

```
diagnose ip router pim-dm level none
```

diagnose ip router pim-dm level warn

Warning level.

```
diagnose ip router pim-dm level warn
```

diagnose ip router pim-dm mrt

Multicast-route-table debugging.

```
diagnose ip router pim-dm mrt
```

diagnose ip router pim-dm nexthop

Nexthop debugging.

```
diagnose ip router pim-dm nexthop
```

diagnose ip router pim-dm nsm

NSM interaction debugging.

```
diagnose ip router pim-dm nsm
```

diagnose ip router pim-dm show

Show status of PIM dense-mode debugging.

```
diagnose ip router pim-dm show
```

diagnose ip router pim-dm vif

Multicast VI debugging.

```
diagnose ip router pim-dm vif
```

diagnose ip router pim-sm

PIM sparse-mode.

This topic includes the following commands:

- [diagnose ip router pim-sm all on page 2594](#)
- [diagnose ip router pim-sm events on page 2595](#)
- [diagnose ip router pim-sm level on page 2595](#)
- [diagnose ip router pim-sm level critical on page 2595](#)
- [diagnose ip router pim-sm level error on page 2595](#)
- [diagnose ip router pim-sm level info on page 2595](#)
- [diagnose ip router pim-sm level none on page 2595](#)
- [diagnose ip router pim-sm level warn on page 2596](#)
- [diagnose ip router pim-sm mfc on page 2596](#)
- [diagnose ip router pim-sm mib on page 2596](#)

- [diagnose ip router pim-sm nexthop on page 2596](#)
- [diagnose ip router pim-sm nsm on page 2596](#)
- [diagnose ip router pim-sm packet on page 2596](#)
- [diagnose ip router pim-sm packet all on page 2597](#)
- [diagnose ip router pim-sm packet in on page 2597](#)
- [diagnose ip router pim-sm packet out on page 2597](#)
- [diagnose ip router pim-sm show on page 2597](#)
- [diagnose ip router pim-sm state on page 2597](#)
- [diagnose ip router pim-sm timer on page 2597](#)
- [diagnose ip router pim-sm timer all on page 2598](#)
- [diagnose ip router pim-sm timer assert on page 2598](#)
- [diagnose ip router pim-sm timer assert all on page 2598](#)
- [diagnose ip router pim-sm timer assert at on page 2598](#)
- [diagnose ip router pim-sm timer bsr on page 2598](#)
- [diagnose ip router pim-sm timer bsr all on page 2598](#)
- [diagnose ip router pim-sm timer bsr bst on page 2599](#)
- [diagnose ip router pim-sm timer bsr crp on page 2599](#)
- [diagnose ip router pim-sm timer hello on page 2599](#)
- [diagnose ip router pim-sm timer hello all on page 2599](#)
- [diagnose ip router pim-sm timer hello ht on page 2599](#)
- [diagnose ip router pim-sm timer hello nlt on page 2599](#)
- [diagnose ip router pim-sm timer hello tht on page 2600](#)
- [diagnose ip router pim-sm timer joinprune on page 2600](#)
- [diagnose ip router pim-sm timer joinprune all on page 2600](#)
- [diagnose ip router pim-sm timer joinprune et on page 2600](#)
- [diagnose ip router pim-sm timer joinprune jt on page 2600](#)
- [diagnose ip router pim-sm timer joinprune kat on page 2600](#)
- [diagnose ip router pim-sm timer joinprune ot on page 2601](#)
- [diagnose ip router pim-sm timer joinprune ppt on page 2601](#)
- [diagnose ip router pim-sm timer register on page 2601](#)
- [diagnose ip router pim-sm timer register all on page 2601](#)
- [diagnose ip router pim-sm timer register rst on page 2601](#)

diagnose ip router pim-sm all

All debugging.

```
diagnose ip router pim-sm all
```

diagnose ip router pim-sm events

Events debugging.

```
diagnose ip router pim-sm events
```

diagnose ip router pim-sm level

Debug level.

```
diagnose ip router pim-sm level
```

diagnose ip router pim-sm level critical

Critical level.

```
diagnose ip router pim-sm level critical
```

diagnose ip router pim-sm level error

Error level.

```
diagnose ip router pim-sm level error
```

diagnose ip router pim-sm level info

Information level.

```
diagnose ip router pim-sm level info
```

diagnose ip router pim-sm level none

None level.

```
diagnose ip router pim-sm level none
```

diagnose ip router pim-sm level warn

Warning level.

```
diagnose ip router pim-sm level warn
```

diagnose ip router pim-sm mfc

MFC debugging.

```
diagnose ip router pim-sm mfc
```

diagnose ip router pim-sm mib

MIB debugging.

```
diagnose ip router pim-sm mib
```

diagnose ip router pim-sm nexthop

Nexthop debugging.

```
diagnose ip router pim-sm nexthop
```

diagnose ip router pim-sm nsm

NSM debugging.

```
diagnose ip router pim-sm nsm
```

diagnose ip router pim-sm packet

Packet debugging.

```
diagnose ip router pim-sm packet
```

diagnose ip router pim-sm packet all

All packet debugging.

```
diagnose ip router pim-sm packet all
```

diagnose ip router pim-sm packet in

Incoming packet debugging.

```
diagnose ip router pim-sm packet in
```

diagnose ip router pim-sm packet out

Outgoing packet debugging.

```
diagnose ip router pim-sm packet out
```

diagnose ip router pim-sm show

Show status of PIM sparse-mode debugging.

```
diagnose ip router pim-sm show
```

diagnose ip router pim-sm state

State debugging.

```
diagnose ip router pim-sm state
```

diagnose ip router pim-sm timer

Timer debugging.

```
diagnose ip router pim-sm timer
```

diagnose ip router pim-sm timer all

All timer debugging.

```
diagnose ip router pim-sm timer all
```

diagnose ip router pim-sm timer assert

Assert timer debugging.

```
diagnose ip router pim-sm timer assert
```

diagnose ip router pim-sm timer assert all

All assert timers.

```
diagnose ip router pim-sm timer assert all
```

diagnose ip router pim-sm timer assert at

Assert timer.

```
diagnose ip router pim-sm timer assert at
```

diagnose ip router pim-sm timer bsr

BSR timer debugging.

```
diagnose ip router pim-sm timer bsr
```

diagnose ip router pim-sm timer bsr all

All BSR timers.

```
diagnose ip router pim-sm timer bsr all
```

diagnose ip router pim-sm timer bsr bst

Bootstrap timer.

```
diagnose ip router pim-sm timer bsr bst
```

diagnose ip router pim-sm timer bsr crp

Candidate-RP timer.

```
diagnose ip router pim-sm timer bsr crp
```

diagnose ip router pim-sm timer hello

Hello timer debugging.

```
diagnose ip router pim-sm timer hello
```

diagnose ip router pim-sm timer hello all

All hello-related timers.

```
diagnose ip router pim-sm timer hello all
```

diagnose ip router pim-sm timer hello ht

Hello timer.

```
diagnose ip router pim-sm timer hello ht
```

diagnose ip router pim-sm timer hello nlt

Neighbor liveliness timer.

```
diagnose ip router pim-sm timer hello nlt
```

diagnose ip router pim-sm timer hello tht

Triggered hello timer.

```
diagnose ip router pim-sm timer hello tht
```

diagnose ip router pim-sm timer joinprune

Join prune timer debugging.

```
diagnose ip router pim-sm timer joinprune
```

diagnose ip router pim-sm timer joinprune all

All join prune timers.

```
diagnose ip router pim-sm timer joinprune all
```

diagnose ip router pim-sm timer joinprune et

Expiry timer.

```
diagnose ip router pim-sm timer joinprune et
```

diagnose ip router pim-sm timer joinprune jt

Join prune timer.

```
diagnose ip router pim-sm timer joinprune jt
```

diagnose ip router pim-sm timer joinprune kat

Keep alive timer.

```
diagnose ip router pim-sm timer joinprune kat
```

diagnose ip router pim-sm timer joinprune ot

Override timer.

```
diagnose ip router pim-sm timer joinprune ot
```

diagnose ip router pim-sm timer joinprune ppt

Prune pending timer.

```
diagnose ip router pim-sm timer joinprune ppt
```

diagnose ip router pim-sm timer register

Register timer debugging.

```
diagnose ip router pim-sm timer register
```

diagnose ip router pim-sm timer register all

All register timers.

```
diagnose ip router pim-sm timer register all
```

diagnose ip router pim-sm timer register rst

Register stop timer.

```
diagnose ip router pim-sm timer register rst
```

diagnose ip router rip

RIP protocol.

This topic includes the following commands:

- [diagnose ip router rip all on page 2602](#)
- [diagnose ip router rip events on page 2602](#)
- [diagnose ip router rip level on page 2602](#)

- [diagnose ip router rip level critical on page 2602](#)
- [diagnose ip router rip level error on page 2602](#)
- [diagnose ip router rip level info on page 2603](#)
- [diagnose ip router rip level none on page 2603](#)
- [diagnose ip router rip level warn on page 2603](#)
- [diagnose ip router rip nsm on page 2603](#)
- [diagnose ip router rip packet on page 2603](#)
- [diagnose ip router rip show on page 2603](#)

diagnose ip router rip all

Enable all debugging.

```
diagnose ip router rip all
```

diagnose ip router rip events

RIP events.

```
diagnose ip router rip events
```

diagnose ip router rip level

Debug level.

```
diagnose ip router rip level
```

diagnose ip router rip level critical

Critical level.

```
diagnose ip router rip level critical
```

diagnose ip router rip level error

Error level.

```
diagnose ip router rip level error
```

diagnose ip router rip level info

Information level.

```
diagnose ip router rip level info
```

diagnose ip router rip level none

None level.

```
diagnose ip router rip level none
```

diagnose ip router rip level warn

Warning level.

```
diagnose ip router rip level warn
```

diagnose ip router rip nsm

RIP NSM interface

```
diagnose ip router rip nsm
```

diagnose ip router rip packet

RIP packets

```
diagnose ip router rip packet
```

diagnose ip router rip show

Show status of RIP debugging.

```
diagnose ip router rip show
```

diagnose ip router zl

Set flag to make diag ip router commands persist after router restart.

This topic includes the following commands:

- [diagnose ip router zl disable on page 2604](#)
- [diagnose ip router zl enable on page 2604](#)
- [diagnose ip router zl show on page 2604](#)

diagnose ip router zl disable

Debug events/level will reset to default after restart.

```
diagnose ip router zl disable
```

diagnose ip router zl enable

Newly enabled debug events/level will persist after router restart.

```
diagnose ip router zl enable
```

diagnose ip router zl show

Show whether flag is set.

```
diagnose ip router zl show
```

diagnose ip rtcache

Routing cache.

This topic includes the following commands:

- [diagnose ip rtcache list on page 2604](#)

diagnose ip rtcache list

List routing cache.

```
diagnose ip rtcache list
```

diagnose ip tcp

TCP sockets.

This topic includes the following commands:

- [diagnose ip tcp list on page 2605](#)

diagnose ip tcp list

List TCP sockets.

```
diagnose ip tcp list
```

diagnose ip udp

UDP sockets.

This topic includes the following commands:

- [diagnose ip udp list on page 2605](#)

diagnose ip udp list

List UDP sockets.

```
diagnose ip udp list
```

diagnose ips anomaly

IPS anomaly.

This topic includes the following commands:

- [diagnose ips anomaly clear on page 2606](#)
- [diagnose ips anomaly config on page 2606](#)
- [diagnose ips anomaly filter on page 2606](#)

- [diagnose ips anomaly filter clear on page 2606](#)
- [diagnose ips anomaly filter freq on page 2606](#)
- [diagnose ips anomaly filter id on page 2607](#)
- [diagnose ips anomaly filter ip on page 2607](#)
- [diagnose ips anomaly filter pps on page 2607](#)
- [diagnose ips anomaly list on page 2607](#)
- [diagnose ips anomaly status on page 2608](#)

diagnose ips anomaly clear

Clear anomaly meters.

```
diagnose ips anomaly clear
```

diagnose ips anomaly config

List DoS-sensor.

```
diagnose ips anomaly config
```

diagnose ips anomaly filter

List anomaly with filters.

```
diagnose ips anomaly filter
```

diagnose ips anomaly filter clear

Clear anomaly filter.

```
diagnose ips anomaly filter clear
```

diagnose ips anomaly filter freq

frequency

```
diagnose ips anomaly filter freq <xx> <xx>
```

Parameter	Description	Type	Size
<xx>	Frequency from.	string	
<xx>	Frequency to.	string	

diagnose ips anomaly filter id

Anomaly ID.

```
diagnose ips anomaly filter id <xx>
```

Parameter	Description	Type	Size
<xx>	<0-11>	string	

diagnose ips anomaly filter ip

IP and subnet mask.

```
diagnose ips anomaly filter ip <xxx.xxx.xxx.xxx> <xxx.xxx.xxx.xxx>
```

Parameter	Description	Type	Size
<xxx.xxx.xxx.xxx>	ip	string	
<xxx.xxx.xxx.xxx>	mask	string	

diagnose ips anomaly filter pps

pps

```
diagnose ips anomaly filter pps <xx> <xx>
```

Parameter	Description	Type	Size
<xx>	PPS from.	string	
<xx>	PPS to.	string	

diagnose ips anomaly list

List anomaly meters.

```
diagnose ips anomaly list
```

diagnose ips anomaly status

List anomaly status.

```
diagnose ips anomaly status
```

diagnose ips anomaly6

IPS6 anomaly.

This topic includes the following commands:

- [diagnose ips anomaly6 clear on page 2608](#)
- [diagnose ips anomaly6 config on page 2608](#)
- [diagnose ips anomaly6 filter on page 2608](#)
- [diagnose ips anomaly6 filter clear on page 2609](#)
- [diagnose ips anomaly6 filter freq on page 2609](#)
- [diagnose ips anomaly6 filter id on page 2609](#)
- [diagnose ips anomaly6 filter ip on page 2609](#)
- [diagnose ips anomaly6 filter pps on page 2609](#)
- [diagnose ips anomaly6 list on page 2610](#)
- [diagnose ips anomaly6 status on page 2610](#)

diagnose ips anomaly6 clear

Clear anomaly meters.

```
diagnose ips anomaly6 clear
```

diagnose ips anomaly6 config

List DoS-sensor.

```
diagnose ips anomaly6 config
```

diagnose ips anomaly6 filter

List anomaly with filters.

```
diagnose ips anomaly6 filter
```

diagnose ips anomaly6 filter clear

Clear anomaly filter.

```
diagnose ips anomaly6 filter clear
```

diagnose ips anomaly6 filter freq

frequency

```
diagnose ips anomaly6 filter freq <xx> <xx>
```

Parameter	Description	Type	Size
<xx>	Frequency from.	string	
<xx>	Frequency to.	string	

diagnose ips anomaly6 filter id

Anomaly ID.

```
diagnose ips anomaly6 filter id <xx>
```

Parameter	Description	Type	Size
<xx>	<0-11>	string	

diagnose ips anomaly6 filter ip

IP and subnet mask.

```
diagnose ips anomaly6 filter ip <xxxx:xxxx:xxxx:xxxx:xxxx:xxxx:xxxx:xxxx/xxx>
```

Parameter	Description	Type	Size
<xxxx:xxxx:xxxx:xxxx:xxxx:xxxx:xxxx:xxxx/xxx>	ip	string	

diagnose ips anomaly6 filter pps

pps

```
diagnose ips anomaly6 filter pps <xx> <xx>
```


Parameter	Description	Type	Size
<xx>	PPS from.	string	
<xx>	PPS to.	string	

diagnose ips anomaly6 list

List anomaly meters.

```
diagnose ips anomaly6 list
```

diagnose ips anomaly6 status

List anomaly status.

```
diagnose ips anomaly6 status
```

diagnose ips av avengine

Diagnose commands for AV engine.

This topic includes the following commands:

- [diagnose ips av avengine bypass-disable on page 2610](#)
- [diagnose ips av avengine bypass-enable on page 2610](#)
- [diagnose ips av avengine run-diagnose on page 2611](#)

diagnose ips av avengine bypass-disable

Disable AV engine scan bypass.

```
diagnose ips av avengine bypass-disable
```

diagnose ips av avengine bypass-enable

Enable AV engine scan bypass.

```
diagnose ips av avengine bypass-enable
```

diagnose ips av avengine run-diagnose

Run AV engine diagnose commands.

```
diagnose ips av avengine run-diagnose <command>
```

Parameter	Description	Type	Size
<command>	AV engine diagnostic command.	string	

diagnose ips av cache

This topic includes the following commands:

- [diagnose ips av cache clear on page 2611](#)
- [diagnose ips av cache delete on page 2611](#)
- [diagnose ips av cache list on page 2611](#)
- [diagnose ips av cache set-age on page 2612](#)
- [diagnose ips av cache status on page 2612](#)

diagnose ips av cache clear

clear

```
diagnose ips av cache clear
```

diagnose ips av cache delete

delete

```
diagnose ips av cache delete <ID>
```

Parameter	Description	Type	Size
<ID>	<ID>	string	

diagnose ips av cache list

list

```
diagnose ips av cache list
```

diagnose ips av cache set-age

set-age

```
diagnose ips av cache set-age <ID> <age>
```

Parameter	Description	Type	Size
<ID>	<ID>	string	
<age>	<age>	string	

diagnose ips av cache status

status

```
diagnose ips av cache status
```

diagnose ips av mode

Flow-based AV scan mode.

This topic includes the following commands:

- [diagnose ips av mode show on page 2612](#)

Flow-based AV scan mode.

```
diagnose ips av mode hybrid
```

Parameter	Description	Type	Size
hybrid	Enable/disable hybrid scan mode.	option	

diagnose ips av mode show

Show status of hybrid scan mode.

```
diagnose ips av mode show
```

diagnose ips av stats

AntiVirus statistics.

This topic includes the following commands:

- [diagnose ips av stats clear on page 2613](#)
- [diagnose ips av stats show on page 2613](#)

diagnose ips av stats clear

Clear AntiVirus statistics.

```
diagnose ips av stats clear
```

diagnose ips av stats show

Show AntiVirus statistics.

```
diagnose ips av stats show
```

diagnose ips av timeout

Flowav timeout.

This topic includes the following commands:

- [diagnose ips av timeout set on page 2613](#)
- [diagnose ips av timeout show on page 2614](#)

diagnose ips av timeout set

Set av timeout for diagnosis.

```
diagnose ips av timeout set <Integer>
```

Parameter	Description	Type	Size
<Integer>	Timeout range: 5 - 60.	string	

diagnose ips av timeout show

Show current timeout.

```
diagnose ips av timeout show
```

diagnose ips config disable

This topic includes the following commands:

- [diagnose ips config disable log-verbose on page 2614](#)

diagnose ips config disable log-verbose

log-verbose

```
diagnose ips config disable log-verbose
```

diagnose ips config enable

This topic includes the following commands:

- [diagnose ips config enable log-verbose on page 2614](#)

diagnose ips config enable log-verbose

log-verbose

```
diagnose ips config enable log-verbose
```

diagnose ips dac

This topic includes the following commands:

- [diagnose ips dac clear on page 2615](#)
- [diagnose ips dac info on page 2615](#)

diagnose ips dac clear

clear

```
diagnose ips dac clear <age>
```

Parameter	Description	Type	Size
<age>	<age>	string	

diagnose ips dac info

info

```
diagnose ips dac info
```

diagnose ips debug disable

This topic includes the following commands:

- [diagnose ips debug disable all on page 2616](#)
- [diagnose ips debug disable av on page 2616](#)
- [diagnose ips debug disable content on page 2616](#)
- [diagnose ips debug disable content_detail on page 2616](#)
- [diagnose ips debug disable dac on page 2617](#)
- [diagnose ips debug disable detect on page 2617](#)
- [diagnose ips debug disable dissector on page 2617](#)
- [diagnose ips debug disable dns on page 2617](#)
- [diagnose ips debug disable error on page 2617](#)
- [diagnose ips debug disable http on page 2617](#)
- [diagnose ips debug disable im on page 2618](#)
- [diagnose ips debug disable init on page 2618](#)
- [diagnose ips debug disable ipsa on page 2618](#)
- [diagnose ips debug disable log on page 2618](#)
- [diagnose ips debug disable mail on page 2618](#)
- [diagnose ips debug disable mime on page 2618](#)
- [diagnose ips debug disable p2p on page 2619](#)

- [diagnose ips debug disable packet on page 2619](#)
- [diagnose ips debug disable packet_detail on page 2619](#)
- [diagnose ips debug disable packet_dump on page 2619](#)
- [diagnose ips debug disable parse on page 2619](#)
- [diagnose ips debug disable proxy on page 2619](#)
- [diagnose ips debug disable quic on page 2620](#)
- [diagnose ips debug disable rpc on page 2620](#)
- [diagnose ips debug disable sctp on page 2620](#)
- [diagnose ips debug disable session on page 2620](#)
- [diagnose ips debug disable smb on page 2620](#)
- [diagnose ips debug disable ssh on page 2620](#)
- [diagnose ips debug disable ssl on page 2621](#)
- [diagnose ips debug disable state on page 2621](#)
- [diagnose ips debug disable tcp on page 2621](#)
- [diagnose ips debug disable timeout on page 2621](#)
- [diagnose ips debug disable urlfilter on page 2621](#)
- [diagnose ips debug disable voip on page 2621](#)
- [diagnose ips debug disable warn on page 2622](#)

diagnose ips debug disable all

all

```
diagnose ips debug disable all
```

diagnose ips debug disable av

av

```
diagnose ips debug disable av
```

diagnose ips debug disable content

content

```
diagnose ips debug disable content
```

diagnose ips debug disable content_detail

content_detail

```
diagnose ips debug disable content_detail
```

diagnose ips debug disable dac

dac

```
diagnose ips debug disable dac
```

diagnose ips debug disable detect

detect

```
diagnose ips debug disable detect
```

diagnose ips debug disable dissector

dissector

```
diagnose ips debug disable dissector
```

diagnose ips debug disable dns

dns

```
diagnose ips debug disable dns
```

diagnose ips debug disable error

error

```
diagnose ips debug disable error
```

diagnose ips debug disable http

http

```
diagnose ips debug disable http
```


diagnose ips debug disable im

im

```
diagnose ips debug disable im
```

diagnose ips debug disable init

init

```
diagnose ips debug disable init
```

diagnose ips debug disable ipsa

ipsa

```
diagnose ips debug disable ipsa
```

diagnose ips debug disable log

log

```
diagnose ips debug disable log
```

diagnose ips debug disable mail

mail

```
diagnose ips debug disable mail
```

diagnose ips debug disable mime

mime

```
diagnose ips debug disable mime
```

diagnose ips debug disable p2p

p2p

```
diagnose ips debug disable p2p
```

diagnose ips debug disable packet

packet

```
diagnose ips debug disable packet
```

diagnose ips debug disable packet_detail

packet_detail

```
diagnose ips debug disable packet_detail
```

diagnose ips debug disable packet_dump

packet_dump

```
diagnose ips debug disable packet_dump
```

diagnose ips debug disable parse

parse

```
diagnose ips debug disable parse
```

diagnose ips debug disable proxy

proxy

```
diagnose ips debug disable proxy
```

diagnose ips debug disable quic

quic

```
diagnose ips debug disable quic
```

diagnose ips debug disable rpc

rpc

```
diagnose ips debug disable rpc
```

diagnose ips debug disable sctp

sctp

```
diagnose ips debug disable sctp
```

diagnose ips debug disable session

session

```
diagnose ips debug disable session
```

diagnose ips debug disable smb

smb

```
diagnose ips debug disable smb
```

diagnose ips debug disable ssh

ssh

```
diagnose ips debug disable ssh
```

diagnose ips debug disable ssl

ssl

```
diagnose ips debug disable ssl
```

diagnose ips debug disable state

state

```
diagnose ips debug disable state
```

diagnose ips debug disable tcp

tcp

```
diagnose ips debug disable tcp
```

diagnose ips debug disable timeout

timeout

```
diagnose ips debug disable timeout
```

diagnose ips debug disable urlfilter

urlfilter

```
diagnose ips debug disable urlfilter
```

diagnose ips debug disable voip

voip

```
diagnose ips debug disable voip
```

diagnose ips debug disable warn

warn

```
diagnose ips debug disable warn
```

diagnose ips debug enable

This topic includes the following commands:

- [diagnose ips debug enable all on page 2623](#)
- [diagnose ips debug enable av on page 2623](#)
- [diagnose ips debug enable content on page 2623](#)
- [diagnose ips debug enable content_detail on page 2623](#)
- [diagnose ips debug enable dac on page 2623](#)
- [diagnose ips debug enable detect on page 2623](#)
- [diagnose ips debug enable dissector on page 2624](#)
- [diagnose ips debug enable dns on page 2624](#)
- [diagnose ips debug enable error on page 2624](#)
- [diagnose ips debug enable http on page 2624](#)
- [diagnose ips debug enable im on page 2624](#)
- [diagnose ips debug enable init on page 2624](#)
- [diagnose ips debug enable ipsa on page 2625](#)
- [diagnose ips debug enable log on page 2625](#)
- [diagnose ips debug enable mail on page 2625](#)
- [diagnose ips debug enable mime on page 2625](#)
- [diagnose ips debug enable p2p on page 2625](#)
- [diagnose ips debug enable packet on page 2625](#)
- [diagnose ips debug enable packet_detail on page 2626](#)
- [diagnose ips debug enable packet_dump on page 2626](#)
- [diagnose ips debug enable parse on page 2626](#)
- [diagnose ips debug enable proxy on page 2626](#)
- [diagnose ips debug enable quic on page 2626](#)
- [diagnose ips debug enable rpc on page 2626](#)
- [diagnose ips debug enable sctp on page 2627](#)
- [diagnose ips debug enable session on page 2627](#)
- [diagnose ips debug enable smb on page 2627](#)
- [diagnose ips debug enable ssh on page 2627](#)
- [diagnose ips debug enable ssl on page 2627](#)
- [diagnose ips debug enable state on page 2627](#)

- [diagnose ips debug enable tcp on page 2628](#)
- [diagnose ips debug enable timeout on page 2628](#)
- [diagnose ips debug enable urlfilter on page 2628](#)
- [diagnose ips debug enable voip on page 2628](#)
- [diagnose ips debug enable warn on page 2628](#)

diagnose ips debug enable all

all

```
diagnose ips debug enable all
```

diagnose ips debug enable av

av

```
diagnose ips debug enable av
```

diagnose ips debug enable content

content

```
diagnose ips debug enable content
```

diagnose ips debug enable content_detail

content_detail

```
diagnose ips debug enable content_detail
```

diagnose ips debug enable dac

dac

```
diagnose ips debug enable dac
```

diagnose ips debug enable detect

detect

```
diagnose ips debug enable detect
```

diagnose ips debug enable dissector

dissector

```
diagnose ips debug enable dissector
```

diagnose ips debug enable dns

dns

```
diagnose ips debug enable dns
```

diagnose ips debug enable error

error

```
diagnose ips debug enable error
```

diagnose ips debug enable http

http

```
diagnose ips debug enable http
```

diagnose ips debug enable im

im

```
diagnose ips debug enable im
```

diagnose ips debug enable init

init

```
diagnose ips debug enable init
```

diagnose ips debug enable ipsa

ipsa

```
diagnose ips debug enable ipsa
```

diagnose ips debug enable log

log

```
diagnose ips debug enable log
```

diagnose ips debug enable mail

mail

```
diagnose ips debug enable mail
```

diagnose ips debug enable mime

mime

```
diagnose ips debug enable mime
```

diagnose ips debug enable p2p

p2p

```
diagnose ips debug enable p2p
```

diagnose ips debug enable packet

packet

```
diagnose ips debug enable packet
```


diagnose ips debug enable packet_detail

packet_detail

```
diagnose ips debug enable packet_detail
```

diagnose ips debug enable packet_dump

packet_dump

```
diagnose ips debug enable packet_dump
```

diagnose ips debug enable parse

parse

```
diagnose ips debug enable parse
```

diagnose ips debug enable proxy

proxy

```
diagnose ips debug enable proxy
```

diagnose ips debug enable quic

quic

```
diagnose ips debug enable quic
```

diagnose ips debug enable rpc

rpc

```
diagnose ips debug enable rpc
```

diagnose ips debug enable sctp

sctp

```
diagnose ips debug enable sctp
```

diagnose ips debug enable session

session

```
diagnose ips debug enable session
```

diagnose ips debug enable smb

smb

```
diagnose ips debug enable smb
```

diagnose ips debug enable ssh

ssh

```
diagnose ips debug enable ssh
```

diagnose ips debug enable ssl

ssl

```
diagnose ips debug enable ssl
```

diagnose ips debug enable state

state

```
diagnose ips debug enable state
```

diagnose ips debug enable tcp

tcp

```
diagnose ips debug enable tcp
```

diagnose ips debug enable timeout

timeout

```
diagnose ips debug enable timeout
```

diagnose ips debug enable urlfilter

urlfilter

```
diagnose ips debug enable urlfilter
```

diagnose ips debug enable voip

voip

```
diagnose ips debug enable voip
```

diagnose ips debug enable warn

warn

```
diagnose ips debug enable warn
```

diagnose ips debug level

This topic includes the following commands:

- [diagnose ips debug level reset on page 2629](#)
- [diagnose ips debug level save on page 2629](#)

diagnose ips debug level reset

reset

```
diagnose ips debug level reset
```

diagnose ips debug level save

save

```
diagnose ips debug level save
```

diagnose ips debug status

This topic includes the following commands:

- [diagnose ips debug status show on page 2629](#)

diagnose ips debug status show

show

```
diagnose ips debug status show
```

diagnose ips dissector

This topic includes the following commands:

- [diagnose ips dissector dump on page 2629](#)
- [diagnose ips dissector status on page 2630](#)

diagnose ips dissector dump

dump

```
diagnose ips dissector dump
```

diagnose ips dissector status

status

```
diagnose ips dissector status
```

diagnose ips filter

This topic includes the following commands:

- [diagnose ips filter clear on page 2630](#)
- [diagnose ips filter process_id on page 2630](#)
- [diagnose ips filter set on page 2630](#)
- [diagnose ips filter status on page 2631](#)

diagnose ips filter clear

clear

```
diagnose ips filter clear
```

diagnose ips filter process_id

process_id

```
diagnose ips filter process_id <process id>
```

Parameter	Description	Type	Size
<process id>	<process id>	string	

diagnose ips filter set

set

```
diagnose ips filter set <bpf filter>
```

Parameter	Description	Type	Size
<bpf filter>	bpf filter	string	

diagnose ips filter status

status

```
diagnose ips filter status
```

diagnose ips global rule

Rule file operation.

This topic includes the following commands:

- [diagnose ips global rule reload on page 2631](#)

diagnose ips global rule reload

Reload rule file.

```
diagnose ips global rule reload
```

diagnose ips gtp

This topic includes the following commands:

- [diagnose ips gtp clear on page 2631](#)
- [diagnose ips gtp list on page 2632](#)
- [diagnose ips gtp stats on page 2632](#)
- [diagnose ips gtp stats-clear on page 2632](#)

diagnose ips gtp clear

clear

```
diagnose ips gtp clear [vdom]
```

Parameter	Description	Type	Size
[vdom]	[vdom]	string	

diagnose ips gtp list

list

```
diagnose ips gtp list [vdom]
```

Parameter	Description	Type	Size
[vdom]	[vdom]	string	

diagnose ips gtp stats

stats

```
diagnose ips gtp stats [vdom]
```

Parameter	Description	Type	Size
[vdom]	[vdom]	string	

diagnose ips gtp stats-clear

stats-clear

```
diagnose ips gtp stats-clear
```

diagnose ips ipsa

This topic includes the following commands:

- [diagnose ips ipsa info on page 2632](#)
- [diagnose ips ipsa read-ridmap on page 2633](#)

diagnose ips ipsa info

info

```
diagnose ips ipsa info
```

diagnose ips ipsa read-ridmap

read-ridmap

```
diagnose ips ipsa read-ridmap
```

diagnose ips l2ips

Layer 2 IPS information.

This topic includes the following commands:

- [diagnose ips l2ips stats on page 2633](#)

diagnose ips l2ips stats

Statistics.

```
diagnose ips l2ips stats
```

diagnose ips memory

This topic includes the following commands:

- [diagnose ips memory compact on page 2633](#)
- [diagnose ips memory profiling on page 2634](#)
- [diagnose ips memory status on page 2634](#)
- [diagnose ips memory track on page 2634](#)
- [diagnose ips memory track-glibc on page 2634](#)
- [diagnose ips memory track-print on page 2634](#)
- [diagnose ips memory track-size on page 2635](#)

diagnose ips memory compact

compact

```
diagnose ips memory compact
```


diagnose ips memory profiling

profiling

```
diagnose ips memory profiling <enable/disable/dump>
```

Parameter	Description	Type	Size
<enable/disable/dump>	<enable/disable/dump>	string	

diagnose ips memory status

status

```
diagnose ips memory status
```

diagnose ips memory track

track

```
diagnose ips memory track <enable/disable/clear>
```

Parameter	Description	Type	Size
<enable/disable/clear>	enable/disable/clear	string	

diagnose ips memory track-glibc

track-glibc

```
diagnose ips memory track-glibc <status/enable/disable/dump>
```

Parameter	Description	Type	Size
<status/enable/disable/dump>	<status/enable/disable/dump>	string	

diagnose ips memory track-print

track-print

```
diagnose ips memory track-print <record count>
```

Parameter	Description	Type	Size
<record count>	<record count>	string	

diagnose ips memory track-size

track-size

```
diagnose ips memory track-size <min size> <max size>
```

Parameter	Description	Type	Size
<min size>	<min size>	string	
<max size>	<max size>	string	

diagnose ips packet

This topic includes the following commands:

- [diagnose ips packet clear on page 2635](#)
- [diagnose ips packet status on page 2635](#)

diagnose ips packet clear

clear

```
diagnose ips packet clear
```

diagnose ips packet status

status

```
diagnose ips packet status
```

diagnose ips pme debug

This topic includes the following commands:

- [diagnose ips pme debug disable on page 2636](#)
- [diagnose ips pme debug enable on page 2636](#)
- [diagnose ips pme debug status on page 2636](#)
- [diagnose ips pme debug verbose on page 2636](#)

diagnose ips pme debug disable

disable

```
diagnose ips pme debug disable
```

diagnose ips pme debug enable

enable

```
diagnose ips pme debug enable
```

diagnose ips pme debug status

status

```
diagnose ips pme debug status
```

diagnose ips pme debug verbose

verbose

```
diagnose ips pme debug verbose
```

diagnose ips pme detail

This topic includes the following commands:

- [diagnose ips pme detail addr on page 2637](#)
- [diagnose ips pme detail all on page 2637](#)
- [diagnose ips pme detail auth on page 2637](#)
- [diagnose ips pme detail def_port on page 2637](#)

- [diagnose ips pme detail intf on page 2637](#)
- [diagnose ips pme detail isdb on page 2637](#)
- [diagnose ips pme detail none on page 2638](#)
- [diagnose ips pme detail sched on page 2638](#)
- [diagnose ips pme detail service on page 2638](#)

diagnose ips pme detail addr

addr

```
diagnose ips pme detail addr
```

diagnose ips pme detail all

all

```
diagnose ips pme detail all
```

diagnose ips pme detail auth

auth

```
diagnose ips pme detail auth
```

diagnose ips pme detail def_port

def_port

```
diagnose ips pme detail def_port
```

diagnose ips pme detail intf

intf

```
diagnose ips pme detail intf
```

diagnose ips pme detail isdb

isdb

```
diagnose ips pme detail isdb
```

diagnose ips pme detail none

none

```
diagnose ips pme detail none
```

diagnose ips pme detail sched

sched

```
diagnose ips pme detail sched
```

diagnose ips pme detail service

service

```
diagnose ips pme detail service
```

diagnose ips pme policy

This topic includes the following commands:

- [diagnose ips pme policy clear-stats on page 2638](#)
- [diagnose ips pme policy def_port on page 2639](#)
- [diagnose ips pme policy list on page 2639](#)
- [diagnose ips pme policy stats on page 2639](#)

diagnose ips pme policy clear-stats

clear-stats

```
diagnose ips pme policy clear-stats [vdom] [polid]
```

Parameter	Description	Type	Size
[vdom]	[vdom]	string	

Parameter	Description	Type	Size
[polid]	[polid]	string	

diagnose ips pme policy def_port

def_port

```
diagnose ips pme policy def_port
```

diagnose ips pme policy list

list

```
diagnose ips pme policy list
```

diagnose ips pme policy stats

stats

```
diagnose ips pme policy stats
```

diagnose ips raw

Raw socket.

This topic includes the following commands:

- [diagnose ips raw clear on page 2639](#)
- [diagnose ips raw status on page 2640](#)

diagnose ips raw clear

Clear status.

```
diagnose ips raw clear
```

diagnose ips raw status

Show status.

```
diagnose ips raw status
```

diagnose ips session

This topic includes the following commands:

- [diagnose ips session clear on page 2640](#)
- [diagnose ips session content on page 2640](#)
- [diagnose ips session list on page 2640](#)
- [diagnose ips session performance on page 2641](#)
- [diagnose ips session status on page 2641](#)

diagnose ips session clear

clear

```
diagnose ips session clear [vdom]
```

Parameter	Description	Type	Size
[vdom]	[vdom]	string	

diagnose ips session content

content

```
diagnose ips session content
```

diagnose ips session list

list

```
diagnose ips session list <by-mem> <number>
```

Parameter	Description	Type	Size
<by-mem>	by-mem	string	
<number>	<number>	string	

diagnose ips session performance

performance

```
diagnose ips session performance
```

diagnose ips session status

status

```
diagnose ips session status
```

diagnose ips share

This topic includes the following commands:

- [diagnose ips share clear on page 2641](#)
- [diagnose ips share list on page 2641](#)
- [diagnose ips share pool on page 2642](#)

diagnose ips share clear

clear

```
diagnose ips share clear <pool>
```

Parameter	Description	Type	Size
<pool>	<pool>	string	

diagnose ips share list

list


```
diagnose ips share list <pool>
```

Parameter	Description	Type	Size
<pool>	<pool>	string	

diagnose ips share pool

pool

```
diagnose ips share pool
```

diagnose ips shmopts

This topic includes the following commands:

- [diagnose ips shmopts disable on page 2642](#)
- [diagnose ips shmopts reset on page 2642](#)
- [diagnose ips shmopts status on page 2642](#)

diagnose ips shmopts disable

disable

```
diagnose ips shmopts disable
```

diagnose ips shmopts reset

reset

```
diagnose ips shmopts reset
```

diagnose ips shmopts status

status

```
diagnose ips shmopts status
```

diagnose ips signature

This topic includes the following commands:

- [diagnose ips signature cycle on page 2643](#)
- [diagnose ips signature hit on page 2643](#)
- [diagnose ips signature on-hold on page 2643](#)
- [diagnose ips signature status on page 2644](#)

diagnose ips signature cycle

cycle

```
diagnose ips signature cycle <top N>
```

Parameter	Description	Type	Size
<top N>	<top N>	string	

diagnose ips signature hit

hit

```
diagnose ips signature hit <top N>
```

Parameter	Description	Type	Size
<top N>	<top N>	string	

diagnose ips signature on-hold

on-hold

```
diagnose ips signature on-hold <vdom> <rule id>
```

Parameter	Description	Type	Size
<vdom>	<vdom>	string	
<rule id>	<rule id>	string	

diagnose ips signature status

status

```
diagnose ips signature status <severity mask>
```

Parameter	Description	Type	Size
<severity mask>	<severity mask>	string	

diagnose ips ssl

This topic includes the following commands:

- [diagnose ips ssl bypass on page 2644](#)
- [diagnose ips ssl cc-alg on page 2644](#)
- [diagnose ips ssl ciphers on page 2645](#)
- [diagnose ips ssl clear on page 2645](#)
- [diagnose ips ssl debug on page 2645](#)
- [diagnose ips ssl debug-status on page 2645](#)
- [diagnose ips ssl noscan on page 2645](#)
- [diagnose ips ssl resume on page 2646](#)
- [diagnose ips ssl status on page 2646](#)

diagnose ips ssl bypass

bypass

```
diagnose ips ssl bypass <enable | disable>
```

Parameter	Description	Type	Size
<enable disable>	enable disable	string	

diagnose ips ssl cc-alg

cc-alg

```
diagnose ips ssl cc-alg <bic|cubic>
```

Parameter	Description	Type	Size
<bic cubic>	bic cubic	string	

diagnose ips ssl ciphers

ciphers

```
diagnose ips ssl ciphers
```

diagnose ips ssl clear

clear

```
diagnose ips ssl clear
```

diagnose ips ssl debug

debug

```
diagnose ips ssl debug <none|err|warn|info|dbg|noise>
```

Parameter	Description	Type	Size
<none err warn info dbg noise>	none err warn info dbg noise	string	

diagnose ips ssl debug-status

debug-status

```
diagnose ips ssl debug-status
```

diagnose ips ssl noscan

noscan

```
diagnose ips ssl noscan <enable | disable>
```

Parameter	Description	Type	Size
<enable disable>	enable disable	string	

diagnose ips ssl resume

resume

```
diagnose ips ssl resume <enable | disable>
```

Parameter	Description	Type	Size
<enable disable>	enable disable	string	

diagnose ips ssl status

status

```
diagnose ips ssl status
```

diagnose ips test

This topic includes the following commands:

- [diagnose ips test cmd on page 2646](#)

diagnose ips test cmd

cmd

```
diagnose ips test cmd <cmd1;cmd2;cmd3>
```

Parameter	Description	Type	Size
<cmd1;cmd2;cmd3>	cmd1;cmd2;cmd3	string	

diagnose ips urlfilter

This topic includes the following commands:

- [diagnose ips urlfilter clear on page 2647](#)
- [diagnose ips urlfilter status on page 2647](#)

diagnose ips urlfilter clear

clear

```
diagnose ips urlfilter clear
```

diagnose ips urlfilter status

status

```
diagnose ips urlfilter status
```

diagnose ips vpatch

This topic includes the following commands:

- [diagnose ips vpatch fmwp-enable-all on page 2647](#)
- [diagnose ips vpatch fmwp-reset on page 2647](#)
- [diagnose ips vpatch fmwp-status on page 2648](#)

diagnose ips vpatch fmwp-enable-all

fmwp-enable-all

```
diagnose ips vpatch fmwp-enable-all
```

diagnose ips vpatch fmwp-reset

fmwp-reset

```
diagnose ips vpatch fwp-reset
```

diagnose ips vpatch fwp-status

fwp-status

```
diagnose ips vpatch fwp-status
```

diagnose ipv6 address

IPv6 addresses.

This topic includes the following commands:

- [diagnose ipv6 address add on page 2648](#)
- [diagnose ipv6 address anycast on page 2648](#)
- [diagnose ipv6 address delete on page 2649](#)
- [diagnose ipv6 address list on page 2649](#)
- [diagnose ipv6 address multicast on page 2649](#)

diagnose ipv6 address add

Add IPv6 address.

```
diagnose ipv6 address add <intf-name> <xxxx:xxxx:xxxx:xxxx:xxxx:xxxx:xxxx:xxxx/xxx>
```

Parameter	Description	Type	Size
<intf-name>	Interface Name.	string	
<xxxx:xxxx:xxxx:xxxx:xxxx:xxxx:xxxx:xxxx/xxx>	IPv6 prefix.	string	

diagnose ipv6 address anycast

Add IPv6 anycast address.

```
diagnose ipv6 address anycast
```

diagnose ipv6 address delete

Delete IPv6 address.

```
diagnose ipv6 address delete <intf-name> <xxxx:xxxx:xxxx:xxxx:xxxx:xxxx:xxxx:xxxx/xxx>
```

Parameter	Description	Type	Size
<intf-name>	Interface Name.	string	
<xxxx:xxxx:xxxx:xxxx:xxxx:xxxx:xxxx:xxxx/xxx>	IPv6 prefix.	string	

diagnose ipv6 address list

List IPv6 addresses.

```
diagnose ipv6 address list
```

diagnose ipv6 address multicast

Add IPv6 multicast address.

```
diagnose ipv6 address multicast <intf-name> <xxxx:xxxx:xxxx:xxxx:xxxx:xxxx:xxxx:xxxx/xxx>
```

Parameter	Description	Type	Size
<intf-name>	Interface Name.	string	
<xxxx:xxxx:xxxx:xxxx:xxxx:xxxx:xxxx:xxxx/xxx>	IPv6 prefix.	string	

diagnose ipv6 devconf

IPv6 device config.

This topic includes the following commands:

- [diagnose ipv6 devconf accept-dad](#) on page 2649
- [diagnose ipv6 devconf disable_ipv6](#) on page 2650

diagnose ipv6 devconf accept-dad

IPv6 Duplicate Address Detection.


```
diagnose ipv6 devconf accept-dad <0, 1 or 2>
```

Parameter	Description	Type	Size
<0, 1 or 2>	0: disable DAD; 1: enable DAD; 2: enable DAD, and disable IPv6 operation if MAC-based duplicate link-local address has been found	string	

diagnose ipv6 devconf disable_ipv6

Disable/enable IPv6 operation.

```
diagnose ipv6 devconf disable_ipv6 <0 or 1>
```

Parameter	Description	Type	Size
<0 or 1>	0: enabling IPv6 operation; 1: disabling.	string	

diagnose ipv6 gre-tunnel

tunnels

This topic includes the following commands:

- [diagnose ipv6 gre-tunnel flush on page 2650](#)
- [diagnose ipv6 gre-tunnel list on page 2650](#)

diagnose ipv6 gre-tunnel flush

Flush GRE tunnels.

```
diagnose ipv6 gre-tunnel flush
```

diagnose ipv6 gre-tunnel list

Show GRE tunnels.

```
diagnose ipv6 gre-tunnel list
```

diagnose ipv6 ipv6-tunnel

tunnels

This topic includes the following commands:

- [diagnose ipv6 ipv6-tunnel flush on page 2651](#)
- [diagnose ipv6 ipv6-tunnel list on page 2651](#)

diagnose ipv6 ipv6-tunnel flush

Flush tunnels.

```
diagnose ipv6 ipv6-tunnel flush
```

diagnose ipv6 ipv6-tunnel list

Show tunnels.

```
diagnose ipv6 ipv6-tunnel list
```

diagnose ipv6 multicast

Multicast information.

This topic includes the following commands:

- [diagnose ipv6 multicast mroute on page 2651](#)
- [diagnose ipv6 multicast status on page 2652](#)
- [diagnose ipv6 multicast vif on page 2652](#)

diagnose ipv6 multicast mroute

Multicast FIB.

```
diagnose ipv6 multicast mroute
```

diagnose ipv6 multicast status

Multicast status.

```
diagnose ipv6 multicast status
```

diagnose ipv6 multicast vif

Multicast VIF device info.

```
diagnose ipv6 multicast vif
```

diagnose ipv6 neighbor-cache

IPv6 neighbor-cache table.

This topic includes the following commands:

- [diagnose ipv6 neighbor-cache add on page 2652](#)
- [diagnose ipv6 neighbor-cache delete on page 2652](#)
- [diagnose ipv6 neighbor-cache flush on page 2653](#)
- [diagnose ipv6 neighbor-cache list on page 2653](#)

diagnose ipv6 neighbor-cache add

Add an IPv6 neighbor cache entry.

```
diagnose ipv6 neighbor-cache add <intf-name> <xxxx:xxxx:xxxx:xxxx:xxxx:xxxx:xxxx:xxxx>  
<XX:XX:XX:XX:XX:XX>
```

Parameter	Description	Type	Size
<intf-name>	Interface Name.	string	
<xxxx:xxxx:xxxx:xxxx:xxxx:xxxx:xxxx:xxxx>	IPv6 address.	string	
<XX:XX:XX:XX:XX:XX>	MAC address.	string	

diagnose ipv6 neighbor-cache delete

Delete an IPv6 neighbor cache entry.

```
diagnose ipv6 neighbor-cache delete <intf-name> <xxxx:xxxx:xxxx:xxxx:xxxx:xxxx:xxxx:xxxx>
```

Parameter	Description	Type	Size
<intf-name>	Interface Name.	string	
<xxxx:xxxx:xxxx:xxxx:xxxx:xxxx:xxxx:xxxx>	IPv6 address.	string	

diagnose ipv6 neighbor-cache flush

Flush IPv6 neighbor cache table.

```
diagnose ipv6 neighbor-cache flush <intf-name>
```

Parameter	Description	Type	Size
<intf-name>	Interface Name.	string	

diagnose ipv6 neighbor-cache list

Show IPv6 neighbor cache table.

```
diagnose ipv6 neighbor-cache list
```

diagnose ipv6 proute

IPv6 policy routing.

This topic includes the following commands:

- [diagnose ipv6 proute match on page 2653](#)

diagnose ipv6 proute match

Match IPv6 route to policy routes.

```
diagnose ipv6 proute match <xxxx:xxxx:xxxx:xxxx:xxxx:xxxx:xxxx:xxxx>  
<xxxx:xxxx:xxxx:xxxx:xxxx:xxxx:xxxx:xxxx> <intf-name> <0-255> <0-65535>
```

Parameter	Description	Type	Size
<xxxx:xxxx:xxxx:xxxx:xxxx:xxxx:xxxx:xxxx>	IPv6 destination address.	string	

Parameter	Description	Type	Size
<xxxx:xxxx:xxxx:xxxx:xxxx:xxxx:xxxx:xxxx>	Source IP or MAC address.	string	
<intf-name>	Interface Name.	string	
<0-255>	Protocol.	string	
<0-65535>	Destination port.	string	

diagnose ipv6 route

IPv6 routing table.

This topic includes the following commands:

- [diagnose ipv6 route list on page 2654](#)

diagnose ipv6 route list

List IPv6 routing table.

```
diagnose ipv6 route list
```

diagnose ipv6 router ospf

OSPFv3 protocol.

This topic includes the following commands:

- [diagnose ipv6 router ospf all on page 2655](#)
- [diagnose ipv6 router ospf events on page 2655](#)
- [diagnose ipv6 router ospf ifsm on page 2655](#)
- [diagnose ipv6 router ospf level on page 2655](#)
- [diagnose ipv6 router ospf level critical on page 2655](#)
- [diagnose ipv6 router ospf level error on page 2655](#)
- [diagnose ipv6 router ospf level info on page 2656](#)
- [diagnose ipv6 router ospf level none on page 2656](#)
- [diagnose ipv6 router ospf level warn on page 2656](#)
- [diagnose ipv6 router ospf lsa on page 2656](#)
- [diagnose ipv6 router ospf nsm on page 2656](#)
- [diagnose ipv6 router ospf packet on page 2657](#)

- [diagnose ipv6 router ospf route on page 2657](#)
- [diagnose ipv6 router ospf show on page 2657](#)

diagnose ipv6 router ospf all

All OSPFv3 debug.

```
diagnose ipv6 router ospf all
```

diagnose ipv6 router ospf events

OSPFv3 events.

```
diagnose ipv6 router ospf events
```

diagnose ipv6 router ospf ifsm

OSPFv3 Interface State Machine.

```
diagnose ipv6 router ospf ifsm
```

diagnose ipv6 router ospf level

Debug level.

```
diagnose ipv6 router ospf level
```

diagnose ipv6 router ospf level critical

Critical level.

```
diagnose ipv6 router ospf level critical
```

diagnose ipv6 router ospf level error

Error level.

```
diagnose ipv6 router ospf level error
```

diagnose ipv6 router ospf level info

Information level.

```
diagnose ipv6 router ospf level info
```

diagnose ipv6 router ospf level none

None level.

```
diagnose ipv6 router ospf level none
```

diagnose ipv6 router ospf level warn

Warning level.

```
diagnose ipv6 router ospf level warn
```

diagnose ipv6 router ospf lsa

OSPFv3 Link State Advertisement.

```
diagnose ipv6 router ospf lsa
```

diagnose ipv6 router ospf nfsm

OSPFv3 Neighbor State Machine.

```
diagnose ipv6 router ospf nfsm
```

diagnose ipv6 router ospf nsm

OSPFv3 NSM information.

```
diagnose ipv6 router ospf nsm
```

diagnose ipv6 router ospf packet

OSPFv3 packets.

```
diagnose ipv6 router ospf packet
```

diagnose ipv6 router ospf route

OSPFv3 route information.

```
diagnose ipv6 router ospf route
```

diagnose ipv6 router ospf show

Show status of OSPFv3 debugging.

```
diagnose ipv6 router ospf show
```

diagnose ipv6 router rip

RIPng protocol.

This topic includes the following commands:

- [diagnose ipv6 router rip all on page 2657](#)
- [diagnose ipv6 router rip events on page 2658](#)
- [diagnose ipv6 router rip level on page 2658](#)
- [diagnose ipv6 router rip level critical on page 2658](#)
- [diagnose ipv6 router rip level error on page 2658](#)
- [diagnose ipv6 router rip level info on page 2658](#)
- [diagnose ipv6 router rip level none on page 2658](#)
- [diagnose ipv6 router rip level warn on page 2659](#)
- [diagnose ipv6 router rip nsm on page 2659](#)
- [diagnose ipv6 router rip packet on page 2659](#)
- [diagnose ipv6 router rip show on page 2659](#)

diagnose ipv6 router rip all

Enable all debugging.


```
diagnose ipv6 router rip all
```

diagnose ipv6 router rip events

RIPng events.

```
diagnose ipv6 router rip events
```

diagnose ipv6 router rip level

Debug level.

```
diagnose ipv6 router rip level
```

diagnose ipv6 router rip level critical

Critical level.

```
diagnose ipv6 router rip level critical
```

diagnose ipv6 router rip level error

Error level.

```
diagnose ipv6 router rip level error
```

diagnose ipv6 router rip level info

Information level.

```
diagnose ipv6 router rip level info
```

diagnose ipv6 router rip level none

None level.

```
diagnose ipv6 router rip level none
```

diagnose ipv6 router rip level warn

Warning level.

```
diagnose ipv6 router rip level warn
```

diagnose ipv6 router rip nsm

RIPng NSM interface

```
diagnose ipv6 router rip nsm
```

diagnose ipv6 router rip packet

RIPng packets

```
diagnose ipv6 router rip packet
```

diagnose ipv6 router rip show

Show status of RIPng debugging.

```
diagnose ipv6 router rip show
```

diagnose ipv6 router zl6

Set flag to make diag ipv6 router commands persist after router restart.

This topic includes the following commands:

- [diagnose ipv6 router zl6 disable on page 2659](#)
- [diagnose ipv6 router zl6 enable on page 2660](#)
- [diagnose ipv6 router zl6 show on page 2660](#)

diagnose ipv6 router zl6 disable

Debug events/level will reset to default after restart.

```
diagnose ipv6 router zl6 disable
```

diagnose ipv6 router zl6 enable

Newly enabled debug events/level will persist after router restart.

```
diagnose ipv6 router zl6 enable
```

diagnose ipv6 router zl6 show

Show whether flag is set.

```
diagnose ipv6 router zl6 show
```

diagnose ipv6 sit-tunnel

tunnels

This topic includes the following commands:

- [diagnose ipv6 sit-tunnel flush on page 2660](#)
- [diagnose ipv6 sit-tunnel list on page 2660](#)

diagnose ipv6 sit-tunnel flush

Flush tunnels.

```
diagnose ipv6 sit-tunnel flush
```

diagnose ipv6 sit-tunnel list

Show tunnels.

```
diagnose ipv6 sit-tunnel list
```

diagnose lldprx

Link Layer Description Protocol (LLDP) Receiver diagnostics.

This topic includes the following commands:

- [diagnose lldprx config on page 2661](#)
- [diagnose lldprx neighbor on page 2661](#)
- [diagnose lldprx neighbor clear on page 2661](#)
- [diagnose lldprx neighbor details on page 2661](#)
- [diagnose lldprx neighbor summary on page 2662](#)
- [diagnose lldprx port on page 2662](#)
- [diagnose lldprx port details on page 2662](#)
- [diagnose lldprx port neighbor on page 2662](#)
- [diagnose lldprx port neighbor clear on page 2662](#)
- [diagnose lldprx port neighbor details on page 2662](#)
- [diagnose lldprx port neighbor summary on page 2663](#)
- [diagnose lldprx port summary on page 2663](#)
- [diagnose lldprx restart on page 2663](#)
- [diagnose lldprx stats on page 2663](#)
- [diagnose lldprx stats config on page 2663](#)
- [diagnose lldprx stats crash on page 2663](#)
- [diagnose lldprx stats manager on page 2664](#)
- [diagnose lldprx stats scan on page 2664](#)

diagnose lldprx config

Display LLDP configuration.

```
diagnose lldprx config
```

diagnose lldprx neighbor

Display LLDP neighbors.

```
diagnose lldprx neighbor
```

diagnose lldprx neighbor clear

Clear the LLDP from all ports.

```
diagnose lldprx neighbor clear
```

diagnose lldprx neighbor details

Display details of each LLDP neighbor.

```
diagnose lldprx neighbor details
```

diagnose lldprx neighbor summary

Display summary of each LLDP neighbor.

```
diagnose lldprx neighbor summary
```

diagnose lldprx port

Display summary information about each port with LLDP reception enabled.

```
diagnose lldprx port
```

diagnose lldprx port details

Display details of the LLDP enabled ports.

```
diagnose lldprx port details
```

diagnose lldprx port neighbor

Display information about each LLDP neighbor for one or more ports.

```
diagnose lldprx port neighbor
```

diagnose lldprx port neighbor clear

Clear the LLDP neighbor information for one or more ports.

```
diagnose lldprx port neighbor clear
```

diagnose lldprx port neighbor details

Display details of each LLDP neighbor for one or more ports.

```
diagnose lldprx port neighbor details
```

diagnose lldprx port neighbor summary

Display summary of each LLDP neighbor for one or more ports.

```
diagnose lldprx port neighbor summary
```

diagnose lldprx port summary

Display summary of the LLDP enabled ports.

```
diagnose lldprx port summary
```

diagnose lldprx restart

Restart the LLDPRX process

```
diagnose lldprx restart
```

diagnose lldprx stats

Display LLDPRX statistics.

```
diagnose lldprx stats
```

diagnose lldprx stats config

Display LLDPRX statistics for the configuration handling process.

```
diagnose lldprx stats config
```

diagnose lldprx stats crash

Display LLDPRX statistics for the crash log generating process.

```
diagnose lldprx stats crash
```

diagnose lldprx stats manager

Display LLDPRX statistics for the manager process.

```
diagnose lldprx stats manager
```

diagnose lldprx stats scan

Display LLDPRX statistics for the scanning process.

```
diagnose lldprx stats scan
```

diagnose lldptx

Link Layer Description Protocol (LLDP) Transmitter diagnostics.

This topic includes the following commands:

- [diagnose lldptx log on page 2665](#)
- [diagnose lldptx log terminal on page 2665](#)
- [diagnose lldptx log terminal clear on page 2665](#)
- [diagnose lldptx log terminal reset on page 2665](#)
- [diagnose lldptx log terminal stats on page 2665](#)
- [diagnose lldptx restart on page 2665](#)
- [diagnose lldptx scheduler-times on page 2666](#)
- [diagnose lldptx scheduler-times display on page 2666](#)
- [diagnose lldptx scheduler-times start on page 2666](#)
- [diagnose lldptx scheduler-times stop on page 2666](#)
- [diagnose lldptx stats on page 2666](#)
- [diagnose lldptx stats counts on page 2666](#)
- [diagnose lldptx stats list on page 2667](#)
- [diagnose lldptx stats objects on page 2667](#)
- [diagnose lldptx valgrind on page 2667](#)
- [diagnose lldptx valgrind disable on page 2667](#)
- [diagnose lldptx valgrind enable on page 2667](#)
- [diagnose lldptx valgrind log on page 2667](#)
- [diagnose lldptx valgrind log clear on page 2668](#)
- [diagnose lldptx valgrind log show on page 2668](#)
- [diagnose lldptx valgrind memcheck on page 2668](#)
- [diagnose lldptx valgrind memcheck_less on page 2668](#)
- [diagnose lldptx valgrind status on page 2668](#)

diagnose lldptx log

Debug log.

```
diagnose lldptx log
```

diagnose lldptx log terminal

Debug log terminal statistics.

```
diagnose lldptx log terminal
```

diagnose lldptx log terminal clear

Clear debug log terminals.

```
diagnose lldptx log terminal clear
```

diagnose lldptx log terminal reset

Reset debug log terminals.

```
diagnose lldptx log terminal reset
```

diagnose lldptx log terminal stats

Show debug log terminal statistics.

```
diagnose lldptx log terminal stats
```

diagnose lldptx restart

Restart LLDP transmitter.

```
diagnose lldptx restart
```


diagnose lldptx scheduler-times

Scheduler times.

```
diagnose lldptx scheduler-times
```

diagnose lldptx scheduler-times display

Display scheduler times.

```
diagnose lldptx scheduler-times display
```

diagnose lldptx scheduler-times start

Start measuring scheduler times.

```
diagnose lldptx scheduler-times start
```

diagnose lldptx scheduler-times stop

Stop measuring scheduler times.

```
diagnose lldptx scheduler-times stop
```

diagnose lldptx stats

Source visibility statistics.

```
diagnose lldptx stats
```

diagnose lldptx stats counts

Counters.

```
diagnose lldptx stats counts
```

diagnose lldptx stats list

List all statistics.

```
diagnose lldptx stats list
```

diagnose lldptx stats objects

Objects.

```
diagnose lldptx stats objects
```

diagnose lldptx valgrind

Valgrind analysis.

```
diagnose lldptx valgrind
```

diagnose lldptx valgrind disable

Force daemon to restart.

```
diagnose lldptx valgrind disable
```

diagnose lldptx valgrind enable

Force daemon to restart.

```
diagnose lldptx valgrind enable
```

diagnose lldptx valgrind log

Valgrind logs.

```
diagnose lldptx valgrind log
```

diagnose lldptx valgrind log clear

Clear logs.

```
diagnose lldptx valgrind log clear
```

diagnose lldptx valgrind log show

Show logs.

```
diagnose lldptx valgrind log show
```

diagnose lldptx valgrind memcheck

Force daemon to restart.

```
diagnose lldptx valgrind memcheck
```

diagnose lldptx valgrind memcheck_less

Force daemon to restart.

```
diagnose lldptx valgrind memcheck_less
```

diagnose lldptx valgrind status

Show valgrind status.

```
diagnose lldptx valgrind status
```

diagnose log

log

This topic includes the following commands:

- [diagnose log alertmail on page 2669](#)
- [diagnose log alertmail authcode on page 2669](#)
- [diagnose log alertmail test on page 2669](#)

- [diagnose log check-empty on page 2670](#)
- [diagnose log clear-kernel-stats on page 2670](#)
- [diagnose log dummy-log on page 2670](#)
- [diagnose log dummy-log fill on page 2670](#)
- [diagnose log dummy-log remove on page 2670](#)
- [diagnose log field-enum on page 2670](#)
- [diagnose log field-list on page 2671](#)
- [diagnose log kernel-stats on page 2671](#)
- [diagnose log severity on page 2671](#)
- [diagnose log show on page 2671](#)
- [diagnose log stress-test on page 2671](#)
- [diagnose log sub-category on page 2671](#)
- [diagnose log test on page 2672](#)
- [diagnose log test-text on page 2672](#)
- [diagnose log wireless-controller on page 2672](#)

diagnose log alertmail

alertmail

```
diagnose log alertmail
```

diagnose log alertmail authcode

Send a test authentication code.

```
diagnose log alertmail authcode <recipient>
```

Parameter	Description	Type	Size
<recipient>	recipient's email address	string	

diagnose log alertmail test

Send a test alert mail.

```
diagnose log alertmail test <level> <number>
```

Parameter	Description	Type	Size
<level>	Log level number.	string	
<number>	Number of messages.	string	

diagnose log check-empty

check-empty

```
diagnose log check-empty
```

diagnose log clear-kernel-stats

Clear logging statistics.

```
diagnose log clear-kernel-stats
```

diagnose log dummy-log

dummy-log

```
diagnose log dummy-log
```

diagnose log dummy-log fill

Fill up log disk with dummy logs.

```
diagnose log dummy-log fill
```

diagnose log dummy-log remove

Remove dummy logs from log disk.

```
diagnose log dummy-log remove
```

diagnose log field-enum

field-enum

```
diagnose log field-enum
```

diagnose log field-list

field-list

```
diagnose log field-list
```

diagnose log kernel-stats

Query logging statistics.

```
diagnose log kernel-stats
```

diagnose log severity

severity

```
diagnose log severity
```

diagnose log show

Display the contents of a log file.

```
diagnose log show
```

diagnose log stress-test

stress-test

```
diagnose log stress-test
```

diagnose log sub-category

sub-category

```
diagnose log sub-category
```

diagnose log test

Test miglog.

```
diagnose log test
```

diagnose log test-text

Test miglog.

```
diagnose log test-text
```

diagnose log wireless-controller

Test wireless event log.

```
diagnose log wireless-controller
```

diagnose lpmd

Longest Prefix Match Daemon

This topic includes the following commands:

- [diagnose lpmd debug on page 2672](#)
- [diagnose lpmd debug query on page 2672](#)
- [diagnose lpmd debug set on page 2673](#)
- [diagnose lpmd debug show on page 2673](#)

diagnose lpmd debug

set and show debug flags

```
diagnose lpmd debug
```

diagnose lpmd debug query

Query kernel route entry.

```
diagnose lpmd debug query
```

diagnose lpmd debug set

set debug flags : ERROR, INFO, DEBUG

```
diagnose lpmd debug set
```

diagnose lpmd debug show

Show current debug level.

```
diagnose lpmd debug show
```

diagnose netlink aggregate

802.3ad link aggregation

This topic includes the following commands:

- [diagnose netlink aggregate list on page 2673](#)
- [diagnose netlink aggregate list-active on page 2673](#)
- [diagnose netlink aggregate name on page 2674](#)
- [diagnose netlink aggregate port on page 2674](#)

diagnose netlink aggregate list

list of 802.3ad link aggregation interfaces

```
diagnose netlink aggregate list
```

diagnose netlink aggregate list-active

list active 802.3ad link aggregation interfaces

```
diagnose netlink aggregate list-active <name>
```

Parameter	Description	Type	Size
<name>	aggregate name	string	

diagnose netlink aggregate name

details of a specific 802.3ad link aggregate

```
diagnose netlink aggregate name <name>
```

Parameter	Description	Type	Size
<name>	aggregate name	string	

diagnose netlink aggregate port

determine which physical port a packet will exit on

```
diagnose netlink aggregate port
```

diagnose netlink backlog

UDP sockets.

This topic includes the following commands:

- [diagnose netlink backlog get on page 2674](#)
- [diagnose netlink backlog set on page 2674](#)

diagnose netlink backlog get

Show backlog.

```
diagnose netlink backlog get
```

diagnose netlink backlog set

Backlog.

```
diagnose netlink backlog set <backlog>
```

Parameter	Description	Type	Size
<backlog>	Backlog value.	string	

diagnose netlink brctl

brctl

This topic includes the following commands:

- [diagnose netlink brctl domain on page 2675](#)
- [diagnose netlink brctl list on page 2675](#)
- [diagnose netlink brctl name on page 2675](#)

diagnose netlink brctl domain

domain

```
diagnose netlink brctl domain <name> <id>
```

Parameter	Description	Type	Size
<name>	Bridge name domain_id ...	string	
<id>	id	string	

diagnose netlink brctl list

list

```
diagnose netlink brctl list
```

diagnose netlink brctl name

name

```
diagnose netlink brctl name <type> <name>
```

Parameter	Description	Type	Size
<type>	"host" or "port"	string	
<name>	name	string	

diagnose netlink device

devices

This topic includes the following commands:

- [diagnose netlink device list on page 2676](#)

diagnose netlink device list

List devices.

```
diagnose netlink device list
```

diagnose netlink dstmac

Destination MAC substitution.

This topic includes the following commands:

- [diagnose netlink dstmac flush on page 2676](#)
- [diagnose netlink dstmac list on page 2676](#)

diagnose netlink dstmac flush

flush

```
diagnose netlink dstmac flush
```

diagnose netlink dstmac list

list

```
diagnose netlink dstmac list [name]
```

Parameter	Description	Type	Size
[name]	Interface name.	string	

diagnose netlink interface

Network interfaces.

This topic includes the following commands:

- [diagnose netlink interface clear on page 2677](#)
- [diagnose netlink interface list on page 2677](#)
- [diagnose netlink interface packet-rate on page 2677](#)
- [diagnose netlink interface speed-test on page 2677](#)
- [diagnose netlink interface speed-test-result on page 2678](#)
- [diagnose netlink interface speed-test-result-clear on page 2678](#)
- [diagnose netlink interface speed-test-tunnel on page 2678](#)

diagnose netlink interface clear

Clear interface counters.

```
diagnose netlink interface clear
```

diagnose netlink interface list

List interfaces.

```
diagnose netlink interface list
```

diagnose netlink interface packet-rate

Show send/receive rate of interfaces.

```
diagnose netlink interface packet-rate
```

diagnose netlink interface speed-test

Execute speed-test on the interface.

```
diagnose netlink interface speed-test <intf-name> <server> <mode> <dry-run>
```

Parameter	Description	Type	Size
<intf-name>	Interface Name.	string	
<server>	server name.	string	
<mode>	Optional. Auto(default), TCP or UDP.	string	
<dry-run>	Optional. <0> execute speed-test; <1> dry run to verify routing etc.	string	

diagnose netlink interface speed-test-result

Get speed-test result for a specific test ID.

```
diagnose netlink interface speed-test-result <test-id>
```

Parameter	Description	Type	Size
<test-id>	Test ID from executing speed-test.	string	

diagnose netlink interface speed-test-result-clear

Remove speed test results from disk.

```
diagnose netlink interface speed-test-result-clear
```

diagnose netlink interface speed-test-tunnel

Request speed-test on tunnels' underlay interfaces.

```
diagnose netlink interface speed-test-tunnel <ipsec-phase1-interface> <all | a tunnel name>
```

Parameter	Description	Type	Size
<ipsec-phase1-interface>	Interface Name.	string	
<all a tunnel name>	Specify tunnel's name or 'all'	string	

diagnose netlink intf-class

Network interface class.

This topic includes the following commands:

- [diagnose netlink intf-class list on page 2679](#)

diagnose netlink intf-class list

list

```
diagnose netlink intf-class list <string>
```

Parameter	Description	Type	Size
<string>	Interface name.	string	

diagnose netlink intf-qdisc

Network interface qdisc.

This topic includes the following commands:

- [diagnose netlink intf-qdisc list on page 2679](#)

diagnose netlink intf-qdisc list

list

```
diagnose netlink intf-qdisc list <string>
```

Parameter	Description	Type	Size
<string>	Interface name.	string	

diagnose netlink qlen

Interface queue length.

This topic includes the following commands:

- [diagnose netlink qlen get on page 2680](#)
- [diagnose netlink qlen set on page 2680](#)

diagnose netlink qlen get

Get queue length.

```
diagnose netlink qlen get <intf-name>
```

Parameter	Description	Type	Size
<intf-name>	Interface Name.	string	

diagnose netlink qlen set

Queue length.

```
diagnose netlink qlen set <intf-name> <len_integer>
```

Parameter	Description	Type	Size
<intf-name>	Interface Name.	string	
<len_integer>	Length value.	string	

diagnose netlink redundant

redundant interfaces

This topic includes the following commands:

- [diagnose netlink redundant list on page 2680](#)
- [diagnose netlink redundant name on page 2681](#)

diagnose netlink redundant list

list of redundant interfaces

```
diagnose netlink redundant list
```

diagnose netlink redundant name

details of a specific redundant interface

```
diagnose netlink redundant name <name>
```

Parameter	Description	Type	Size
<name>	redundant interface name	string	

diagnose netlink switch

Switch ports.

This topic includes the following commands:

- [diagnose netlink switch list on page 2681](#)

diagnose netlink switch list

List switch ports.

```
diagnose netlink switch list
```

diagnose nodejs

Node.JS web server diagnostics.

This topic includes the following commands:

- [diagnose nodejs health-check on page 2682](#)
- [diagnose nodejs health-check ping on page 2682](#)
- [diagnose nodejs logs on page 2682](#)
- [diagnose nodejs logs delete on page 2682](#)
- [diagnose nodejs logs list on page 2682](#)
- [diagnose nodejs logs show on page 2682](#)
- [diagnose nodejs logs show-all on page 2683](#)
- [diagnose nodejs performance on page 2683](#)
- [diagnose nodejs performance mass-ztna-event-logs on page 2683](#)
- [diagnose nodejs process on page 2683](#)
- [diagnose nodejs process restart on page 2683](#)

diagnose nodejs health-check

Node.JS health check commands.

```
diagnose nodejs health-check
```

diagnose nodejs health-check ping

Send HTTP request to Node.JS, and check if Node.JS can handle HTTP request.

```
diagnose nodejs health-check ping
```

diagnose nodejs logs

Show/List Node.JS debug log.

```
diagnose nodejs logs
```

diagnose nodejs logs delete

Delete one of the Node.JS debug log files. Use log sequence number as an argument.

```
diagnose nodejs logs delete <log sequence number>
```

Parameter	Description	Type	Size
<log sequence number>	Log sequence number.	string	

diagnose nodejs logs list

List all of the Node.JS debug log files.

```
diagnose nodejs logs list
```

diagnose nodejs logs show

Show one of the Node.JS debug logs files. Use log sequence number as an argument.

```
diagnose nodejs logs show <log sequence number>
```

Parameter	Description	Type	Size
<log sequence number>	Log sequence number.	string	

diagnose nodejs logs show-all

Show all of the Node.JS debug log files.

```
diagnose nodejs logs show-all
```

diagnose nodejs performance

Performance testing for Node.js.

```
diagnose nodejs performance
```

diagnose nodejs performance mass-ztna-event-logs

Generate thousands of ZTNA tag update events.

```
diagnose nodejs performance mass-ztna-event-logs <count>
```

Parameter	Description	Type	Size
<count>	Number of events to generate.	string	

diagnose nodejs process

Actions to Node.JS process.

```
diagnose nodejs process
```

diagnose nodejs process restart

Send SIGKILL and restart Node.JS.

```
diagnose nodejs process restart
```

diagnose npd

NPDaemon

This topic includes the following commands:

- [diagnose npd debug on page 2684](#)
- [diagnose npd debug set on page 2684](#)
- [diagnose npd debug show on page 2684](#)
- [diagnose npd policy on page 2684](#)
- [diagnose npd policy dump on page 2685](#)
- [diagnose npd policy flush on page 2685](#)
- [diagnose npd policy sync on page 2685](#)
- [diagnose npd stats on page 2685](#)

diagnose npd debug

set and show debug flags

```
diagnose npd debug
```

diagnose npd debug set

set debug flags : clear, trace, schedule, neigh, policy, ple, reg, fle, all

```
diagnose npd debug set
```

diagnose npd debug show

Show current debug level.

```
diagnose npd debug show
```

diagnose npd policy

Policy related CMD.

```
diagnose npd policy
```

diagnose npd policy dump

List NPD policy. syntax : 4|6 [gnumber index]

```
diagnose npd policy dump
```

diagnose npd policy flush

Flush NPD policy.

```
diagnose npd policy flush
```

diagnose npd policy sync

Sync NPD policy with FOS.

```
diagnose npd policy sync
```

diagnose npd stats

List NPD Statistics.

```
diagnose npd stats
```

diagnose npu

Network Processing Unit

This topic includes the following commands:

- [diagnose npu np6 on page 2690](#)
- [diagnose npu np6 anomaly-drop on page 2690](#)
- [diagnose npu np6 anomaly-drop-all on page 2691](#)
- [diagnose npu np6 cwp-frame-chk-act on page 2691](#)
- [diagnose npu np6 dce on page 2691](#)
- [diagnose npu np6 dce-all on page 2691](#)
- [diagnose npu np6 debug-console on page 2692](#)
- [diagnose npu np6 eeprom-read on page 2692](#)
- [diagnose npu np6 fastpath on page 2692](#)
- [diagnose npu np6 fastpath disable on page 2692](#)

- [diagnose npu np6 fastpath enable on page 2692](#)
- [diagnose npu np6 gige-port-stats on page 2693](#)
- [diagnose npu np6 gige-port-stats-clear on page 2693](#)
- [diagnose npu np6 gmac-stats on page 2693](#)
- [diagnose npu np6 gmac-stats-clear on page 2693](#)
- [diagnose npu np6 hardware-cap on page 2693](#)
- [diagnose npu np6 hpe on page 2694](#)
- [diagnose npu np6 hrx-drop on page 2694](#)
- [diagnose npu np6 hrx-drop-all on page 2694](#)
- [diagnose npu np6 ipsec-stats on page 2694](#)
- [diagnose npu np6 ipsec-stats-clear on page 2695](#)
- [diagnose npu np6 monitor-hpe on page 2695](#)
- [diagnose npu np6 monitor-hpe disable on page 2695](#)
- [diagnose npu np6 monitor-hpe enable on page 2695](#)
- [diagnose npu np6 npu-feature on page 2695](#)
- [diagnose npu np6 pdq on page 2696](#)
- [diagnose npu np6 port-list on page 2696](#)
- [diagnose npu np6 portmod on page 2696](#)
- [diagnose npu np6 register on page 2696](#)
- [diagnose npu np6 session-stats on page 2696](#)
- [diagnose npu np6 session-stats-clear on page 2697](#)
- [diagnose npu np6 show-cwp-undersize-act on page 2697](#)
- [diagnose npu np6 sse-drift-summary on page 2697](#)
- [diagnose npu np6 sse-latch-debug on page 2697](#)
- [diagnose npu np6 sse-purge-drift on page 2697](#)
- [diagnose npu np6 sse-register on page 2698](#)
- [diagnose npu np6 sse-stats on page 2698](#)
- [diagnose npu np6 sse-stats-clear on page 2698](#)
- [diagnose npu np6 xgmac-stats on page 2698](#)
- [diagnose npu np6 xgmac-stats-clear on page 2699](#)
- [diagnose npu np6lite on page 2699](#)
- [diagnose npu np6lite anomaly-drop on page 2699](#)
- [diagnose npu np6lite dce on page 2699](#)
- [diagnose npu np6lite fastpath on page 2700](#)
- [diagnose npu np6lite fastpath disable on page 2700](#)
- [diagnose npu np6lite fastpath enable on page 2700](#)
- [diagnose npu np6lite npu-feature on page 2700](#)
- [diagnose npu np6lite port-list on page 2700](#)
- [diagnose npu np6lite register on page 2701](#)
- [diagnose npu np6lite session on page 2701](#)
- [diagnose npu np6lite session-stats on page 2701](#)
- [diagnose npu np6lite sse-stats on page 2701](#)
- [diagnose npu np6xlite on page 2701](#)

- [diagnose npu np6xlite anomaly-drop on page 2702](#)
- [diagnose npu np6xlite dce on page 2702](#)
- [diagnose npu np6xlite fastpath on page 2702](#)
- [diagnose npu np6xlite fastpath disable on page 2702](#)
- [diagnose npu np6xlite fastpath enable on page 2702](#)
- [diagnose npu np6xlite ipsec-fragment on page 2703](#)
- [diagnose npu np6xlite ipsec-fragment inner on page 2703](#)
- [diagnose npu np6xlite ipsec-fragment outer on page 2703](#)
- [diagnose npu np6xlite mse-dump on page 2703](#)
- [diagnose npu np6xlite mse-dump all on page 2703](#)
- [diagnose npu np6xlite mse-dump summary on page 2704](#)
- [diagnose npu np6xlite mse-dump valid on page 2704](#)
- [diagnose npu np6xlite npu-feature on page 2704](#)
- [diagnose npu np6xlite port-list on page 2704](#)
- [diagnose npu np6xlite register on page 2704](#)
- [diagnose npu np6xlite session-dump on page 2705](#)
- [diagnose npu np6xlite session-stats on page 2705](#)
- [diagnose npu np6xlite sse-stats on page 2705](#)
- [diagnose npu np7 on page 2705](#)
- [diagnose npu np7 cgmact-stats on page 2706](#)
- [diagnose npu np7 cmd on page 2706](#)
- [diagnose npu np7 cmd all on page 2706](#)
- [diagnose npu np7 cmd dse on page 2706](#)
- [diagnose npu np7 cmd lpm-rlt on page 2707](#)
- [diagnose npu np7 cmd measure-rate on page 2707](#)
- [diagnose npu np7 cmd mse on page 2707](#)
- [diagnose npu np7 cmd rate on page 2707](#)
- [diagnose npu np7 cmd sse on page 2708](#)
- [diagnose npu np7 dce-dfr-drop on page 2708](#)
- [diagnose npu np7 dce-drop-all on page 2708](#)
- [diagnose npu np7 dce-eif-drop on page 2709](#)
- [diagnose npu np7 dce-hif-drop on page 2709](#)
- [diagnose npu np7 dce-hlx-drop on page 2709](#)
- [diagnose npu np7 dce-ipsec-drop on page 2709](#)
- [diagnose npu np7 dce-ipti-drop on page 2710](#)
- [diagnose npu np7 dce-l2p-drop on page 2710](#)
- [diagnose npu np7 dce-l2ti-drop on page 2710](#)
- [diagnose npu np7 dce-sse-drop on page 2711](#)
- [diagnose npu np7 dce-xhp-drop on page 2711](#)
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diagnose npu np6

Network Processor version 6

```
diagnose npu np6
```

diagnose npu np6 anomaly-drop

Show non-zero L3/L4 anomaly check drop counters.

```
diagnose npu np6 anomaly-drop <dev_id>
```

Parameter	Description	Type	Size
<dev_id>	NP6 ID	string	

diagnose npu np6 anomaly-drop-all

Show all L3/L4 anomaly check drop counters.

```
diagnose npu np6 anomaly-drop-all <dev_id>
```

Parameter	Description	Type	Size
<dev_id>	NP6 ID	string	

diagnose npu np6 cwp-frame-chk-act

Set CAPWAP frame check actions.

```
diagnose npu np6 cwp-frame-chk-act <ether-II-act> <802.3-act> <frame-len-error-act>
```

Parameter	Description	Type	Size
<ether-II-act>	Action for undersize Ethernet II frames, {drop trap-to-host}	string	
<802.3-act>	Action for undersize 802.3 frames, {drop trap-to-host}	string	
<frame-len-error-act>	Action for 802.3 frame length error, {drop trap-to-host}	string	

diagnose npu np6 dce

Show non-zero subengine drop counters.

```
diagnose npu np6 dce <dev_id>
```

Parameter	Description	Type	Size
<dev_id>	NP6 ID	string	

diagnose npu np6 dce-all

Show all subengine drop counters.

```
diagnose npu np6 dce-all <dev_id>
```

Parameter	Description	Type	Size
<dev_id>	NP6 ID	string	

diagnose npu np6 debug-console

Access debug console

```
diagnose npu np6 debug-console
```

diagnose npu np6 eeprom-read

Read NP6 EEPROM

```
diagnose npu np6 eeprom-read <dev_id>
```

Parameter	Description	Type	Size
<dev_id>	NP6 ID	string	

diagnose npu np6 fastpath

Configure fastpath

```
diagnose npu np6 fastpath
```

diagnose npu np6 fastpath disable

Disable fastpath

```
diagnose npu np6 fastpath disable <dev_id>
```

Parameter	Description	Type	Size
<dev_id>	NP6 ID	string	

diagnose npu np6 fastpath enable

Enable fastpath

```
diagnose npu np6 fastpath enable <dev_id>
```

Parameter	Description	Type	Size
<dev_id>	NP6 ID	string	

diagnose npu np6 gige-port-stats

Show GIGE PORT MIBs counters

```
diagnose npu np6 gige-port-stats <intf_name>
```

Parameter	Description	Type	Size
<intf_name>	NP6 GIGE Port Name	string	

diagnose npu np6 gige-port-stats-clear

Clear GIGE PORT MIBs counters

```
diagnose npu np6 gige-port-stats-clear <intf_name>
```

Parameter	Description	Type	Size
<intf_name>	NP6 GIGE Port Name	string	

diagnose npu np6 gmac-stats

Show GMAC MIBs counters

```
diagnose npu np6 gmac-stats <dev_id>
```

Parameter	Description	Type	Size
<dev_id>	NP6 ID	string	

diagnose npu np6 gmac-stats-clear

Clear GMAC MIBS counters

```
diagnose npu np6 gmac-stats-clear <dev_id>
```

Parameter	Description	Type	Size
<dev_id>	NP6 ID	string	

diagnose npu np6 hardware-cap

Show hardware capability definitions

```
diagnose npu np6 hardware-cap <dev_id>
```

Parameter	Description	Type	Size
<dev_id>	NP6 ID	string	

diagnose npu np6 hpe

Show HPE setting and host queue status counters.

```
diagnose npu np6 hpe <dev_id>
```

Parameter	Description	Type	Size
<dev_id>	NP6 ID	string	

diagnose npu np6 hrx-drop

Show non-zero host interface drop counters.

```
diagnose npu np6 hrx-drop <dev_id>
```

Parameter	Description	Type	Size
<dev_id>	NP6 ID	string	

diagnose npu np6 hrx-drop-all

Show all host interface drop counters.

```
diagnose npu np6 hrx-drop-all <dev_id>
```

Parameter	Description	Type	Size
<dev_id>	NP6 ID	string	

diagnose npu np6 ipsec-stats

Show IPsec offloading statistics

```
diagnose npu np6 ipsec-stats
```

diagnose npu np6 ipsec-stats-clear

Clear IPsec offloading statistics

```
diagnose npu np6 ipsec-stats-clear
```

diagnose npu np6 monitor-hpe

Monitor HPE setting and host queue status counters without packet dropping.

```
diagnose npu np6 monitor-hpe
```

diagnose npu np6 monitor-hpe disable

Disable HPE monitor

```
diagnose npu np6 monitor-hpe disable <dev_id>
```

Parameter	Description	Type	Size
<dev_id>	NP6 ID.	string	

diagnose npu np6 monitor-hpe enable

Enable HPE monitor

```
diagnose npu np6 monitor-hpe enable <dev_id>
```

Parameter	Description	Type	Size
<dev_id>	NP6 ID.	string	

diagnose npu np6 npu-feature

Show NPU feature and status

```
diagnose npu np6 npu-feature
```

diagnose npu np6 pdq

Show packet buffer queue counters

```
diagnose npu np6 pdq <dev_id>
```

Parameter	Description	Type	Size
<dev_id>	NP6 ID	string	

diagnose npu np6 port-list

Show port list

```
diagnose npu np6 port-list
```

diagnose npu np6 portmod

Show port group info.

```
diagnose npu np6 portmod
```

diagnose npu np6 register

Show NP6 registers

```
diagnose npu np6 register <dev_id>
```

Parameter	Description	Type	Size
<dev_id>	NP6 ID	string	

diagnose npu np6 session-stats

Show session offloading statistics counters

```
diagnose npu np6 session-stats <dev_id>
```

Parameter	Description	Type	Size
<dev_id>	NP6 ID	string	

diagnose npu np6 session-stats-clear

Clear session offloading statistics counters

```
diagnose npu np6 session-stats-clear <dev_id>
```

Parameter	Description	Type	Size
<dev_id>	NP6 ID	string	

diagnose npu np6 show-cwp-undersize-act

Show CAPWAP undersize frame check actions.

```
diagnose npu np6 show-cwp-undersize-act
```

diagnose npu np6 sse-drift-summary

Show SSE session drift summary.

```
diagnose npu np6 sse-drift-summary
```

diagnose npu np6 sse-latch-debug

Latch SSE debug

```
diagnose npu np6 sse-latch-debug <dev_id>
```

Parameter	Description	Type	Size
<dev_id>	NP6 ID	string	

diagnose npu np6 sse-purge-drift

Clean up idle sessions in SSE.

```
diagnose npu np6 sse-purge-drift <dev_id> <time>
```

Parameter	Description	Type	Size
<dev_id>	NP6 ID	string	

Parameter	Description	Type	Size
<time>	Session purge time in seconds (5 - 300 secs, default = 300).	string	

diagnose npu np6 sse-register

Show NP6 SSE registers

```
diagnose npu np6 sse-register <dev_id>
```

Parameter	Description	Type	Size
<dev_id>	NP6 ID	string	

diagnose npu np6 sse-stats

Show hardware session statistics counters

```
diagnose npu np6 sse-stats <dev_id>
```

Parameter	Description	Type	Size
<dev_id>	NP6 ID	string	

diagnose npu np6 sse-stats-clear

Clear hardware session statistics counters

```
diagnose npu np6 sse-stats-clear <dev_id>
```

Parameter	Description	Type	Size
<dev_id>	NP6 ID	string	

diagnose npu np6 xgmac-stats

Show XGMAC MIBs counters

```
diagnose npu np6 xgmac-stats <dev_id>
```

Parameter	Description	Type	Size
<dev_id>	NP6 ID	string	

diagnose npu np6 xgmac-stats-clear

Clear XGMAC MIBS counters

```
diagnose npu np6 xgmac-stats-clear <dev_id>
```

Parameter	Description	Type	Size
<dev_id>	NP6 ID	string	

diagnose npu np6lite

Network Processor version 6 Lite

```
diagnose npu np6lite
```

diagnose npu np6lite anomaly-drop

Show non-zero L3/L4 anomaly check drop counters.

```
diagnose npu np6lite anomaly-drop <dev_id>
```

Parameter	Description	Type	Size
<dev_id>	NP6Lite ID	string	

diagnose npu np6lite dce

Show non-zero subengine drop counters.

```
diagnose npu np6lite dce <dev_id>
```

Parameter	Description	Type	Size
<dev_id>	NP6Lite ID	string	

diagnose npu np6lite fastpath

Configure fastpath

```
diagnose npu np6lite fastpath
```

diagnose npu np6lite fastpath disable

Disable fastpath

```
diagnose npu np6lite fastpath disable <dev_id>
```

Parameter	Description	Type	Size
<dev_id>	NP6Lite ID	string	

diagnose npu np6lite fastpath enable

Enable fastpath

```
diagnose npu np6lite fastpath enable <dev_id>
```

Parameter	Description	Type	Size
<dev_id>	NP6Lite ID	string	

diagnose npu np6lite npu-feature

Show NPU feature and status.

```
diagnose npu np6lite npu-feature
```

diagnose npu np6lite port-list

Show port list

```
diagnose npu np6lite port-list
```

diagnose npu np6lite register

Show NP6LITE registers.

```
diagnose npu np6lite register <dev_id>
```

Parameter	Description	Type	Size
<dev_id>	NP6Lite ID	string	

diagnose npu np6lite session

Dump hardware session

```
diagnose npu np6lite session <dev_id>
```

Parameter	Description	Type	Size
<dev_id>	NP6Lite ID	string	

diagnose npu np6lite session-stats

Show session offloading statistics counters

```
diagnose npu np6lite session-stats <dev_id>
```

Parameter	Description	Type	Size
<dev_id>	NP6Lite ID	string	

diagnose npu np6lite sse-stats

Show hardware session statistics counters

```
diagnose npu np6lite sse-stats <dev_id>
```

Parameter	Description	Type	Size
<dev_id>	NP6Lite ID	string	

diagnose npu np6xlite

Network Processor version 6 XLite

```
diagnose npu np6xlite
```

diagnose npu np6xlite anomaly-drop

Show non-zero L3/L4 anomaly check drop counters.

```
diagnose npu np6xlite anomaly-drop <dev_id>
```

Parameter	Description	Type	Size
<dev_id>	NP6XLite ID	string	

diagnose npu np6xlite dce

Show non-zero subengine drop counters.

```
diagnose npu np6xlite dce <dev_id>
```

Parameter	Description	Type	Size
<dev_id>	NP6XLite ID	string	

diagnose npu np6xlite fastpath

Configure fastpath

```
diagnose npu np6xlite fastpath
```

diagnose npu np6xlite fastpath disable

Disable fastpath

```
diagnose npu np6xlite fastpath disable <dev_id>
```

Parameter	Description	Type	Size
<dev_id>	NP6XLite ID	string	

diagnose npu np6xlite fastpath enable

Enable fastpath

```
diagnose npu np6xlite fastpath enable <dev_id>
```

Parameter	Description	Type	Size
<dev_id>	NP6XLite ID	string	

diagnose npu np6xlite ipsec-fragment

Configure ipsec fragmentation type.

```
diagnose npu np6xlite ipsec-fragment
```

diagnose npu np6xlite ipsec-fragment inner

fragment the inner packet first.

```
diagnose npu np6xlite ipsec-fragment inner <dev_id>
```

Parameter	Description	Type	Size
<dev_id>	NP6XLite ID	string	

diagnose npu np6xlite ipsec-fragment outer

fragment the outer packet first.

```
diagnose npu np6xlite ipsec-fragment outer <dev_id>
```

Parameter	Description	Type	Size
<dev_id>	NP6XLite ID	string	

diagnose npu np6xlite mse-dump

Dump MSE session

```
diagnose npu np6xlite mse-dump
```

diagnose npu np6xlite mse-dump all

Dump all MSE sessions

```
diagnose npu np6xlite mse-dump all <dev_id>
```

Parameter	Description	Type	Size
<dev_id>	NP6XLite ID	string	

diagnose npu np6xlite mse-dump summary

Dump MSE session summary

```
diagnose npu np6xlite mse-dump summary <dev_id>
```

Parameter	Description	Type	Size
<dev_id>	NP6XLite ID	string	

diagnose npu np6xlite mse-dump valid

Dump valid MSE sessions

```
diagnose npu np6xlite mse-dump valid <dev_id>
```

Parameter	Description	Type	Size
<dev_id>	NP6XLite ID	string	

diagnose npu np6xlite npu-feature

Show NPU feature and status.

```
diagnose npu np6xlite npu-feature
```

diagnose npu np6xlite port-list

Show port list

```
diagnose npu np6xlite port-list
```

diagnose npu np6xlite register

Show NP6XLITE registers.

```
diagnose npu np6xlite register <dev_id> <blocks>
```

Parameter	Description	Type	Size
<dev_id>	NP6XLite ID	string	
<blocks>	Blocks' names separated by spaces.	string	

diagnose npu np6xlite session-dump

Dump hardware session summary or session list

```
diagnose npu np6xlite session-dump <dev_id> <show_full_enty>
```

Parameter	Description	Type	Size
<dev_id>	NP6XLite ID	string	
<show_full_enty>	0: not show full entry; 1, show full entry	string	

diagnose npu np6xlite session-stats

Show session offloading statistics counters

```
diagnose npu np6xlite session-stats <dev_id>
```

Parameter	Description	Type	Size
<dev_id>	NP6XLite ID	string	

diagnose npu np6xlite sse-stats

Show hardware session statistics counters

```
diagnose npu np6xlite sse-stats <dev_id>
```

Parameter	Description	Type	Size
<dev_id>	NP6XLite ID	string	

diagnose npu np7

Network Processor version 7


```
diagnose npu np7
```

diagnose npu np7 cgmac-stats

Show/clear CGMAC MIBs counters.

```
diagnose npu np7 cgmac-stats <dev_id> <action>
```

Parameter	Description	Type	Size
<dev_id>	NP ID {all 0}	string	
<action>	{0 b brief}: Show non-zero counters, {1 v verbose}: Show all the counters, {2 c clear}: Clear counters	string	

diagnose npu np7 cmd

Command counters

```
diagnose npu np7 cmd
```

diagnose npu np7 cmd all

Show/clear all command counters.

```
diagnose npu np7 cmd all <dev_id> <action>
```

Parameter	Description	Type	Size
<dev_id>	NP ID {all 0}	string	
<action>	{0 b brief}: Show non-zero counters, {1 v verbose}: Show all the counters, {2 c clear}: Clear counters	string	

diagnose npu np7 cmd dse

Show/clear DSE command counters.

```
diagnose npu np7 cmd dse <dev_id> <action>
```

Parameter	Description	Type	Size
<dev_id>	NP ID {all 0}	string	

Parameter	Description	Type	Size
<action>	{0 b brief}: Show non-zero counters, {1 v verbose}: Show all the counters, {2 c clear}: Clear counters	string	

diagnose npu np7 cmd lpm-rlt

Show/clear LPM/RLT command counters.

```
diagnose npu np7 cmd lpm-rlt <dev_id> <action>
```

Parameter	Description	Type	Size
<dev_id>	NP ID {all 0}	string	
<action>	{0 b brief}: Show non-zero counters, {1 v verbose}: Show all the counters, {2 c clear}: Clear counters	string	

diagnose npu np7 cmd measure-rate

Enable/disable command rate measurement.

```
diagnose npu np7 cmd measure-rate <action>
```

Parameter	Description	Type	Size
<action>	Action {enable disable}	string	

diagnose npu np7 cmd mse

Show/clear MSE command counters.

```
diagnose npu np7 cmd mse <dev_id> <action>
```

Parameter	Description	Type	Size
<dev_id>	NP ID {all 0}	string	
<action>	{0 b brief}: Show non-zero counters, {1 v verbose}: Show all the counters, {2 c clear}: Clear counters	string	

diagnose npu np7 cmd rate

Show/clear command rate.

```
diagnose npu np7 cmd rate <dev_id> <action>
```

Parameter	Description	Type	Size
<dev_id>	NP ID {all 0}	string	
<action>	{0 b brief}: Show non-zero counters, {1 v verbose}: Show all the counters, {2 c clear}: Clear counters	string	

diagnose npu np7 cmd sse

Show/clear SSE command counters.

```
diagnose npu np7 cmd sse <dev_id> <action>
```

Parameter	Description	Type	Size
<dev_id>	NP ID {all 0}	string	
<action>	{0 b brief}: Show non-zero counters, {1 v verbose}: Show all the counters, {2 c clear}: Clear counters	string	

diagnose npu np7 dce-dfr-drop

Show/clear DFR IHP drop counters.

```
diagnose npu np7 dce-dfr-drop <dev_id> <action>
```

Parameter	Description	Type	Size
<dev_id>	NP ID {all 0}	string	
<action>	{0 b brief}: Show non-zero counters, {1 v verbose}: Show all the counters, {2 c clear}: Clear counters	string	

diagnose npu np7 dce-drop-all

Show/clear all drop counters.

```
diagnose npu np7 dce-drop-all <dev_id> <action>
```

Parameter	Description	Type	Size
<dev_id>	NP ID {all 0}	string	
<action>	{0 b brief}: Show non-zero counters, {1 v verbose}: Show all the counters, {2 c clear}: Clear counters	string	

diagnose npu np7 dce-eif-drop

Show/clear EIF IHP drop counters.

```
diagnose npu np7 dce-eif-drop <dev_id> <action>
```

Parameter	Description	Type	Size
<dev_id>	NP ID {all 0}	string	
<action>	{0 b brief}: Show non-zero counters, {1 v verbose}: Show all the counters, {2 c clear}: Clear counters	string	

diagnose npu np7 dce-hif-drop

Show/clear HIF drop counters.

```
diagnose npu np7 dce-hif-drop <dev_id> <action>
```

Parameter	Description	Type	Size
<dev_id>	NP ID {all 0}	string	
<action>	{0 b brief}: Show non-zero counters, {1 v verbose}: Show all the counters, {2 c clear}: Clear counters	string	

diagnose npu np7 dce-htx-drop

Show/clear HTX IHP drop counters.

```
diagnose npu np7 dce-htx-drop <dev_id> <action>
```

Parameter	Description	Type	Size
<dev_id>	NP ID {all 0}	string	
<action>	{0 b brief}: Show non-zero counters, {1 v verbose}: Show all the counters, {2 c clear}: Clear counters	string	

diagnose npu np7 dce-ipsec-drop

Show/clear IPSec drop counters.

```
diagnose npu np7 dce-ipsec-drop <dev_id> <action>
```

Parameter	Description	Type	Size
<dev_id>	NP ID {all 0}	string	
<action>	{0 b brief}: Show non-zero counters, {1 v verbose}: Show all the counters, {2 c clear}: Clear counters	string	

diagnose npu np7 dce-ipti-drop

Show/clear IPTI IHP drop counters.

```
diagnose npu np7 dce-ipti-drop <dev_id> <action>
```

Parameter	Description	Type	Size
<dev_id>	NP ID {all 0}	string	
<action>	{0 b brief}: Show non-zero counters, {1 v verbose}: Show all the counters, {2 c clear}: Clear counters	string	

diagnose npu np7 dce-l2p-drop

Show/clear L2P IHP drop counters.

```
diagnose npu np7 dce-l2p-drop <dev_id> <action>
```

Parameter	Description	Type	Size
<dev_id>	NP ID {all 0}	string	
<action>	{0 b brief}: Show non-zero counters, {1 v verbose}: Show all the counters, {2 c clear}: Clear counters	string	

diagnose npu np7 dce-l2ti-drop

Show/clear L2TI IHP drop counters.

```
diagnose npu np7 dce-l2ti-drop <dev_id> <action>
```

Parameter	Description	Type	Size
<dev_id>	NP ID {all 0}	string	
<action>	{0 b brief}: Show non-zero counters, {1 v verbose}: Show all the counters, {2 c clear}: Clear counters	string	

diagnose npu np7 dce-sse-drop

Show/clear SSE drop counters.

```
diagnose npu np7 dce-sse-drop <dev_id> <action>
```

Parameter	Description	Type	Size
<dev_id>	NP ID {all 0}	string	
<action>	{0 b brief}: Show non-zero counters, {1 v verbose}: Show all the counters, {2 c clear}: Clear counters	string	

diagnose npu np7 dce-xhp-drop

Show/clear XHP IHP drop counters.

```
diagnose npu np7 dce-xhp-drop <dev_id> <action>
```

Parameter	Description	Type	Size
<dev_id>	NP ID {all 0}	string	
<action>	{0 b brief}: Show non-zero counters, {1 v verbose}: Show all the counters, {2 c clear}: Clear counters	string	

diagnose npu np7 ddr-access

Set DDR access of submodules.

```
diagnose npu np7 ddr-access
```

diagnose npu np7 ddr-access disable

Disable DDR access.

```
diagnose npu np7 ddr-access disable <dev_id>
```

Parameter	Description	Type	Size
<dev_id>	NP ID.	string	

diagnose npu np7 ddr-access enable

Enable DDR access.

```
diagnose npu np7 ddr-access enable <dev_id>
```

Parameter	Description	Type	Size
<dev_id>	NP ID	string	

diagnose npu np7 ddr-info

Show DDR size and debug information.

```
diagnose npu np7 ddr-info <dev_id>
```

Parameter	Description	Type	Size
<dev_id>	NP ID.	string	

diagnose npu np7 ddr-param-clear

Clear customized DDR PHY parameters.

```
diagnose npu np7 ddr-param-clear
```

diagnose npu np7 ddr-param-set

Customize DDR PHY parameters.

```
diagnose npu np7 ddr-param-set <slew-rate> <ODI>
```

Parameter	Description	Type	Size
<slew-rate>	slew-rate in hex.	string	
<ODI>	ODI in hex.	string	

diagnose npu np7 ddr-phy-reg

Read DDR PHY registers.

```
diagnose npu np7 ddr-phy-reg <dev_id>
```

Parameter	Description	Type	Size
<dev_id>	NP ID	string	

diagnose npu np7 ddr-test

Launch DDR memory testing.

```
diagnose npu np7 ddr-test <dev_id> <channel> <address> <size> <pattern-src> <pattern> <round>
```

Parameter	Description	Type	Size
<dev_id>	NP ID.	string	
<channel>	DDR Channel ID (0.5).	string	
<address>	Start address (in hex).	string	
<size>	Size of memory (in hex).	string	
<pattern-src>	Pattern source.(0: hardware,1: software)	string	
<pattern>	Pattern (0:walkone, 1: walkzero, 2:incremental, 3:random).	string	
<round>	Repeat round	string	

diagnose npu np7 dsw-drop-all

Show/clear DSW drop counters.

```
diagnose npu np7 dsw-drop-all <dev_id> <action>
```

Parameter	Description	Type	Size
<dev_id>	NP ID {all 0}	string	
<action>	{0 b brief}: Show non-zero counters, {1 v verbose}: Show all the counters, {2 c clear}: Clear counters	string	

diagnose npu np7 dsw-drop-by-dst

Show/clear DSW drop counters by destination modules.

```
diagnose npu np7 dsw-drop-by-dst <dev_id> <action>
```


Parameter	Description	Type	Size
<dev_id>	NP ID {all 0}	string	
<action>	{0 b brief}: Show non-zero counters, {1 v verbose}: Show all the counters, {2 c clear}: Clear counters	string	

diagnose npu np7 dsw-drop-by-src

Show/clear DSW drop counters by source modules.

```
diagnose npu np7 dsw-drop-by-src <dev_id> <action>
```

Parameter	Description	Type	Size
<dev_id>	NP ID {all 0}	string	
<action>	{0 b brief}: Show non-zero counters, {1 v verbose}: Show all the counters, {2 c clear}: Clear counters	string	

diagnose npu np7 dsw-egress-stats

Show/clear DSW egress counters.

```
diagnose npu np7 dsw-egress-stats <dev_id> <action>
```

Parameter	Description	Type	Size
<dev_id>	NP ID {all 0}	string	
<action>	{0 b brief}: Show non-zero counters, {1 v verbose}: Show all the counters, {2 c clear}: Clear counters	string	

diagnose npu np7 dsw-ingress-stats

Show/clear DSW ingress counters.

```
diagnose npu np7 dsw-ingress-stats <dev_id> <action>
```

Parameter	Description	Type	Size
<dev_id>	NP ID {all 0}	string	
<action>	{0 b brief}: Show non-zero counters, {1 v verbose}: Show all the counters, {2 c clear}: Clear counters	string	

diagnose npu np7 dvlan-mode

Set DVLAN mode.

```
diagnose npu np7 dvlan-mode
```

diagnose npu np7 dvlan-mode 802.1AD

Set dvlan mode to 802.1AD

```
diagnose npu np7 dvlan-mode 802.1AD <dev-id>
```

Parameter	Description	Type	Size
<dev-id>	NP ID {all 0}	string	

diagnose npu np7 dvlan-mode 802.1Q

Set dvlan mode to 802.1Q

```
diagnose npu np7 dvlan-mode 802.1Q <dev-id>
```

Parameter	Description	Type	Size
<dev-id>	NP ID {all 0}	string	

diagnose npu np7 dvlan-mode-list

list DVLAN mode info

```
diagnose npu np7 dvlan-mode-list
```

diagnose npu np7 getreg

Read NP7 registers.

```
diagnose npu np7 getreg <dev_id> <register name> <depth>
```

Parameter	Description	Type	Size
<dev_id>	NP7 ID.	string	

Parameter	Description	Type	Size
<register name>	Register name ({all <blk>.[sub-blk].[reg-name].[filed-name]}).	string	
<depth>	Read depth into register tree ({max [1.10]}}, default 1).	string	

diagnose npu np7 hif-stats

Show/clear host queue counters.

```
diagnose npu np7 hif-stats <dev_id> <action>
```

Parameter	Description	Type	Size
<dev_id>	NP ID {all 0}	string	
<action>	{0 b brief}: Show non-zero counters, {1 v verbose}: Show all the counters, {2 c clear}: Clear counters	string	

diagnose npu np7 hpe

Show np7 hpe host queue packet type shaper status.

```
diagnose npu np7 hpe <dev_id>
```

Parameter	Description	Type	Size
<dev_id>	NP ID	string	

diagnose npu np7 info

Show chip information.

```
diagnose npu np7 info
```

diagnose npu np7 init-params

Show driver initialization parameters.

```
diagnose npu np7 init-params
```

diagnose npu np7 intf-clear-err

Clear interface error counters.

```
diagnose npu np7 intf-clear-err <intf-name>
```

Parameter	Description	Type	Size
<intf-name>	Interface name	string	

diagnose npu np7 intf-clear-stats

Clear interface statistics counters.

```
diagnose npu np7 intf-clear-stats <intf-name>
```

Parameter	Description	Type	Size
<intf-name>	Interface name	string	

diagnose npu np7 ipl

ipl cmds

```
diagnose npu np7 ipl
```

diagnose npu np7 listreg

List NP7 registers.

```
diagnose npu np7 listreg <register name> <depth>
```

Parameter	Description	Type	Size
<register name>	Register name ({all <blk>.[<sub-blk>].[<reg-name>].[<field-name>]}).	string	
<depth>	List depth into register tree ({max [1.10]}}, default 1).	string	

diagnose npu np7 listtbl

List NP7 configuration tables.

```
diagnose npu np7 listtbl <table type>
```

Parameter	Description	Type	Size
<table type>	Table type ({all linear hash hhash}).	string	

diagnose npu np7 mas

Show DDR memory access module (MAS) information.

```
diagnose npu np7 mas <dev-id>
```

Parameter	Description	Type	Size
<dev-id>	NP ID {all 0}	string	

diagnose npu np7 mdbg

DDR memory debug tool.

[illegible][illegible]

Parameter	Description	Type	Size
<arg>	command args.	string	
<arg>	command args.	string	
<arg>	command args.	string	
<arg>	command args.	string	
<arg>	command args.	string	
<arg>	command args.	string	
<arg>	command args.	string	
<arg>	command args.	string	
<arg>	command args.	string	
<arg>	command args.	string	
<arg>	command args.	string	
<arg>	command args.	string	

diagnose npu np7 monitor-hpe

Monitor HPE setting and host queue status counters without packet dropping.

```
diagnose npu np7 monitor-hpe
```

diagnose npu np7 monitor-hpe disable

Disable monitor hpe

```
diagnose npu np7 monitor-hpe disable <dev_id>
```

Parameter	Description	Type	Size
<dev_id>	NP ID	string	

diagnose npu np7 monitor-hpe enable

Enable monitor hpe

```
diagnose npu np7 monitor-hpe enable <dev_id>
```

Parameter	Description	Type	Size
<dev_id>	NP ID	string	

diagnose npu np7 msg

Message counters

```
diagnose npu np7 msg
```

diagnose npu np7 msg htab-rate

Show/clear hash table message rate.

```
diagnose npu np7 msg htab-rate <dev_id> <action>
```

Parameter	Description	Type	Size
<dev_id>	NP ID {all 0}	string	
<action>	{0 b brief}: Show non-zero counters, {1 v verbose}: Show all the counters, {2 c clear}: Clear counters	string	

diagnose npu np7 msg htab-stats

Show/clear hash table message counters.

```
diagnose npu np7 msg htab-stats <dev_id> <action>
```

Parameter	Description	Type	Size
<dev_id>	NP ID {all 0}	string	
<action>	{0 b brief}: Show non-zero counters, {1 v verbose}: Show all the counters, {2 c clear}: Clear counters	string	

diagnose npu np7 msg ipsec-rate

Show/clear IPSec message rate.

```
diagnose npu np7 msg ipsec-rate <dev_id> <action>
```

Parameter	Description	Type	Size
<dev_id>	NP ID {all 0}	string	
<action>	{0 b brief}: Show non-zero counters, {1 v verbose}: Show all the counters, {2 c clear}: Clear counters	string	

diagnose npu np7 msg ipsec-stats

Show/clear IPSec message counters.

```
diagnose npu np7 msg ipsec-stats <dev_id> <action>
```

Parameter	Description	Type	Size
<dev_id>	NP ID {all 0}	string	
<action>	{0 b brief}: Show non-zero counters, {1 v verbose}: Show all the counters, {2 c clear}: Clear counters	string	

diagnose npu np7 msg ipt-rate

Show/clear IP tunnel message rate.

```
diagnose npu np7 msg ipt-rate <dev_id> <action>
```

Parameter	Description	Type	Size
<dev_id>	NP ID {all 0}	string	
<action>	{0 b brief}: Show non-zero counters, {1 v verbose}: Show all the counters, {2 c clear}: Clear counters	string	

diagnose npu np7 msg ipt-stats

Show/clear IP tunnel message counters.

```
diagnose npu np7 msg ipt-stats <dev_id> <action>
```

Parameter	Description	Type	Size
<dev_id>	NP ID {all 0}	string	
<action>	{0 b brief}: Show non-zero counters, {1 v verbose}: Show all the counters, {2 c clear}: Clear counters	string	

diagnose npu np7 msg log

Enable/disable command rate measurement.

```
diagnose npu np7 msg log <action>
```

Parameter	Description	Type	Size
<action>	Action {enable disable show clear}	string	

diagnose npu np7 msg log-filter

Enable/disable command rate measurement.

```
diagnose npu np7 msg log-filter <src-module> <msg-code>
```

Parameter	Description	Type	Size
<src-module>	Source module [-1, 255] in decimal or hex, -1 for any.	string	
<msg-code>	Message code [-1, 255] in decimal or hex, -1 for any.	string	

diagnose npu np7 msg measure-rate

Enable/disable command rate measurement.

```
diagnose npu np7 msg measure-rate <action>
```

Parameter	Description	Type	Size
<action>	Action {enable disable}	string	

diagnose npu np7 msg mse-rate

Show/clear MSE message rate.

```
diagnose npu np7 msg mse-rate <dev_id> <action>
```

Parameter	Description	Type	Size
<dev_id>	NP ID {all 0}	string	
<action>	{0 b brief}: Show non-zero counters, {1 v verbose}: Show all the counters, {2 c clear}: Clear counters	string	

diagnose npu np7 msg mse-stats

Show/clear MSE message counters.

```
diagnose npu np7 msg mse-stats <dev_id> <action>
```

Parameter	Description	Type	Size
<dev_id>	NP ID {all 0}	string	
<action>	{0 b brief}: Show non-zero counters, {1 v verbose}: Show all the counters, {2 c clear}: Clear counters	string	

diagnose npu np7 msg msg-by-code

Show/clear message counters by message code.

```
diagnose npu np7 msg msg-by-code <dev_id> <action>
```

Parameter	Description	Type	Size
<dev_id>	NP ID {all 0}	string	
<action>	{0 b brief}: Show non-zero counters, {1 v verbose}: Show all the counters, {2 c clear}: Clear counters	string	

diagnose npu np7 msg msg-by-cpu

Show/clear message counters by CPU.

```
diagnose npu np7 msg msg-by-cpu <dev-id> <action>
```

Parameter	Description	Type	Size
<dev-id>	NP ID {all 0}	string	
<action>	{0 b brief}: Show non-zero counters, {1 v verbose}: Show all the counters	string	

diagnose npu np7 msg msg-by-mod

Show/clear message counters by source module.

```
diagnose npu np7 msg msg-by-mod <dev_id> <action>
```

Parameter	Description	Type	Size
<dev_id>	NP ID {all 0}	string	
<action>	{0 b brief}: Show non-zero counters, {1 v verbose}: Show all the counters, {2 c clear}: Clear counters	string	

diagnose npu np7 msg msg-by-que

Show/clear message counters by RX queue.

```
diagnose npu np7 msg msg-by-que <dev_id> <action>
```

Parameter	Description	Type	Size
<dev_id>	NP ID {all 0}	string	
<action>	{0 b brief}: Show non-zero counters, {1 v verbose}: Show all the counters, {2 c clear}: Clear counters	string	

diagnose npu np7 msg spath-rate

Show/clear hyperscale message rate.

```
diagnose npu np7 msg spath-rate <dev_id> <action>
```

Parameter	Description	Type	Size
<dev_id>	NP ID {all 0}	string	
<action>	{0 b brief}: Show non-zero counters, {1 v verbose}: Show all the counters, {2 c clear}: Clear counters	string	

diagnose npu np7 msg spath-stats

Show/clear hyperscale message counters.

```
diagnose npu np7 msg spath-stats <dev_id> <action>
```

Parameter	Description	Type	Size
<dev_id>	NP ID {all 0}	string	
<action>	{0 b brief}: Show non-zero counters, {1 v verbose}: Show all the counters, {2 c clear}: Clear counters	string	

diagnose npu np7 msg sse-rate

Show/clear SSE message rate.

```
diagnose npu np7 msg sse-rate <dev_id> <action>
```

Parameter	Description	Type	Size
<dev_id>	NP ID {all 0}	string	
<action>	{0 b brief}: Show non-zero counters, {1 v verbose}: Show all the counters, {2 c clear}: Clear counters	string	

diagnose npu np7 msg sse-stats

Show/clear SSE message counters.

```
diagnose npu np7 msg sse-stats <dev_id> <action>
```

Parameter	Description	Type	Size
<dev_id>	NP ID {all 0}	string	
<action>	{0 b brief}: Show non-zero counters, {1 v verbose}: Show all the counters, {2 c clear}: Clear counters	string	

diagnose npu np7 msg summary

Show summary of message counters.

```
diagnose npu np7 msg summary <dev-id>
```

Parameter	Description	Type	Size
<dev-id>	NP ID {all 0}	string	

diagnose npu np7 msg tpe-tce-rate

Show/clear TPE/TCE message rate.

```
diagnose npu np7 msg tpe-tce-rate <dev_id> <action>
```

Parameter	Description	Type	Size
<dev_id>	NP ID {all 0}	string	

Parameter	Description	Type	Size
<action>	{0 b brief}: Show non-zero counters, {1 v verbose}: Show all the counters, {2 c clear}: Clear counters	string	

diagnose npu np7 msg tpe-tce-stats

Show/clear TPC/TCE message counters.

```
diagnose npu np7 msg tpe-tce-stats <dev_id> <action>
```

Parameter	Description	Type	Size
<dev_id>	NP ID {all 0}	string	
<action>	{0 b brief}: Show non-zero counters, {1 v verbose}: Show all the counters, {2 c clear}: Clear counters	string	

diagnose npu np7 msgq

Show message queue configurations.

```
diagnose npu np7 msgq <dev-id>
```

Parameter	Description	Type	Size
<dev-id>	NP ID {all 0}	string	

diagnose npu np7 mswm

Message Switch Module

```
diagnose npu np7 mswm
```

diagnose npu np7 mswm module-to-mswh

Show/clear module-to-MSWH counters.

```
diagnose npu np7 mswm module-to-mswh <dev_id> <action>
```

Parameter	Description	Type	Size
<dev_id>	NP ID {all 0}	string	
<action>	{0 b brief}: Show non-zero counters, {1 v verbose}: Show all the counters, {2 c clear}: Clear counters	string	

diagnose npu np7 mswm module-to-mswm

Show/clear module-to-MSWM counters.

```
diagnose npu np7 mswm module-to-mswm <dev_id> <action>
```

Parameter	Description	Type	Size
<dev_id>	NP ID {all 0}	string	
<action>	{0 b brief}: Show non-zero counters, {1 v verbose}: Show all the counters, {2 c clear}: Clear counters	string	

diagnose npu np7 mswm mswh-all

Show/clear all MSWH counters.

```
diagnose npu np7 mswm mswh-all <dev_id> <action>
```

Parameter	Description	Type	Size
<dev_id>	NP ID {all 0}	string	
<action>	{0 b brief}: Show non-zero counters, {1 v verbose}: Show all the counters, {2 c clear}: Clear counters	string	

diagnose npu np7 mswm mswh-to-hrx

Show/clear MSWH-to-HRX counter.

```
diagnose npu np7 mswm mswh-to-hrx <dev_id> <action>
```

Parameter	Description	Type	Size
<dev_id>	NP ID {all 0}	string	
<action>	{0 b brief}: Show non-zero counters, {1 v verbose}: Show all the counters, {2 c clear}: Clear counters	string	

diagnose npu np7 mswm mswm-all

Show/clear all MSWM counters.

```
diagnose npu np7 mswm mswm-all <dev_id> <action>
```

Parameter	Description	Type	Size
<dev_id>	NP ID {all 0}	string	
<action>	{0 b brief}: Show non-zero counters, {1 v verbose}: Show all the counters, {2 c clear}: Clear counters	string	

diagnose npu np7 mswm mswm-to-module

Show/clear MSWM-to-module counters.

```
diagnose npu np7 mswm mswm-to-module <dev_id> <action>
```

Parameter	Description	Type	Size
<dev_id>	NP ID {all 0}	string	
<action>	{0 b brief}: Show non-zero counters, {1 v verbose}: Show all the counters, {2 c clear}: Clear counters	string	

diagnose npu np7 napi-param-clear

Clear customized napi parameters.

```
diagnose npu np7 napi-param-clear
```

diagnose npu np7 napi-param-set

Customize napi parameters.

```
diagnose npu np7 napi-param-set <weight>
```

Parameter	Description	Type	Size
<weight>	napi weight	string	

diagnose npu np7 np-port

Show NP port status.

```
diagnose npu np7 np-port
```

diagnose npu np7 pba

Show packet buffer counters.

```
diagnose npu np7 pba <dev-id>
```

Parameter	Description	Type	Size
<dev-id>	NP ID {all 0}	string	

diagnose npu np7 pdq

Show packet descriptor queue counters.

```
diagnose npu np7 pdq <dev-id> <action>
```

Parameter	Description	Type	Size
<dev-id>	NP ID {all 0}	string	
<action>	{0 b brief}: Show non-zero counters, {1 v verbose}: Show all the counters	string	

diagnose npu np7 phy-status

Show PHY status.

```
diagnose npu np7 phy-status
```

diagnose npu np7 pmon

Show engine performance monitor counters.

```
diagnose npu np7 pmon <dev-id> <action>
```


Parameter	Description	Type	Size
<dev-id>	NP ID {all 0}	string	
<action>	{0 b brief}: Show non-zero counters, {1 v verbose}: Show all the counters	string	

diagnose npu np7 port-list

Show port list.

```
diagnose npu np7 port-list
```

diagnose npu np7 readtbl

Read NP7 configuration table.

```
diagnose npu np7 readtbl <dev_id> <tbl_name> <inst_id> <ent_index>
```

Parameter	Description	Type	Size
<dev_id>	NP7 ID	string	
<tbl_name>	Name of linear or software-managed hash tables.	string	
<inst_id>	Instance ID (0 for single-instance tables).	string	
<ent_index>	Table entry index.	string	

diagnose npu np7 serdes

NP7 serdes.

```
diagnose npu np7 serdes
```

diagnose npu np7 serdes linkscan

Enable/disable NP linkscan.

```
diagnose npu np7 serdes linkscan
```

diagnose npu np7 serdes linkscan disable

Disable NP linkscan

```
diagnose npu np7 serdes linkscan disable
```

diagnose npu np7 serdes linkscan enable

Enable NP linkscan

```
diagnose npu np7 serdes linkscan enable
```

diagnose npu np7 serdes pma_eye_diagram

Create eye diagram

```
diagnose npu np7 serdes pma_eye_diagram <npu_id> <serdes_id> <lane> <ber_exp> <mode>
```

Parameter	Description	Type	Size
<npu_id>	NPU index	string	
<serdes_id>	SerDes index [0,1].	string	
<lane>	Lane number [0.3].	string	
<ber_exp>	BER exp. [7.10].	string	
<mode>	Mode [0.1] (0:center, 1:all).	string	

diagnose npu np7 serdes pma_register

Read/write PMA registers.

```
diagnose npu np7 serdes pma_register
```

diagnose npu np7 serdes pma_register read

Read PMA registers.

```
diagnose npu np7 serdes pma_register read <npu_id> <serdes_id> <address>
```

Parameter	Description	Type	Size
<npu_id>	npu index	string	
<serdes_id>	SerDes index [0,1]	string	
<address>	Address in hex {<hex> all} (e.g. 0x80a7, all).	string	

diagnose npu np7 serdes pma_register write

Write PMA registers.

```
diagnose npu np7 serdes pma_register write <npu_id> <serdes_id> <address> <data>
```

Parameter	Description	Type	Size
<npu_id>	npu index.	string	
<serdes_id>	SerDes index [0,1].	string	
<address>	Address in hex (e.g. 0x80a7)	string	
<data>	Data in hex (e.g. 0xabcd).	string	

diagnose npu np7 session-offload-stats

Show/Clear session offload error counters.

```
diagnose npu np7 session-offload-stats <dev_id> <action>
```

Parameter	Description	Type	Size
<dev_id>	NP ID {all 0}	string	
<action>	{0 b brief}: Show non-zero counters, {1 v verbose}: Show all the counters, {2 c clear}: Clear counters	string	

diagnose npu np7 setreg

Write NP7 registers.

```
diagnose npu np7 setreg <dev_id> <register name> <reg-value>
```

Parameter	Description	Type	Size
<dev_id>	NP7 ID	string	

Parameter	Description	Type	Size
<register name>	Register name (<blk>.<sub-blk>.<reg-name>.<filed-name>).	string	
<reg-value>	Register or field value in decimal or hexadecimal (e.g. 0xabc).	string	

diagnose npu np7 show-dsw-dts-profile

Show NP7 dsw dts profile table.

```
diagnose npu np7 show-dsw-dts-profile <dev_id> <iport> <profile_id> <data_id>
```

Parameter	Description	Type	Size
<dev_id>	NP7 ID	string	
<iport>	dsw iport id or iport name.	string	
<profile_id>	dsw dts profile id.{all <profile_id>}	string	
<data_id>	dsw dts profile data id.{all <data_id>}	string	

diagnose npu np7 show-dsw-qtbl

Read NP7 configuration table.

```
diagnose npu np7 show-dsw-qtbl <dev_id> <iport> <oport> <queue_id>
```

Parameter	Description	Type	Size
<dev_id>	NP7 ID	string	
<iport>	dsw iport id or iport name.	string	
<oport>	dsw oport id or oport name.{all <oport>}	string	
<queue_id>	dsw queue id.{all <queue_id>}	string	

diagnose npu np7 sse-stats

Show session search engine counters.

```
diagnose npu np7 sse-stats <dev-id>
```

Parameter	Description	Type	Size
<dev-id>	NP ID {all 0}	string	

diagnose npu np7 sse-tpe-accounting

Enable/disable SSE accounting for debugging purpose.

```
diagnose npu np7 sse-tpe-accounting <action>
```

Parameter	Description	Type	Size
<action>	Action { enable disable }	string	

diagnose npu np7 sw-np-que

Show the queue counters on those switch ports which connected to the current NP

```
diagnose npu np7 sw-np-que <dev-id>
```

Parameter	Description	Type	Size
<dev-id>	NP ID {all 0}	string	

diagnose npu np7 system-config

Show system level driver configurations.

```
diagnose npu np7 system-config
```

diagnose npu np7 trng-frequency

NP7 trng RO frequency read.

```
diagnose npu np7 trng-frequency <dev_id>
```

Parameter	Description	Type	Size
<dev_id>	NP ID	string	

diagnose npu np7 trng-read

NP7 entropy read.

```
diagnose npu np7 trng-read <dev_id> <size>
```

Parameter	Description	Type	Size
<dev_id>	NP ID.	string	
<size>	Randump number in bytes.	string	

diagnose npu np7 vep-mode

Set VEP mode.

```
diagnose npu np7 vep-mode <vep_mode>
```

Parameter	Description	Type	Size
<vep_mode>	VEP Mode	string	

diagnose npu np7 vlan-accounting

Enable/disable/show VLAN accouting for deubugging purpose.

```
diagnose npu np7 vlan-accounting <action>
```

Parameter	Description	Type	Size
<action>	Action {enable disable show}	string	

diagnose npu nturbo

Display NTurbo information.

```
diagnose npu nturbo
```

diagnose npu nturbo driver

Show driver stats.

```
diagnose npu nturbo driver
```

diagnose npu sniffer

NPU sniffer.

```
diagnose npu sniffer
```

diagnose npu sniffer filter

Sniffer filters.

```
diagnose npu sniffer filter
```

diagnose npu sniffer filter clear

Clear all filter config.

```
diagnose npu sniffer filter clear
```

diagnose npu sniffer filter dir

Direction of the traffic.

```
diagnose npu sniffer filter dir <x>
```

Parameter	Description	Type	Size
<x>	0. ingress, 1. egress, 2. both	string	

diagnose npu sniffer filter dport

Layer 4 Destination port.

```
diagnose npu sniffer filter dport <xxxxxx>
```

Parameter	Description	Type	Size
<xxxxxx>	Layer 4 Destination port	string	

diagnose npu sniffer filter dstip

Destination IP.

```
diagnose npu sniffer filter dstip <xxx.xxx.xxx.xxx>/<xxx.xxx.xxx.xxx>
```

Parameter	Description	Type	Size
<xxx.xxx.xxx.xxx>/<xxx.xxx.xxx.xxx>	Dst IP and mask	string	

diagnose npu sniffer filter dstip6

Destination IP6.

```
diagnose npu sniffer filter dstip6 <x:x:x:x:x:x:x>/<x:x:x:x:x:x:x>
```

Parameter	Description	Type	Size
<x:x:x:x:x:x:x>/<x:x:x:x:x:x:x>	Dest IP6 and mask	string	

diagnose npu sniffer filter ethtype

non IP Ethernet Type.

```
diagnose npu sniffer filter ethtype <xxxx>
```

Parameter	Description	Type	Size
<xxxx>	non IP EthType <0-65535>.	string	

diagnose npu sniffer filter intf

Interfaces to sniffer.

```
diagnose npu sniffer filter intf <xxxx>
```

Parameter	Description	Type	Size
<xxxx>	Interface name.	string	

diagnose npu sniffer filter ip

IP address.


```
diagnose npu sniffer filter ip <xxx.xxx.xxx.xxx>/<xxx.xxx.xxx.xxx>
```

Parameter	Description	Type	Size
<xxx.xxx.xxx.xxx>/<xxx.xxx.xxx.xxx>	IP address and mask	string	

diagnose npu sniffer filter ip6

IP6 Address.

```
diagnose npu sniffer filter ip6 <x:x:x:x:x:x:x>/<x:x:x:x:x:x:x>
```

Parameter	Description	Type	Size
<x:x:x:x:x:x:x>/<x:x:x:x:x:x:x>	IP6 Address and mask	string	

diagnose npu sniffer filter outgoing_intf

NOT a filtering field! Intf that the mirrored traffic goes to.

```
diagnose npu sniffer filter outgoing_intf <xxxx>
```

Parameter	Description	Type	Size
<xxxx>	NOT a filtering field! Interface name	string	

diagnose npu sniffer filter outgoing_vlan

NOT a filtering field! Vlan that the mirrored traffic goes to.

```
diagnose npu sniffer filter outgoing_vlan <xxxx>
```

Parameter	Description	Type	Size
<xxxx>	NOT a filtering field! Vlan id	string	

diagnose npu sniffer filter port

Layer 4 Port.

```
diagnose npu sniffer filter port <xxxxx>
```

Parameter	Description	Type	Size
<xxxxxx>	Layer 4 port	string	

diagnose npu sniffer filter protocol

IP protocol.

```
diagnose npu sniffer filter protocol <xx>
```

Parameter	Description	Type	Size
<xx>	<0-255>.	string	

diagnose npu sniffer filter selector

Select the filter to config.

```
diagnose npu sniffer filter selector <x>
```

Parameter	Description	Type	Size
<x>	0-3: Support four filters.	string	

diagnose npu sniffer filter sport

Layer 4 Source port.

```
diagnose npu sniffer filter sport <xxxxxx>
```

Parameter	Description	Type	Size
<xxxxxx>	Layer 4 Source port	string	

diagnose npu sniffer filter srcip

Source IP.

```
diagnose npu sniffer filter srcip <xxx.xxx.xxx.xxx>/<xxx.xxx.xxx.xxx>
```

Parameter	Description	Type	Size
<xxx.xxx.xxx.xxx>/<xxx.xxx.xxx.xxx>	Src IP and mask	string	

diagnose npu sniffer filter srcip6

Source IP6.

```
diagnose npu sniffer filter srcip6 <x:x:x:x:x:x:x>/<x:x:x:x:x:x:x>
```

Parameter	Description	Type	Size
<x:x:x:x:x:x:x>/<x:x:x:x:x:x:x>	Src IP6 and mask	string	

diagnose npu sniffer start

Start sniffer.

```
diagnose npu sniffer start
```

diagnose npu sniffer stop

Stop sniffer.

```
diagnose npu sniffer stop
```

diagnose oci

Oracle Cloud Infrastructure platform diagnose commands.

This topic includes the following commands:

- [diagnose oci pubkey on page 2740](#)

diagnose oci pubkey

Display OCI public key information.

```
diagnose oci pubkey <name>
```

Parameter	Description	Type	Size
<name>	OCI SDN connector name	string	

diagnose poe

PoE

This topic includes the following commands:

- [diagnose poe controller-reset on page 2741](#)
- [diagnose poe debug on page 2741](#)
- [diagnose poe device-info on page 2742](#)
- [diagnose poe get-port-status on page 2742](#)
- [diagnose poe list on page 2742](#)
- [diagnose poe power-stats on page 2742](#)
- [diagnose poe reset on page 2743](#)
- [diagnose poe set-port-status on page 2743](#)
- [diagnose poe set-port-status disable on page 2743](#)
- [diagnose poe set-port-status enable on page 2743](#)
- [diagnose poe sifos-test-settings on page 2743](#)
- [diagnose poe sifos-test-settings disable on page 2744](#)
- [diagnose poe sifos-test-settings enable on page 2744](#)
- [diagnose poe system-status on page 2744](#)
- [diagnose poe upgrade-firmware on page 2744](#)

diagnose poe controller-reset

Reset Poe Controller

```
diagnose poe controller-reset
```

diagnose poe debug

debug POE function

```
diagnose poe debug <value0> <value1> <value2> <value3> <value4> <value5> <value6> <value7>  
<value8> <value9> <value10> <value11> <value12>
```

Parameter	Description	Type	Size
<value0>	value 0	string	
<value1>	value 1	string	
<value2>	value 2	string	
<value3>	value 3	string	

Parameter	Description	Type	Size
<value4>	value 4	string	
<value5>	value 5	string	
<value6>	value 6	string	
<value7>	value 7	string	
<value8>	value 8	string	
<value9>	value 9	string	
<value10>	value 10	string	
<value11>	value 11	string	
<value12>	value 12	string	

diagnose poe device-info

Show POE Device Information

```
diagnose poe device-info
```

diagnose poe get-port-status

Get port's PoE status

```
diagnose poe get-port-status <port>
```

Parameter	Description	Type	Size
<port>	Port ID: 15, 16, ..., 38	string	

diagnose poe list

Display all PoE ports

```
diagnose poe list
```

diagnose poe power-stats

Show POE Device Power Budget and Measured Overall Power

```
diagnose poe power-stats
```

diagnose poe reset

Reset Poe port

```
diagnose poe reset <port>
```

Parameter	Description	Type	Size
<port>	Port ID: 15, 16, ..., 38	string	

diagnose poe set-port-status

Set port PoE status

```
diagnose poe set-port-status
```

diagnose poe set-port-status disable

Shutdown PoE on this port

```
diagnose poe set-port-status disable <port>
```

Parameter	Description	Type	Size
<port>	Port ID: 15, 16, ..., 38	string	

diagnose poe set-port-status enable

Enable PoE on this port

```
diagnose poe set-port-status enable <port>
```

Parameter	Description	Type	Size
<port>	Port ID: 15, 16, ..., 38	string	

diagnose poe sifos-test-settings

Enable/Disable Sifos Test Register Settings

```
diagnose poe sifos-test-settings
```

diagnose poe sifos-test-settings disable

Disable Sifos Test Settings

```
diagnose poe sifos-test-settings disable
```

diagnose poe sifos-test-settings enable

Enable Sifos Test Settings

```
diagnose poe sifos-test-settings enable
```

diagnose poe system-status

Show POE Device System Status

```
diagnose poe system-status
```

diagnose poe upgrade-firmware

Upgrade POE Controller Firmware

```
diagnose poe upgrade-firmware
```

diagnose radiusd

RADIUS daemon diagnostic commands.

This topic includes the following commands:

- [diagnose radiusd test on page 2744](#)

diagnose radiusd test

Send test command to RADIUS daemon.

```
diagnose radiusd test <level>
```

Parameter	Description	Type	Size
<level>	Test level (integer).	string	

diagnose report

report

This topic includes the following commands:

- [diagnose report clear-filter on page 2745](#)
- [diagnose report dataset on page 2745](#)
- [diagnose report filter on page 2745](#)
- [diagnose report min-points on page 2746](#)
- [diagnose report ondemand-table on page 2746](#)
- [diagnose report sql on page 2746](#)
- [diagnose report time on page 2746](#)
- [diagnose report top-n on page 2746](#)

diagnose report clear-filter

clear-filter

```
diagnose report clear-filter
```

diagnose report dataset

dataset

```
diagnose report dataset
```

diagnose report filter

filter

```
diagnose report filter
```


diagnose report min-points

min-points

```
diagnose report min-points
```

diagnose report ondemand-table

ondemand-table

```
diagnose report ondemand-table
```

diagnose report sql

sql

```
diagnose report sql
```

diagnose report time

time

```
diagnose report time
```

diagnose report top-n

top-n

```
diagnose report top-n
```

diagnose report-runner

Report Runner service.

This topic includes the following commands:

- [diagnose report-runner clean on page 2747](#)
- [diagnose report-runner trigger on page 2747](#)
- [diagnose report-runner trigger security-rating-reports on page 2747](#)

diagnose report-runner clean

Delete all Report Runner results.

```
diagnose report-runner clean
```

diagnose report-runner trigger

Execute a report.

```
diagnose report-runner trigger
```

diagnose report-runner trigger security-rating-reports

Execute the Security Rating reports (Security Posture, Fabric Coverage, Optimization).

```
diagnose report-runner trigger security-rating-reports
```

diagnose rso

RSSO diagnostic commands.

This topic includes the following commands:

- [diagnose rso delete on page 2747](#)
- [diagnose rso delete ip on page 2748](#)
- [diagnose rso delete ip6 on page 2748](#)
- [diagnose rso query on page 2748](#)
- [diagnose rso query carrier-endpoint on page 2748](#)
- [diagnose rso query ip on page 2748](#)
- [diagnose rso query ip6 on page 2749](#)
- [diagnose rso query rso-key on page 2749](#)

diagnose rso delete

Delete entries in RSSO database.

```
diagnose rso delete
```

diagnose rso delete ip

delete by IP address.

```
diagnose rso delete ip <ip>
```

Parameter	Description	Type	Size
<ip>	IP address to delete.	string	

diagnose rso delete ip6

delete by IP6 address.

```
diagnose rso delete ip6 <ip6>
```

Parameter	Description	Type	Size
<ip6>	IP6 address to delete.	string	

diagnose rso query

Query RSSO database.

```
diagnose rso query
```

diagnose rso query carrier-endpoint

Query by End Point.

```
diagnose rso query carrier-endpoint <endpoint> <ip>
```

Parameter	Description	Type	Size
<endpoint>	End Point to query.	string	
<ip>	IP address of TFTP server to upload results (optional).	string	

diagnose rso query ip

Query by IP address.

```
diagnose rso query ip <ip> <ip>
```

Parameter	Description	Type	Size
<ip>	IP address to query.	string	
<ip>	IP address of TFTP server to upload results (optional).	string	

diagnose rso query ip6

Query by IP6 address.

```
diagnose rso query ip6 <ip6> <ip>
```

Parameter	Description	Type	Size
<ip6>	IP6 address to query.	string	
<ip>	IP address of TFTP server to upload results (optional).	string	

diagnose rso query rso-key

Query by RSSO key.

```
diagnose rso query rso-key <name> <ip>
```

Parameter	Description	Type	Size
<name>	RSSO key to query.	string	
<ip>	IP address of TFTP server to upload results (optional).	string	

diagnose saas

SaaS diagnose commands.

This topic includes the following commands:

- [diagnose saas reload on page 2750](#)
- [diagnose saas show on page 2750](#)
- [diagnose saas show apps on page 2750](#)
- [diagnose saas show details on page 2750](#)
- [diagnose saas show status on page 2750](#)

diagnose saas reload

Reload SaaS database.

```
diagnose saas reload
```

diagnose saas show

Show SaaS database.

```
diagnose saas show
```

diagnose saas show apps

Show SaaS database application list.

```
diagnose saas show apps
```

diagnose saas show details

Show SaaS database details.

```
diagnose saas show details
```

diagnose saas show status

Show SaaS database status.

```
diagnose saas show status
```

diagnose settings

settings

This topic includes the following commands:

- [diagnose settings info on page 2751](#)
- [diagnose settings reset on page 2751](#)

diagnose settings info

Show all diagnose settings.

```
diagnose settings info
```

diagnose settings reset

Reset all diagnose settings.

```
diagnose settings reset
```

diagnose sfp-dsl

Diagnose command for SFP DSL

This topic includes the following commands:

- [diagnose sfp-dsl shell on page 2751](#)

diagnose sfp-dsl shell

merlin cli

```
diagnose sfp-dsl shell
```

diagnose sniffer

Sniffer command.

This topic includes the following commands:

- [diagnose sniffer dpdk on page 2752](#)
- [diagnose sniffer migsock on page 2752](#)
- [diagnose sniffer migsock debug-trace on page 2753](#)
- [diagnose sniffer migsock debug-trace disable on page 2753](#)
- [diagnose sniffer migsock debug-trace enable on page 2753](#)
- [diagnose sniffer migsock filter on page 2753](#)
- [diagnose sniffer migsock ssl-trace on page 2753](#)
- [diagnose sniffer migsock ssl-trace disable on page 2753](#)

- [diagnose sniffer migsock ssl-trace enable on page 2754](#)
- [diagnose sniffer migsock start on page 2754](#)
- [diagnose sniffer migsock timestamp on page 2754](#)
- [diagnose sniffer migsock timestamp disable on page 2754](#)
- [diagnose sniffer migsock timestamp enable on page 2754](#)
- [diagnose sniffer packet on page 2754](#)

diagnose sniffer dpdk

Sniff packets on Rx/Tx of DPDK interfaces. (DPDK Sniffing Mode)

```
diagnose sniffer dpdk <interface> <filter> <verbose> <count> <tsformat> <frame size>
```

Parameter	Description	Type	Size
<interface>	Network interface to sniff (or "any").	string	
<filter>	Flexible logical filters for sniffer (or "none"). For example: To print UDP 1812 traffic between forti1 and either forti2 or forti3 'udp and port 1812 and host forti1 and (forti2 or forti3)'	string	
<verbose>	1: print header of packets 2: print header and data from ip of packets 3: print header and data from ethernet of packets (if available) 4: print header of packets with interface name 5: print header and data from ip of packets with interface name 6: print header and data from ethernet of packets (if available) with intf name	string	
<count>	Sniffer count.	string	
<tsformat>	Format of timestamp. a: absolute UTC time, yyyy-mm-dd hh:mm:ss.ms l: absolute LOCAL time, yyyy-mm-dd hh:mm:ss.ms otherwise: relative to the start of sniffing, ss.ms	string	
<frame size>	Set the frame size that is printed before truncation. Defaults to the interface MTU.	string	

diagnose sniffer migsock

Sniff migsock packets.

```
diagnose sniffer migsock
```

diagnose sniffer migsock debug-trace

Enable/disable debug trace.

```
diagnose sniffer migsock debug-trace
```

diagnose sniffer migsock debug-trace disable

Disable debug trace.

```
diagnose sniffer migsock debug-trace disable
```

diagnose sniffer migsock debug-trace enable

Enable debug trace.

```
diagnose sniffer migsock debug-trace enable
```

diagnose sniffer migsock filter

Filter flow.

```
diagnose sniffer migsock filter <filter>
```

Parameter	Description	Type	Size
<filter>	Filter string.	string	

diagnose sniffer migsock ssl-trace

Enable/disable SSL trace.

```
diagnose sniffer migsock ssl-trace
```

diagnose sniffer migsock ssl-trace disable

Disable SSL trace.

```
diagnose sniffer migsock ssl-trace disable
```


diagnose sniffer migsock ssl-trace enable

Enable SSL trace.

```
diagnose sniffer migsock ssl-trace enable
```

diagnose sniffer migsock start

Start sniffer.

```
diagnose sniffer migsock start
```

diagnose sniffer migsock timestamp

Enable/disable timestamp trace.

```
diagnose sniffer migsock timestamp
```

diagnose sniffer migsock timestamp disable

Disable timestamp trace.

```
diagnose sniffer migsock timestamp disable
```

diagnose sniffer migsock timestamp enable

Enable timestamp trace.

```
diagnose sniffer migsock timestamp enable
```

diagnose sniffer packet

Sniff packets.

```
diagnose sniffer packet <interface> <filter> <verbose> <count> <tsformat> <frame size>
```

Parameter	Description	Type	Size
<interface>	Network interface to sniff (or "any").	string	

Parameter	Description	Type	Size
<filter>	Flexible logical filters for sniffer (or "none"). For example: To print UDP 1812 traffic between forti1 and either forti2 or forti3 'udp and port 1812 and host forti1 and (forti2 or forti3)'	string	
<verbose>	1: print header of packets 2: print header and data from ip of packets 3: print header and data from ethernet of packets (if available) 4: print header of packets with interface name 5: print header and data from ip of packets with interface name 6: print header and data from ethernet of packets (if available) with intf name	string	
<count>	Sniffer count.	string	
<tsformat>	Format of timestamp. a: absolute UTC time, yyyy-mm-dd hh:mm:ss.ms l: absolute LOCAL time, yyyy-mm-dd hh:mm:ss.ms otherwise: relative to the start of sniffing, ss.ms	string	
<frame size>	Set the frame size that is printed before truncation. Defaults to the interface MTU.	string	

diagnose snmp ip

Some IP stats.

This topic includes the following commands:

- [diagnose snmp ip frags on page 2755](#)
- [diagnose snmp ip icmp on page 2756](#)
- [diagnose snmp ip ip on page 2756](#)
- [diagnose snmp ip tcp on page 2756](#)
- [diagnose snmp ip udp on page 2756](#)

diagnose snmp ip frags

Fragmentation and reassembly info.

```
diagnose snmp ip frags <rate>
```

Parameter	Description	Type	Size
<rate>	Fragmentation and reassembly info per second	string	

diagnose snmp ip icmp

ICMP related statistics info.

```
diagnose snmp ip icmp <rate>
```

Parameter	Description	Type	Size
<rate>	ICMP related statistics per second	string	

diagnose snmp ip ip

IP related statistics info.

```
diagnose snmp ip ip <rate>
```

Parameter	Description	Type	Size
<rate>	IP related statistics per second	string	

diagnose snmp ip tcp

TCP related statistics info.

```
diagnose snmp ip tcp
```

diagnose snmp ip udp

UDP related statistics info.

```
diagnose snmp ip udp <rate>
```

Parameter	Description	Type	Size
<rate>	UDP related statistics per second	string	

diagnose snmp ip6

Some IPv6 stats.

This topic includes the following commands:

- [diagnose snmp ip6 frags on page 2757](#)
- [diagnose snmp ip6 icmp6 on page 2757](#)
- [diagnose snmp ip6 ip6 on page 2757](#)
- [diagnose snmp ip6 udp6 on page 2757](#)

diagnose snmp ip6 frags

Fragmentation and reassembly info.

```
diagnose snmp ip6 frags <rate>
```

Parameter	Description	Type	Size
<rate>	Fragmentation and reassembly info per second	string	

diagnose snmp ip6 icmp6

ICMP related statistics info.

```
diagnose snmp ip6 icmp6 <rate>
```

Parameter	Description	Type	Size
<rate>	ICMP related statistics per second	string	

diagnose snmp ip6 ip6

IP related statistics info.

```
diagnose snmp ip6 ip6 <rate>
```

Parameter	Description	Type	Size
<rate>	IPv6 related statistics per second	string	

diagnose snmp ip6 udp6

UDP related statistics info.

```
diagnose snmp ip6 udp6 <rate>
```

Parameter	Description	Type	Size
<rate>	UDP related statistics per second	string	

diagnose snmp net

Some network statistics.

This topic includes the following commands:

- [diagnose snmp net stat on page 2758](#)

diagnose snmp net stat

Network statistics.

```
diagnose snmp net stat
```

diagnose snmp trap

SNMP trap diagnostics.

This topic includes the following commands:

- [diagnose snmp trap send on page 2758](#)

diagnose snmp trap send

Generate a trap event.

```
diagnose snmp trap send
```

diagnose switch-controller

Fortiswitch controller.

This topic includes the following commands:

- [diagnose switch-controller dsl on page 2762](#)
- [diagnose switch-controller dsl add on page 2762](#)
- [diagnose switch-controller dsl delete on page 2762](#)
- [diagnose switch-controller dsl show on page 2762](#)
- [diagnose switch-controller flow-collector on page 2763](#)
- [diagnose switch-controller flow-collector status on page 2763](#)
- [diagnose switch-controller mac-cache on page 2763](#)
- [diagnose switch-controller mac-cache filter on page 2763](#)
- [diagnose switch-controller mac-cache filter clear on page 2763](#)
- [diagnose switch-controller mac-cache filter intf-name on page 2763](#)
- [diagnose switch-controller mac-cache filter mac on page 2764](#)
- [diagnose switch-controller mac-cache filter vlan-id on page 2764](#)
- [diagnose switch-controller mac-cache match-user on page 2764](#)
- [diagnose switch-controller mac-cache show on page 2764](#)
- [diagnose switch-controller mac-device on page 2765](#)
- [diagnose switch-controller mac-device cache on page 2765](#)
- [diagnose switch-controller mac-device dynamic on page 2765](#)
- [diagnose switch-controller mac-device nac on page 2765](#)
- [diagnose switch-controller mac-device nac known on page 2765](#)
- [diagnose switch-controller mac-device nac onboarding on page 2765](#)
- [diagnose switch-controller nac-tag on page 2766](#)
- [diagnose switch-controller nac-tag add on page 2766](#)
- [diagnose switch-controller nac-tag delete on page 2766](#)
- [diagnose switch-controller nac-tag get on page 2766](#)
- [diagnose switch-controller restart-daemon on page 2766](#)
- [diagnose switch-controller restart-daemon acd on page 2767](#)
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diagnose switch-controller dsl

DSL.

```
diagnose switch-controller dsl
```

diagnose switch-controller dsl add

Add DSL session.

```
diagnose switch-controller dsl add <switch> <port-name> <mac>
```

Parameter	Description	Type	Size
<switch>	FortiSwitch name.	string	
<port-name>	FortiSwitch port name.	string	
<mac>	Device MAC Address.	string	

diagnose switch-controller dsl delete

Delete DSL session.

```
diagnose switch-controller dsl delete <switch> <port-name> <mac>
```

Parameter	Description	Type	Size
<switch>	FortiSwitch name.	string	
<port-name>	FortiSwitch port name.	string	
<mac>	Device MAC Address.	string	

diagnose switch-controller dsl show

Dump all DSL ports.

```
diagnose switch-controller dsl show
```

diagnose switch-controller flow-collector

Flow collector.

```
diagnose switch-controller flow-collector
```

diagnose switch-controller flow-collector status

Display flow collector status.

```
diagnose switch-controller flow-collector status
```

diagnose switch-controller mac-cache

Mac cache.

```
diagnose switch-controller mac-cache
```

diagnose switch-controller mac-cache filter

Filter to dump devices connected to managed FortiSwitch.

```
diagnose switch-controller mac-cache filter
```

diagnose switch-controller mac-cache filter clear

Clear the configured device filter.

```
diagnose switch-controller mac-cache filter clear
```

diagnose switch-controller mac-cache filter intf-name

Device filter interface name.

```
diagnose switch-controller mac-cache filter intf-name <intf-name>
```

Parameter	Description	Type	Size
<intf-name>	Managed FortiSwitch interface name on which the device is connected.	string	

diagnose switch-controller mac-cache filter mac

Device filter MAC Address.

```
diagnose switch-controller mac-cache filter mac <mac>
```

Parameter	Description	Type	Size
<mac>	MAC Address of device(XX:XX:XX:XX:XX:XX).	string	

diagnose switch-controller mac-cache filter vlan-id

Device filter VLAN ID.

```
diagnose switch-controller mac-cache filter vlan-id <vlan-id>
```

Parameter	Description	Type	Size
<vlan-id>	Managed FortiSwitch VLAN of device.	string	

diagnose switch-controller mac-cache match-user

Display FortiSwitch port of detected devices.

```
diagnose switch-controller mac-cache match-user
```

diagnose switch-controller mac-cache show

Show running clients.

```
diagnose switch-controller mac-cache show <switch>
```

Parameter	Description	Type	Size
<switch>	Managed FortiSwitch device ID.	string	

diagnose switch-controller mac-device

MAC devices.

```
diagnose switch-controller mac-device
```

diagnose switch-controller mac-device cache

Event cached MAC address.

```
diagnose switch-controller mac-device cache
```

diagnose switch-controller mac-device dynamic

Display detected DPP devices which matches dynamic port policy.

```
diagnose switch-controller mac-device dynamic
```

diagnose switch-controller mac-device nac

Display NAC devices.

```
diagnose switch-controller mac-device nac
```

diagnose switch-controller mac-device nac known

Display detected NAC devices which matches NAC policy.

```
diagnose switch-controller mac-device nac known
```

diagnose switch-controller mac-device nac onboarding

Display onboarding NAC devices with no matching NAC policy.

```
diagnose switch-controller mac-device nac onboarding
```

diagnose switch-controller nac-tag

Add, remove, or show MAC from NAC dynamic firewall tag.

```
diagnose switch-controller nac-tag
```

diagnose switch-controller nac-tag add

Add MAC to dynamic NAC tag.

```
diagnose switch-controller nac-tag add <tag> <mac>
```

Parameter	Description	Type	Size
<tag>	Firewall tag.	string	
<mac>	MAC address	string	

diagnose switch-controller nac-tag delete

Delete MAC from dynamic NAC tag.

```
diagnose switch-controller nac-tag delete <tag> <mac>
```

Parameter	Description	Type	Size
<tag>	Firewall tag.	string	
<mac>	MAC address	string	

diagnose switch-controller nac-tag get

Show all MACs associated with dynamic NAC tag.

```
diagnose switch-controller nac-tag get <tag>
```

Parameter	Description	Type	Size
<tag>	Firewall tag.	string	

diagnose switch-controller restart-daemon

Restart switch controller daemons.

```
diagnose switch-controller restart-daemon
```

diagnose switch-controller restart-daemon acd

Restart switch-controller daemon.

```
diagnose switch-controller restart-daemon acd
```

diagnose switch-controller restart-daemon swtpd

Restart switch-controller daemon in FortiSwitch device.

```
diagnose switch-controller restart-daemon swtpd <switch>
```

Parameter	Description	Type	Size
<switch>	Managed FortiSwitch device ID.	string	

diagnose switch-controller switch-info

Switch information.

```
diagnose switch-controller switch-info
```

diagnose switch-controller switch-info 802.1X

Managed FortiSwitch port 802.1X status.

```
diagnose switch-controller switch-info 802.1X <switch> <port>
```

Parameter	Description	Type	Size
<switch>	Managed FortiSwitch device ID.	string	
<port>	Managed FortiSwitch port of interest for 802.1X status.	string	

diagnose switch-controller switch-info arp-inspection

Managed FortiSwitch ARP inspection interface list.

```
diagnose switch-controller switch-info arp-inspection
```

diagnose switch-controller switch-info arp-inspection stats

Show ARP inspection statistics.

```
diagnose switch-controller switch-info arp-inspection stats <switch>
```

Parameter	Description	Type	Size
<switch>	Managed FortiSwitch device ID.	string	

diagnose switch-controller switch-info arp-inspection stats-clear

Clear ARP inspection statistics.

```
diagnose switch-controller switch-info arp-inspection stats-clear <vlan-id> <switch>
```

Parameter	Description	Type	Size
<vlan-id>	Managed FortiSwitch VLAN of interest for MAC address list.	string	
<switch>	Managed FortiSwitch device ID.	string	

diagnose switch-controller switch-info bpdu-guard-status

Managed FortiSwitch STP BPDU guard status.

```
diagnose switch-controller switch-info bpdu-guard-status <switch>
```

Parameter	Description	Type	Size
<switch>	Managed FortiSwitch device ID.	string	

diagnose switch-controller switch-info dhcp-snooping

Managed FortiSwitch DHCP snooping interface list.

```
diagnose switch-controller switch-info dhcp-snooping
```

diagnose switch-controller switch-info dhcp-snooping database

DHCP snooping database details.

```
diagnose switch-controller switch-info dhcp-snooping database <switch>
```

Parameter	Description	Type	Size
<switch>	Managed FortiSwitch device ID.	string	

diagnose switch-controller switch-info dhcp-snooping status

DHCP snooping status.

```
diagnose switch-controller switch-info dhcp-snooping status <switch>
```

Parameter	Description	Type	Size
<switch>	Managed FortiSwitch device ID.	string	

diagnose switch-controller switch-info flapguard

Managed FortiSwitch flap guard.

```
diagnose switch-controller switch-info flapguard
```

diagnose switch-controller switch-info flapguard status

List flapguard status.

```
diagnose switch-controller switch-info flapguard status <switch>
```

Parameter	Description	Type	Size
<switch>	Managed FortiSwitch device ID.	string	

diagnose switch-controller switch-info flow-tracking

Managed FortiSwitch flow information.


```
diagnose switch-controller switch-info flow-tracking
```

diagnose switch-controller switch-info flow-tracking flows

Flow record data.

```
diagnose switch-controller switch-info flow-tracking flows <count> <ip/subnet> <switch> <port>
```

Parameter	Description	Type	Size
<count>	Specify record count or all for query response.	string	
<ip/subnet>	Specify IP address/Subnet(Class IP/Netmask) or all.	string	
<switch>	Managed FortiSwitch device ID.	string	
<port>	Managed FortiSwitch port.	string	

diagnose switch-controller switch-info flow-tracking flows-raw

Flow raw record data.

```
diagnose switch-controller switch-info flow-tracking flows-raw <switch>
```

Parameter	Description	Type	Size
<switch>	Managed FortiSwitch device ID.	string	

diagnose switch-controller switch-info flow-tracking statistics

Flow statistics data.

```
diagnose switch-controller switch-info flow-tracking statistics <switch>
```

Parameter	Description	Type	Size
<switch>	Managed FortiSwitch device ID.	string	

diagnose switch-controller switch-info igmp-snooping

IGMP snooping information.

```
diagnose switch-controller switch-info igmp-snooping
```

diagnose switch-controller switch-info igmp-snooping group

Managed FortiSwitch IGMP snooping learned groups list.

```
diagnose switch-controller switch-info igmp-snooping group <switch>
```

Parameter	Description	Type	Size
<switch>	Managed FortiSwitch device ID.	string	

diagnose switch-controller switch-info igmp-snooping status

Managed FortiSwitch IGMP snooping status.

```
diagnose switch-controller switch-info igmp-snooping status <switch>
```

Parameter	Description	Type	Size
<switch>	Managed FortiSwitch device ID.	string	

diagnose switch-controller switch-info ip-source-guard

Managed FortiSwitch source guard information in hardware.

```
diagnose switch-controller switch-info ip-source-guard
```

diagnose switch-controller switch-info ip-source-guard hardware

Managed FortiSwitch IP source guard information in hardware.

```
diagnose switch-controller switch-info ip-source-guard hardware <switch>
```

Parameter	Description	Type	Size
<switch>	Managed FortiSwitch device ID.	string	

diagnose switch-controller switch-info lldp

LLDP-related information.

```
diagnose switch-controller switch-info lldp
```

diagnose switch-controller switch-info lldp neighbors-detail

LLDP neighbor detail.

```
diagnose switch-controller switch-info lldp neighbors-detail <switch> <port>
```

Parameter	Description	Type	Size
<switch>	Managed FortiSwitch device ID.	string	
<port>	Managed FortiSwitch port name.	string	

diagnose switch-controller switch-info lldp neighbors-summary

LLDP neighbor summary.

```
diagnose switch-controller switch-info lldp neighbors-summary <switch>
```

Parameter	Description	Type	Size
<switch>	Managed FortiSwitch device ID.	string	

diagnose switch-controller switch-info lldp stats

LLDP port statistics.

```
diagnose switch-controller switch-info lldp stats <switch> <port>
```

Parameter	Description	Type	Size
<switch>	Managed FortiSwitch device ID.	string	
<port>	Managed FortiSwitch port name.	string	

diagnose switch-controller switch-info loop-guard

Managed FortiSwitch loop-guard status.

```
diagnose switch-controller switch-info loop-guard <switch>
```

Parameter	Description	Type	Size
<switch>	Managed FortiSwitch device ID.	string	

diagnose switch-controller switch-info mac-limit-violations

Managed FortiSwitch violated MACs.

```
diagnose switch-controller switch-info mac-limit-violations
```

diagnose switch-controller switch-info mac-limit-violations all

FortiSwitch all violations.

```
diagnose switch-controller switch-info mac-limit-violations all <switch>
```

Parameter	Description	Type	Size
<switch>	Managed FortiSwitch device ID.	string	

diagnose switch-controller switch-info mac-limit-violations interface

FortiSwitch port specific violations.

```
diagnose switch-controller switch-info mac-limit-violations interface <switch> <port>
```

Parameter	Description	Type	Size
<switch>	Managed FortiSwitch device ID.	string	
<port>	Managed FortiSwitch port.	string	

diagnose switch-controller switch-info mac-limit-violations vlan

FortiSwitch VLAN specific violations.

```
diagnose switch-controller switch-info mac-limit-violations vlan <switch> <vlan-id>
```

Parameter	Description	Type	Size
<switch>	Managed FortiSwitch device ID.	string	
<vlan-id>	Managed FortiSwitch VLAN ID.	string	

diagnose switch-controller switch-info mac-table

Managed FortiSwitch MAC address list.

```
diagnose switch-controller switch-info mac-table <switch> <vlan-id>
```

Parameter	Description	Type	Size
<switch>	Managed FortiSwitch device ID.	string	
<vlan-id>	Managed FortiSwitch VLAN of interest for MAC address list.	string	

diagnose switch-controller switch-info mclag

Dumps MCLAG related information from FortiSwitch.

```
diagnose switch-controller switch-info mclag
```

diagnose switch-controller switch-info mclag icl

Dumps MCLAG inter-chassis-link(ICL).

```
diagnose switch-controller switch-info mclag icl <switch>
```

Parameter	Description	Type	Size
<switch>	Managed FortiSwitch device ID.	string	

diagnose switch-controller switch-info mclag list

Dumps MCLAG list.

```
diagnose switch-controller switch-info mclag list <switch> <mclag-trunk-name>
```

Parameter	Description	Type	Size
<switch>	Managed FortiSwitch device ID.	string	
<mclag-trunk-name>	MCLAG's trunk name.	string	

diagnose switch-controller switch-info mclag peer-consistency-check

Checks MCLAG peer consistency.

```
diagnose switch-controller switch-info mclag peer-consistency-check <switch> <mclag-trunk-name>
```

Parameter	Description	Type	Size
<switch>	Managed FortiSwitch device ID.	string	
<mclag-trunk-name>	MCLAG's trunk name.	string	

diagnose switch-controller switch-info mirror

Managed FortiSwitch mirror information.

```
diagnose switch-controller switch-info mirror
```

diagnose switch-controller switch-info mirror status

Mirror session status.

```
diagnose switch-controller switch-info mirror status <switch>
```

Parameter	Description	Type	Size
<switch>	Managed FortiSwitch device ID.	string	

diagnose switch-controller switch-info modules

Dumps modules related information from FortiSwitch.

```
diagnose switch-controller switch-info modules
```

diagnose switch-controller switch-info modules detail

Managed FortiSwitch module details.

```
diagnose switch-controller switch-info modules detail <switch> <port>
```

Parameter	Description	Type	Size
<switch>	Managed FortiSwitch device ID.	string	
<port>	Managed FortiSwitch port of interest for statistics.	string	

diagnose switch-controller switch-info modules limits

Managed FortiSwitch module limits.

```
diagnose switch-controller switch-info modules limits <switch> <port>
```

Parameter	Description	Type	Size
<switch>	Managed FortiSwitch device ID.	string	
<port>	Managed FortiSwitch port of interest for statistics.	string	

diagnose switch-controller switch-info modules status

Managed FortiSwitch module status.

```
diagnose switch-controller switch-info modules status <switch> <port>
```

Parameter	Description	Type	Size
<switch>	Managed FortiSwitch device ID.	string	
<port>	Managed FortiSwitch port of interest for statistics.	string	

diagnose switch-controller switch-info modules summary

Managed FortiSwitch module summary.

```
diagnose switch-controller switch-info modules summary <switch> <port>
```

Parameter	Description	Type	Size
<switch>	Managed FortiSwitch device ID.	string	
<port>	Managed FortiSwitch port of interest for statistics.	string	

diagnose switch-controller switch-info pdu-counters-list

Managed FortiSwitch pdu-counters.

```
diagnose switch-controller switch-info pdu-counters-list <switch>
```

Parameter	Description	Type	Size
<switch>	Managed FortiSwitch device ID.	string	

diagnose switch-controller switch-info poe

PoE-related information.

```
diagnose switch-controller switch-info poe
```

diagnose switch-controller switch-info poe detail

PoE detail.

```
diagnose switch-controller switch-info poe detail <switch> <port>
```

Parameter	Description	Type	Size
<switch>	Managed FortiSwitch device ID.	string	
<port>	Managed FortiSwitch port name.	string	

diagnose switch-controller switch-info poe summary

PoE summary.


```
diagnose switch-controller switch-info poe summary <switch>
```

Parameter	Description	Type	Size
<switch>	Managed FortiSwitch device ID.	string	

diagnose switch-controller switch-info port-properties

Managed FortiSwitch port properties.

```
diagnose switch-controller switch-info port-properties <switch> <port>
```

Parameter	Description	Type	Size
<switch>	Managed FortiSwitch device ID.	string	
<port>	Managed FortiSwitch port name.	string	

diagnose switch-controller switch-info port-stats

Managed FortiSwitch port statistics.

```
diagnose switch-controller switch-info port-stats <switch> <port>
```

Parameter	Description	Type	Size
<switch>	Managed FortiSwitch device ID.	string	
<port>	Managed FortiSwitch port of interest for statistics.	string	

diagnose switch-controller switch-info qos-stats

Managed FortiSwitch QoS statistics.

```
diagnose switch-controller switch-info qos-stats <switch> <port>
```

Parameter	Description	Type	Size
<switch>	Managed FortiSwitch device ID.	string	
<port>	Managed FortiSwitch port of interest for statistics.	string	

diagnose switch-controller switch-info rpvtst

Managed FortiSwitch STP port information are inter-operating with rapid PVST network.

```
diagnose switch-controller switch-info rpvt <switch> <port>
```

Parameter	Description	Type	Size
<switch>	Managed FortiSwitch device ID.	string	
<port>	Managed FortiSwitch port name.	string	

diagnose switch-controller switch-info stp

Managed FortiSwitch STP instance status.

```
diagnose switch-controller switch-info stp <switch> <instance-id>
```

Parameter	Description	Type	Size
<switch>	Managed FortiSwitch device ID.	string	
<instance-id>	Managed FortiSwitch STP instance of interest for statistics.	string	

diagnose switch-controller switch-info trunk

Trunk information.

```
diagnose switch-controller switch-info trunk
```

diagnose switch-controller switch-info trunk config

Managed FortiSwitch trunk config information.

```
diagnose switch-controller switch-info trunk config <switch>
```

Parameter	Description	Type	Size
<switch>	Managed FortiSwitch device ID.	string	

diagnose switch-controller switch-info trunk status

Managed FortiSwitch trunk status.

```
diagnose switch-controller switch-info trunk status <switch> <trunk-port>
```

Parameter	Description	Type	Size
<switch>	Managed FortiSwitch device ID.	string	
<trunk-port>	Managed FortiSwitch trunk-port of interest for state.	string	

diagnose switch-controller switch-recommendation

Recommendations for FortiLink topology and configuration.

```
diagnose switch-controller switch-recommendation
```

diagnose switch-controller switch-recommendation bios-compatibility-check

FortiSwitch BIOS compatibility check.

```
diagnose switch-controller switch-recommendation bios-compatibility-check <fortilink interface> <switch>
```

Parameter	Description	Type	Size
<fortilink interface>	FortiLink interface name.	string	
<switch>	Managed FortiSwitch device ID.	string	

diagnose switch-controller switch-recommendation check-fortilink-link-redundancy

Check if FortiLink trunk has redundant links.

```
diagnose switch-controller switch-recommendation check-fortilink-link-redundancy <fortilink interface> <switch>
```

Parameter	Description	Type	Size
<fortilink interface>	FortiLink interface name.	string	
<switch>	Managed FortiSwitch device ID.	string	

diagnose switch-controller switch-recommendation check-isl-icl-link-redundancy

Check if ISL/ICL trunk has redundant links.

```
diagnose switch-controller switch-recommendation check-isl-icl-link-redundancy <fortilink interface> <switch> <switch>
```

Parameter	Description	Type	Size
<fortilink interface>	FortiLink interface name.	string	
<switch>	Managed FortiSwitch #1 device ID.	string	
<switch>	Managed FortiSwitch #2 device ID.	string	

diagnose switch-controller switch-recommendation check-isl-link-redundancy

Check if ISL trunk has redundant links.

```
diagnose switch-controller switch-recommendation check-isl-link-redundancy <fortilink interface> <switch> <switch>
```

Parameter	Description	Type	Size
<fortilink interface>	FortiLink interface name.	string	
<switch>	Managed FortiSwitch #1 device ID.	string	
<switch>	Managed FortiSwitch #2 device ID.	string	

diagnose switch-controller switch-recommendation clear-dhcp-opt43-key

Clear DHCP option43 key in topology.

```
diagnose switch-controller switch-recommendation clear-dhcp-opt43-key <fortilink interface>
```

Parameter	Description	Type	Size
<fortilink interface>	FortiLink interface name.	string	

diagnose switch-controller switch-recommendation config-dhcp-opt43-key

Config DHCP option43 key in topology.

```
diagnose switch-controller switch-recommendation config-dhcp-opt43-key <fortilink interface> <option 43 key>
```

Parameter	Description	Type	Size
<fortilink interface>	FortiLink interface name.	string	
<option 43 key>	DHCP option 43 key.	string	

diagnose switch-controller switch-recommendation disable-auto-config-poe-status

Disable PoE status of auto-config default policy.

```
diagnose switch-controller switch-recommendation disable-auto-config-poe-status
```

diagnose switch-controller switch-recommendation disable-bounce-quarantine-link

Disable bounce quarantine link.

```
diagnose switch-controller switch-recommendation disable-bounce-quarantine-link
```

diagnose switch-controller switch-recommendation disable-poe-pre-standard-detection

Disable PoE pre-standard detection for all user ports.

```
diagnose switch-controller switch-recommendation disable-poe-pre-standard-detection <fortilink interface> <switch>
```

Parameter	Description	Type	Size
<fortilink interface>	FortiLink interface name.	string	
<switch>	Managed FortiSwitch device ID.	string	

diagnose switch-controller switch-recommendation disable-stp-state-topology

Disable STP state for all user ports.

```
diagnose switch-controller switch-recommendation disable-stp-state-topology <fortilink interface> <switch>
```

Parameter	Description	Type	Size
<fortilink interface>	FortiLink interface name.	string	
<switch>	Managed FortiSwitch device ID.	string	

diagnose switch-controller switch-recommendation enable-auto-config-poe-status

Enable PoE status of auto-config default policy.

```
diagnose switch-controller switch-recommendation enable-auto-config-poe-status
```

diagnose switch-controller switch-recommendation enable-bounce-quarantine-link

Enable bounce quarantine link.

```
diagnose switch-controller switch-recommendation enable-bounce-quarantine-link
```

diagnose switch-controller switch-recommendation enable-poe-pre-standard-detection

Enable PoE pre-standard detection for all user ports.

```
diagnose switch-controller switch-recommendation enable-poe-pre-standard-detection <fortilink interface> <switch>
```

Parameter	Description	Type	Size
<fortilink interface>	FortiLink interface name.	string	
<switch>	Managed FortiSwitch device ID.	string	

diagnose switch-controller switch-recommendation enable-stp-state-topology

Enable STP state for all user ports.

```
diagnose switch-controller switch-recommendation enable-stp-state-topology <fortilink interface> <switch>
```

Parameter	Description	Type	Size
<fortilink interface>	FortiLink interface name.	string	
<switch>	Managed FortiSwitch device ID.	string	

diagnose switch-controller switch-recommendation fabric-lockdown-check

Get fabric lockdown status.

```
diagnose switch-controller switch-recommendation fabric-lockdown-check <fortilink interface>
```

Parameter	Description	Type	Size
<fortilink interface>	FortiLink interface name.	string	

diagnose switch-controller switch-recommendation fabric-lockdown-disable

Disable fabric lockdown.

```
diagnose switch-controller switch-recommendation fabric-lockdown-disable <fortilink interface>
```

Parameter	Description	Type	Size
<fortilink interface>	FortiLink interface name.	string	

diagnose switch-controller switch-recommendation fabric-lockdown-enable

Enable fabric lockdown.

```
diagnose switch-controller switch-recommendation fabric-lockdown-enable <fortilink interface>
```

Parameter	Description	Type	Size
<fortilink interface>	FortiLink interface name.	string	

diagnose switch-controller switch-recommendation get-mclag-tier1-candidate

Get MCLAG tier1 candidate recommendation.

```
diagnose switch-controller switch-recommendation get-mclag-tier1-candidate <fortilink interface>
```

Parameter	Description	Type	Size
<fortilink interface>	FortiLink interface name.	string	

diagnose switch-controller switch-recommendation get-mclag-tier2-candidate

Get MCLAG tier2 candidate recommendation.

```
diagnose switch-controller switch-recommendation get-mclag-tier2-candidate <fortilink interface>  
<switch> <switch>
```

Parameter	Description	Type	Size
<fortilink interface>	FortiLink interface name.	string	

Parameter	Description	Type	Size
<switch>	FortiSwitch device ID for tier-1 MCLAG peer 1.	string	
<switch>	FortiSwitch device ID for tier-1 MCLAG peer 2.	string	

diagnose switch-controller switch-recommendation get-mclag-tier3-candidate

Get MCLAG tier3 candidate recommendation.

```
diagnose switch-controller switch-recommendation get-mclag-tier3-candidate <fortilink interface>
<switch> <switch>
```

Parameter	Description	Type	Size
<fortilink interface>	FortiLink interface name.	string	
<switch>	FortiSwitch device ID for tier-2 MCLAG peer 1.	string	
<switch>	FortiSwitch device ID for tier-2 MCLAG peer 2.	string	

diagnose switch-controller switch-recommendation is-fortilink-capacity-exceeded

Check if FortiLink is almost at capacity.

```
diagnose switch-controller switch-recommendation is-fortilink-capacity-exceeded
```

diagnose switch-controller switch-recommendation is-switch-dual-homed

Check if switch is dual-homed.

```
diagnose switch-controller switch-recommendation is-switch-dual-homed <fortilink interface>
<switch>
```

Parameter	Description	Type	Size
<fortilink interface>	FortiLink interface name.	string	
<switch>	Managed FortiSwitch device ID.	string	

diagnose switch-controller switch-recommendation lock-down-topo-lldp-profile

Lock down topology via LLDP profile.

```
diagnose switch-controller switch-recommendation lock-down-topo-lldp-profile <fortilink interface> <switch>
```

Parameter	Description	Type	Size
<fortilink interface>	FortiLink interface name.	string	
<switch>	Managed FortiSwitch device ID.	string	

diagnose switch-controller switch-recommendation pse-check

Get fabric PSE-PSE status.

```
diagnose switch-controller switch-recommendation pse-check <fortilink interface>
```

Parameter	Description	Type	Size
<fortilink interface>	FortiLink interface name.	string	

diagnose switch-controller switch-recommendation pse-config

Disable fabric POE-status to prevent PSE-PSE scenarios.

```
diagnose switch-controller switch-recommendation pse-config <fortilink interface>
```

Parameter	Description	Type	Size
<fortilink interface>	FortiLink interface name.	string	

diagnose switch-controller switch-recommendation set-tier-plus-mclag-icl

Configure tier-plus MCLAG-ICL.

```
diagnose switch-controller switch-recommendation set-tier-plus-mclag-icl <fortilink interface>
<switch> <switch> <switch> <switch> <isl-port-group-name>
```

Parameter	Description	Type	Size
<fortilink interface>	FortiLink interface name.	string	
<switch>	FortiSwitch device ID for parent MCLAG peer 1.	string	
<switch>	FortiSwitch device ID for parent MCLAG peer 2.	string	
<switch>	FortiSwitch device ID for child MCLAG peer 1.	string	
<switch>	FortiSwitch device ID for child MCLAG peer 2.	string	
<isl-port-group-name>	Unique ISL port group name.	string	

diagnose switch-controller switch-recommendation set-tier1-mclag-icl

Configure tier-1 MCLAG-ICL.

```
diagnose switch-controller switch-recommendation set-tier1-mclag-icl <fortilink interface>
<switch> <switch>
```

Parameter	Description	Type	Size
<fortilink interface>	FortiLink interface name.	string	
<switch>	FortiSwitch device ID for MCLAG peer 1.	string	
<switch>	FortiSwitch device ID for MCLAG peer 2.	string	

diagnose switch-controller switch-recommendation tunnel-mode-settings

Tunnel mode settings.

```
diagnose switch-controller switch-recommendation tunnel-mode-settings <fortilink interface>
```

Parameter	Description	Type	Size
<fortilink interface>	FortiLink interface name.	string	

diagnose switch-controller switch-recommendation unlock-topo-lldp-profile

Unlock topology via LLDP profile.

```
diagnose switch-controller switch-recommendation unlock-topo-lldp-profile <fortilink interface> <switch>
```

Parameter	Description	Type	Size
<fortilink interface>	FortiLink interface name.	string	
<switch>	Managed FortiSwitch device ID.	string	

diagnose switch-controller system-info

Switch-controller system information.

```
diagnose switch-controller system-info
```

diagnose switch-controller system-info show

Show switch-controller system info.

```
diagnose switch-controller system-info show
```

diagnose switch-controller telemetry

FortiSwitch telemetry.

```
diagnose switch-controller telemetry
```

diagnose switch-controller telemetry show

Show FortiSwitch telemetry.

```
diagnose switch-controller telemetry show
```

diagnose switch-controller telemetry show mac-stats

Show FortiSwitch MAC telemetry.

```
diagnose switch-controller telemetry show mac-stats
```

diagnose switch-controller telemetry show mac-stats switch

Show FortiSwitch telemetry.

```
diagnose switch-controller telemetry show mac-stats switch <switch>
```

Parameter	Description	Type	Size
<switch>	Managed FortiSwitch device ID.	string	

diagnose switch-controller telemetry show switch

Show FortiSwitch telemetry.

```
diagnose switch-controller telemetry show switch <switch>
```

Parameter	Description	Type	Size
<switch>	Managed FortiSwitch device ID.	string	

diagnose switch-controller telemetry show switch-port

Show FortiSwitch port telemetry.

```
diagnose switch-controller telemetry show switch-port <switch> <port>
```

Parameter	Description	Type	Size
<switch>	Managed FortiSwitch device ID.	string	
<port>	Managed FortiSwitch port of interest for telemetry.	string	

diagnose switch-controller topology

Topology commands.

```
diagnose switch-controller topology
```

diagnose switch-controller topology reset

Topology reset commands.

```
diagnose switch-controller topology reset
```

diagnose switch-controller topology reset fortilink-flag

Reset FortiLink flag.

```
diagnose switch-controller topology reset fortilink-flag <switch> <port>
```

Parameter	Description	Type	Size
<switch>	Managed FortiSwitch device ID.	string	
<port>	Managed FortiSwitch port name.	string	

diagnose switch-controller topology reset isl-peer-flag

Reset isl peer flag.

```
diagnose switch-controller topology reset isl-peer-flag <switch> <port>
```

Parameter	Description	Type	Size
<switch>	Managed FortiSwitch device ID.	string	
<port>	Managed FortiSwitch port name.	string	

diagnose switch-controller topology set

Topology set commands.

```
diagnose switch-controller topology set
```

diagnose switch-controller topology set fortilink-flag

Set FortiLink flag.

```
diagnose switch-controller topology set fortilink-flag <switch> <port>
```

Parameter	Description	Type	Size
<switch>	Managed FortiSwitch device ID.	string	
<port>	Managed FortiSwitch port name.	string	

diagnose switch-controller topology set isl-peer-flag

Set isl peer flag.

```
diagnose switch-controller topology set isl-peer-flag <switch> <port>
```

Parameter	Description	Type	Size
<switch>	Managed FortiSwitch device ID.	string	
<port>	Managed FortiSwitch port name.	string	

diagnose switch-controller traffic-capture

Traffic capture.

```
diagnose switch-controller traffic-capture
```

diagnose switch-controller traffic-capture show

Dump all sniffer sessions.

```
diagnose switch-controller traffic-capture show
```

diagnose switch-controller traffic-capture start

Start sniffer session.

```
diagnose switch-controller traffic-capture start <fortilink-interface> <mac>
```

Parameter	Description	Type	Size
<fortilink-interface>	FortiLink interface name.	string	
<mac>	Device MAC Address.	string	

diagnose switch-controller traffic-capture stop

Stop sniffer session and callback.

```
diagnose switch-controller traffic-capture stop <fortilink-interface> <mac>
```

Parameter	Description	Type	Size
<fortilink-interface>	FortiLink interface name.	string	
<mac>	Device MAC Address.	string	

diagnose switch-controller trigger

Trigger switch controller processing.

```
diagnose switch-controller trigger
```

diagnose switch-controller trigger config-sync

Triggers full configuration synchronization for FortiSwitch.

```
diagnose switch-controller trigger config-sync <switch>
```

Parameter	Description	Type	Size
<switch>	Managed FortiSwitch device ID.	string	

diagnose switch-controller trigger mac-sync

Trigger MAC sync for all managed FortiSwitches.

```
diagnose switch-controller trigger mac-sync
```


diagnose switch-controller trigger nac-mac-cache-sync

Triggers NAC MAC cache synchronization from FortiSwitch.

```
diagnose switch-controller trigger nac-mac-cache-sync <switch>
```

Parameter	Description	Type	Size
<switch>	Managed FortiSwitch device ID.	string	

diagnose switch-controller trigger reset-hardware-counters

Triggers reset of port statistic counters for FortiSwitch.

```
diagnose switch-controller trigger reset-hardware-counters <switch> <port>
```

Parameter	Description	Type	Size
<switch>	Managed FortiSwitch device ID.	string	
<port>	Managed FortiSwitch port list (range of ports separated by commas; eg 1,3,1-4,port6-7,port10-port11,internal).	string	

diagnose switch-controller trigger restore-hardware-counters

Triggers restoration of port statistic counters from FortiSwitch hardware.

```
diagnose switch-controller trigger restore-hardware-counters <switch> <port>
```

Parameter	Description	Type	Size
<switch>	Managed FortiSwitch device ID.	string	
<port>	Managed FortiSwitch port list (range of ports separated by commas; eg 1,3,1-4,port6-7,port10-port11,internal).	string	

diagnose sys

system

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diagnose sys 802-1x

802.1X diagnostics.

```
diagnose sys 802-1x
```

diagnose sys 802-1x status

Display 802.1X port-based authentication status.

```
diagnose sys 802-1x status
```

diagnose sys 802-1x valgrind

Valgrind analysis.

```
diagnose sys 802-1x valgrind
```

diagnose sys 802-1x valgrind disable

Force daemon to restart.

```
diagnose sys 802-1x valgrind disable
```

diagnose sys 802-1x valgrind enable

Force daemon to restart.

```
diagnose sys 802-1x valgrind enable
```

diagnose sys 802-1x valgrind log

Valgrind logs.

```
diagnose sys 802-1x valgrind log
```

diagnose sys 802-1x valgrind log clear

Clear logs.

```
diagnose sys 802-1x valgrind log clear
```

diagnose sys 802-1x valgrind log show

Show logs.

```
diagnose sys 802-1x valgrind log show
```

diagnose sys 802-1x valgrind memcheck

Force daemon to restart.

```
diagnose sys 802-1x valgrind memcheck
```

diagnose sys 802-1x valgrind memcheck_less

Force daemon to restart.

```
diagnose sys 802-1x valgrind memcheck_less
```

diagnose sys 802-1x valgrind status

Show valgrind status.

```
diagnose sys 802-1x valgrind status
```

diagnose sys acme

ACME client diagnostics.

```
diagnose sys acme
```

diagnose sys acme add-account

Import an ACME account to 'system acme.accounts'.

```
diagnose sys acme add-account <id> <url> <ca_url> <status> <contact> <privatekey> <passphrase>
```

Parameter	Description	Type	Size
<id>	Account ID.	string	
<url>	Account URL.	string	
<ca_url>	Account CA URL.	string	
<status>	Account Status.	string	
<contact>	Account Email.	string	
<privatekey>	Account PEM private key.	string	
<passphrase>	Account private key passphrase.	string	

diagnose sys acme delete-cert

Delete certificate from the ACME cert store for a given domain.

```
diagnose sys acme delete-cert <domain>
```

Parameter	Description	Type	Size
<domain>	Certificate's CN domain.	string	

diagnose sys acme list-archive

List the certificate archive.

```
diagnose sys acme list-archive
```

diagnose sys acme list-domains

List certificates currently present in the ACME cert store by CN domain.

```
diagnose sys acme list-domains
```

diagnose sys acme purge-all

Delete the whole ACME cert store, including account data.

```
diagnose sys acme purge-all
```

diagnose sys acme purge-archive

Delete everything in the cert store archive.

```
diagnose sys acme purge-archive
```

diagnose sys acme purge-certs

Delete all certificates from the ACME cert store.

```
diagnose sys acme purge-certs
```

diagnose sys acme regenerate-client-config

Regenerate config for mod_md.

```
diagnose sys acme regenerate-client-config
```

diagnose sys acme regenerate-store

Regenerate store from config.

```
diagnose sys acme regenerate-store
```

diagnose sys acme restart

Gracefully restart Apache.

```
diagnose sys acme restart
```

diagnose sys acme show-archive

Show the certificate archive for a given CN domain.

```
diagnose sys acme show-archive <domain>
```

Parameter	Description	Type	Size
<domain>	Certificate's CN domain.	string	

diagnose sys acme show-client-config

Show config files for mod_md.

```
diagnose sys acme show-client-config
```

diagnose sys acme show-passphrase

Shows the plaintext passphrase of the ACME client store.

```
diagnose sys acme show-passphrase
```

diagnose sys acme status-full

Fetch the ACME client full status log for a given CN domain.

```
diagnose sys acme status-full <domain>
```

Parameter	Description	Type	Size
<domain>	Certificate's CN domain.	string	

diagnose sys bcm_intf

Bcm sdk interface

```
diagnose sys bcm_intf
```

diagnose sys bcm_intf cli

sdk command line

```
diagnose sys bcm_intf cli <command>
```

Parameter	Description	Type	Size
<command>	command to sdk	string	

diagnose sys bcm_intf cmd

sdk command line

```
diagnose sys bcm_intf cmd <command> <parameters>
```

Parameter	Description	Type	Size
<command>	getreg/dump/show/listreg/listmem/phy info/phy diag/ps	string	
<parameters>	command parameter	string	

diagnose sys bcm_intf console

Toggle BCM SDK console debug

```
diagnose sys bcm_intf console
```

diagnose sys bcm_intf sharedmem

Shared memory

```
diagnose sys bcm_intf sharedmem
```

diagnose sys bcm_intf stats

API stats

```
diagnose sys bcm_intf stats
```

diagnose sys botnet-domain

Botnet domain diagnostics.

```
diagnose sys botnet-domain
```

diagnose sys botnet-domain hit

Botnet domain hits.

```
diagnose sys botnet-domain hit
```

diagnose sys botnet-domain list

List botnet domain entry.

```
diagnose sys botnet-domain list
```

diagnose sys botnet-ip

Botnet IP diagnostics.

```
diagnose sys botnet-ip
```

diagnose sys botnet-ip find

Find botnet IP entry.

```
diagnose sys botnet-ip find <ip> <port> <proto>
```

Parameter	Description	Type	Size
<ip>	IP address.	string	
<port>	Port number.	string	
<proto>	Protocol number.	string	

diagnose sys botnet-ip flush

Flush botnet IP entry hit count data.

```
diagnose sys botnet-ip flush
```

diagnose sys botnet-ip hit

Show botnet IP entry hit count data.

```
diagnose sys botnet-ip hit
```

diagnose sys botnet-ip list

List botnet IP entry.

```
diagnose sys botnet-ip list <offset> <number>
```

Parameter	Description	Type	Size
<offset>	Botnet IP entry offset.	string	
<number>	The number of botnet IP entries to display.	string	

diagnose sys certificate-blocklist

Certificate blocklist diagnostics.

```
diagnose sys certificate-blocklist
```


diagnose sys certificate-blocklist count

Get number of entries in malware certificate blocklist.

```
diagnose sys certificate-blocklist count
```

diagnose sys certificate-blocklist delete-mcdb

Delete malicious certificate database.

```
diagnose sys certificate-blocklist delete-mcdb
```

diagnose sys certificate-blocklist query

Query with a certificate hash.

```
diagnose sys certificate-blocklist query <value>
```

Parameter	Description	Type	Size
<value>	SHA1 hash	string	

diagnose sys certificate-blocklist read-range

List entries in malware certificate blocklist based on starting index and count.

```
diagnose sys certificate-blocklist read-range <start> <count>
```

Parameter	Description	Type	Size
<start>	Index of first element	string	
<count>	Number of elements	string	

diagnose sys certificate-blocklist status

Display certificate blocklist status.

```
diagnose sys certificate-blocklist status
```

diagnose sys cmdb

CMDB related information.

```
diagnose sys cmdb
```

diagnose sys cmdb check-lock

Check CMDB lock.

```
diagnose sys cmdb check-lock
```

diagnose sys cmdb dump

Dump cmdb internal data.

```
diagnose sys cmdb dump
```

diagnose sys cmdb dump vdom

Dump vdom data.

```
diagnose sys cmdb dump vdom <global/vdom-name>
```

Parameter	Description	Type	Size
<global/vdom-name>	Dump global or vdom-name data details.	string	

diagnose sys cmdb flag

CMDB related flags.

```
diagnose sys cmdb flag
```

diagnose sys cmdb flag info

CMDB related flags information.

```
diagnose sys cmdb flag info
```

diagnose sys cmdb flag reset

Reset CMDB related flags.

```
diagnose sys cmdb flag reset
```

diagnose sys cmdb flag reset script-running

Reset CMDB script-running flag.

```
diagnose sys cmdb flag reset script-running
```

diagnose sys cmdb info

CMDB information.

```
diagnose sys cmdb info
```

diagnose sys cmdb refcnt

Datasource reference count.

```
diagnose sys cmdb refcnt
```

diagnose sys cmdb refcnt reset

Reset reference count to be consistent with real reference.

```
diagnose sys cmdb refcnt reset <path.object.mkey> <tablename>
```

Parameter	Description	Type	Size
<path.object.mkey>	Table.	string	
<tablename>	Entry.	string	

diagnose sys cmdb refcnt show

Show datasource reference details.

```
diagnose sys cmdb refcnt show <path.object.mkey> <tablename>
```

Parameter	Description	Type	Size
<path.object.mkey>	Table.	string	
<tablename>	Entry.	string	

diagnose sys cmdb set-readlock

Set CMDB read lock.

```
diagnose sys cmdb set-readlock
```

diagnose sys cmdb unset-readlock

Unset CMDB read lock.

```
diagnose sys cmdb unset-readlock
```

diagnose sys cmdb-profile

Get CMDB profile information.

```
diagnose sys cmdb-profile
```

diagnose sys cmdb-profile info

Get CMDB profile shm info.

```
diagnose sys cmdb-profile info
```

diagnose sys cmdb-profile node

Get CMDB profile by node.

```
diagnose sys cmdb-profile node <path.object[.attribute]>
```

Parameter	Description	Type	Size
<path.object[.attribute]>	Path to object/attribute.	string	

diagnose sys cmdb-profile reset

Reset CMDB profile shm info.

```
diagnose sys cmdb-profile reset
```

diagnose sys cmdb-profile top10

sort nodes by operator's time

```
diagnose sys cmdb-profile top10
```

diagnose sys cmdb-profile top10 average

sort nodes by operator's average time

```
diagnose sys cmdb-profile top10 average [n]
```

Parameter	Description	Type	Size
[n]	get n nodes' profile (optional, default is 10)	string	

diagnose sys cmdb-profile top10 total

sort nodes by operator's total time

```
diagnose sys cmdb-profile top10 total [n]
```

Parameter	Description	Type	Size
[n]	get n nodes' profile (optional, default is 10)	string	

diagnose sys config-transaction

Config transaction related information.

```
diagnose sys config-transaction
```

diagnose sys config-transaction show

Show config transaction information.

```
diagnose sys config-transaction show
```

diagnose sys config-transaction show entity-by-txn

Show configuration objects being configured by individual transactions.

```
diagnose sys config-transaction show entity-by-txn <txn-id>
```

Parameter	Description	Type	Size
<txn-id>	Transaction ID.	string	

diagnose sys config-transaction show mctx

Show mctx.

```
diagnose sys config-transaction show mctx
```

diagnose sys config-transaction show txn-cli-commands

Show CLI commands used in a given transaction.

```
diagnose sys config-transaction show txn-cli-commands <txn-id>
```

Parameter	Description	Type	Size
<txn-id>	Transaction ID.	string	

diagnose sys config-transaction show txn-entity

Show configuration objects being configured in transactions.

```
diagnose sys config-transaction show txn-entity
```

diagnose sys config-transaction show txn-info

Show config transaction details.

```
diagnose sys config-transaction show txn-info
```

diagnose sys config-transaction show txn-lock

Show transaction lock status.

```
diagnose sys config-transaction show txn-lock
```

diagnose sys config-transaction show txn-meta

Show config transaction meta information.

```
diagnose sys config-transaction show txn-meta
```

diagnose sys config-transaction status

Show config transaction status in current CLI.

```
diagnose sys config-transaction status
```

diagnose sys confsync

config sync

```
diagnose sys confsync
```

diagnose sys confsync cached-csum

Show conf-sync cached checksum.

```
diagnose sys confsync cached-csum <global/vdom-name>
```

Parameter	Description	Type	Size
<global/vdom-name>	Show global or a specific vdom's cached checksum.	string	

diagnose sys confsync csum-recalculate

Re-calculate conf-sync checksum.

```
diagnose sys confsync csum-recalculate <vdom-name> or <global>
```

Parameter	Description	Type	Size
<vdom-name> or <global>	Re-calculate conf-sync checksum.	string	

diagnose sys confsync dump

dump confsyncd status

```
diagnose sys confsync dump <level>
```

Parameter	Description	Type	Size
<level>	<integer>	string	

diagnose sys confsync showcsum

show conf-sync checksum

```
diagnose sys confsync showcsum <Enter> or <global/vdom-name> <level> or <object-fullpath> <Enter> or <entry-name>
```

Parameter	Description	Type	Size
<Enter> or <global/vdom-name>	<Enter> to show system checksum; <global/vdom-name> to show global/vdom-name detail checksum.	string	
<level> or <object-fullpath>	<level> to show n-th level objects checksum; <object-fullpath> to show individual object's detail checksum.	string	
<Enter> or <entry-name>	<Enter> to show the specific object's detail checksum; <entry-name> to show a single entry's detail checksum.	string	

diagnose sys confsync status

status


```
diagnose sys confsync status
```

diagnose sys cpuset

cpuset

```
diagnose sys cpuset
```

diagnose sys cpuset interrupt

cpuset of interrupt

```
diagnose sys cpuset interrupt <xxx> <xxx>
```

Parameter	Description	Type	Size
<xxx>	id of an interrupt	string	
<xxx>	cpuset mask	string	

diagnose sys cpuset process

cpuset of process

```
diagnose sys cpuset process <xxx> <xxx>
```

Parameter	Description	Type	Size
<xxx>	pid of a process	string	
<xxx>	cpuset mask	string	

diagnose sys csf

Security Fabric diagnostics.

```
diagnose sys csf
```

diagnose sys csf authorization

Authorization requests and permits.

```
diagnose sys csf authorization
```

diagnose sys csf authorization accept

Authorize device to join CSF tree.

```
diagnose sys csf authorization accept <SN> [Name]
```

Parameter	Description	Type	Size
<SN>	Serial number.	string	
[Name]	Optional entry name (if not passed SN is used).	string	

diagnose sys csf authorization deny

Deny device from joining CSF tree.

```
diagnose sys csf authorization deny <SN> [Name]
```

Parameter	Description	Type	Size
<SN>	Serial number.	string	
[Name]	Optional entry name (if not passed SN is used).	string	

diagnose sys csf authorization pending-list

List of pending requests to join security fabric.

```
diagnose sys csf authorization pending-list
```

diagnose sys csf downstream

Show connected downstream FortiGates.

```
diagnose sys csf downstream [-x] [-a]
```

Parameter	Description	Type	Size
[-x]	Show encrypted tokens	string	
[-a]	Show all devices	string	

diagnose sys csf downstream-devices

Show downstream fabric device.

```
diagnose sys csf downstream-devices <device type> [vdom] [group]
```

Parameter	Description	Type	Size
<device type>	fabric device type (e.g. fortinac, fortimail, fortivoice, any).	string	
[vdom]	Connecting VDOM.	string	
[group]	CSF key group.	string	

diagnose sys csf dynamic-sync-read

Read incoming dynamic sync data updates

```
diagnose sys csf dynamic-sync-read <count>
```

Parameter	Description	Type	Size
<count>	Number of updates to read	string	

diagnose sys csf dynamic-sync-request

Get the current dynamic sync data from csfd

```
diagnose sys csf dynamic-sync-request
```

diagnose sys csf dynamic-sync-update

Change the dynamic sync update data

```
diagnose sys csf dynamic-sync-update <content>
```

Parameter	Description	Type	Size
<content>	New data content string	string	

diagnose sys csf fabric-device

Debug fabric device handling.

```
diagnose sys csf fabric-device
```

diagnose sys csf fabric-device list

List all known fabric devices.

```
diagnose sys csf fabric-device list
```

diagnose sys csf file

csfd file management.

```
diagnose sys csf file
```

diagnose sys csf file cat

Dump file.

```
diagnose sys csf file cat <name>
```

Parameter	Description	Type	Size
<name>	Name of the file to be dumped.	string	

diagnose sys csf file top-mem

Display largest files.

```
diagnose sys csf file top-mem [count]
```

Parameter	Description	Type	Size
[count]	Number of files to be displayed ([1 - 20] default = 5).	string	

diagnose sys csf forticloud-id-list

List of FortiCloud IDs of downstreams.

```
diagnose sys csf forticloud-id-list
```

diagnose sys csf get-bulk-global-view

Request global view file

```
diagnose sys csf get-bulk-global-view [refresh seconds]
```

Parameter	Description	Type	Size
[refresh seconds]	Acceptable age for cached global file in seconds.	string	

diagnose sys csf global

Show a summary of all connected members in Security Fabric.

```
diagnose sys csf global
```

diagnose sys csf initialize-cmd

send an init command for merge.

```
diagnose sys csf initialize-cmd <path> <cmdb_path> <cmdb_table>
```

Parameter	Description	Type	Size
<path>	fabric path made of serial numbers e.g: SNCURRENT:SNMIDDLE:SNDestination.	string	
<cmdb_path>	path for cmdb table	string	
<cmdb_table>	cmdb table name	string	

diagnose sys csf merge-cmd

send a merge command to downstream.

```
diagnose sys csf merge-cmd <path> <cmdb_path> <cmdb_table> <key> <new_key>
```

Parameter	Description	Type	Size
<path>	fabric path made of serial numbers e.g: SNCURRENT:SNMIDDLE:SNDestination.	string	
<cmdb_path>	path for cmdb table	string	

Parameter	Description	Type	Size
<cmdb_table>	cmdb table name	string	
<key>	current entry name	string	
<new_key>	new entry name	string	

diagnose sys csf neighbor

CSF enabled devices in adjacency.

```
diagnose sys csf neighbor
```

diagnose sys csf neighbor flush

Clear discovered physical addresses of adjacent devices.

```
diagnose sys csf neighbor flush [interface]
```

Parameter	Description	Type	Size
[interface]	Receiving local interface name.	string	

diagnose sys csf neighbor list

List discovered physical addresses of adjacent devices.

```
diagnose sys csf neighbor list [interface]
```

Parameter	Description	Type	Size
[interface]	Receiving local interface name.	string	

diagnose sys csf query

Query through CSF.

```
diagnose sys csf query <path> [-p]
```

Parameter	Description	Type	Size
<path>	FGT1(SN):FGT2(SN):...:FGTn(SN)	string	
[-p]	partial process.	string	

diagnose sys csf send-test-log-upstream

Send a test log to upstream

```
diagnose sys csf send-test-log-upstream
```

diagnose sys csf tunnel-test-listener

Test the reliable tunnel, listener side

```
diagnose sys csf tunnel-test-listener
```

diagnose sys csf tunnel-test-sender

Test the reliable tunnel, sender side

```
diagnose sys csf tunnel-test-sender <target-sn> <msg-content> <repeats>
```

Parameter	Description	Type	Size
<target-sn>	SN to send the message to	string	
<msg-content>	Content of the message	string	
<repeats>	Number of times to repeat the message	string	

diagnose sys csf upstream

Show connected upstream FortiGates.

```
diagnose sys csf upstream
```

diagnose sys csf versions

get latest incremental version of CSF groups.

```
diagnose sys csf versions
```

diagnose sys csum

System checksum.

```
diagnose sys csum <file>
```

Parameter	Description	Type	Size
<file>	File name.	string	

diagnose sys dayst-info

Daylight saving time information.

```
diagnose sys dayst-info <timezone-index> [year]
```

Parameter	Description	Type	Size
<timezone-index>	Timezone index.	string	
[year]	year	string	

diagnose sys device

Virtual domain device management.

```
diagnose sys device
```

diagnose sys device add

Add device to Virtual Domain.

```
diagnose sys device add <vdname> <devname>
```

Parameter	Description	Type	Size
<vdname>	Virtual Domain Name.	string	
<devname>	Device Name.	string	

diagnose sys device delete

Delete device from Virtual Domain.

```
diagnose sys device delete <vdname> <devname>
```

Parameter	Description	Type	Size
<vdname>	Virtual Domain Name.	string	
<devname>	Device Name.	string	

diagnose sys device list

List devices in Virtual Domain.

```
diagnose sys device list <vdname>
```

Parameter	Description	Type	Size
<vdname>	Virtual Domain Name.	string	

diagnose sys dump-conserve-info

Dump all conserve related info to disk.

```
diagnose sys dump-conserve-info
```

diagnose sys elbc

elbc info

```
diagnose sys elbc
```

diagnose sys elbc haoc-hb-status

HAoC heartbeat status

```
diagnose sys elbc haoc-hb-status
```

diagnose sys emac-vlan

EMAC VLAN diagnostics.

```
diagnose sys emac-vlan
```

diagnose sys emac-vlan fdb

EMAC VLAN forwarding DB.

```
diagnose sys emac-vlan fdb
```

diagnose sys emac-vlan fdb list

Display EMAC VLAN forwarding DB.

```
diagnose sys emac-vlan fdb list <string>
```

Parameter	Description	Type	Size
<string>	Interface name.	string	

diagnose sys emac-vlan stat

Statistics of EMAC VLAN interfaces.

```
diagnose sys emac-vlan stat <string>
```

Parameter	Description	Type	Size
<string>	Underlying interface name.	string	

diagnose sys external-address-resource

External address resource.

```
diagnose sys external-address-resource
```

diagnose sys external-address-resource list

list

```
diagnose sys external-address-resource list <name>
```

Parameter	Description	Type	Size
<name>	External address resource name.	string	

diagnose sys external-resource

External resource.

```
diagnose sys external-resource
```

diagnose sys external-resource list

Dump external resource file by name.

```
diagnose sys external-resource list <name>
```

Parameter	Description	Type	Size
<name>	Name of external resource.	string	

diagnose sys external-resource push-add

Add entry to external resource set to push updates.

```
diagnose sys external-resource push-add
```

diagnose sys external-resource push-api-json-commands

Test push commands JSON API

```
diagnose sys external-resource push-api-json-commands <COMMANDS-JSON>
```

Parameter	Description	Type	Size
<COMMANDS-JSON>	JSON string for commands.	string	

diagnose sys external-resource push-remove

Remove entry to push external resource set to push updates.

```
diagnose sys external-resource push-remove
```

diagnose sys external-resource push-snapshot

Overwrite external resource set to push updates.

```
diagnose sys external-resource push-snapshot
```

diagnose sys external-resource stats

Display external resource file info.

```
diagnose sys external-resource stats <name>
```

Parameter	Description	Type	Size
<name>	Name of external resource.	string	

diagnose sys filesystem

File system.

```
diagnose sys filesystem
```

diagnose sys filesystem hash

Generate hash for files within the filesystem.

```
diagnose sys filesystem hash
```

diagnose sys filesystem last-modified-files

List the last modified files.

```
diagnose sys filesystem last-modified-files [path] [number]
```

Parameter	Description	Type	Size
[path]	Path for listing modified files (default = /data).	string	
[number]	Number of files to list (default = 10).	string	

diagnose sys filesystem tree

List the top files/folders tree.

```
diagnose sys filesystem tree [path] [number]
```

Parameter	Description	Type	Size
[path]	Path for listing files/folder (default = /var/log).	string	
[number]	Number of files in each current folder and subfolder to be listed (default = 10).	string	

diagnose sys fips

FIPS mode.

```
diagnose sys fips
```

diagnose sys fips error-mode

Go to error mode.

```
diagnose sys fips error-mode
```

diagnose sys fips kat-error

Force test failure at next self-test.

```
diagnose sys fips kat-error <KAT>
```

Parameter	Description	Type	Size
<KAT>	KAT, empty to display available values.	string	

diagnose sys flash

Flash image.

```
diagnose sys flash
```

diagnose sys flash format

format shared data partition (flash partition #3)

```
diagnose sys flash format
```

diagnose sys flash list

List flash images.

```
diagnose sys flash list <file>
```

Parameter	Description	Type	Size
<file>	List files.	string	

diagnose sys fortiswitch-heartbeat

fortiswitch heart beat information

```
diagnose sys fortiswitch-heartbeat
```

diagnose sys fortiswitch-heartbeat assist-pkt-stats

assistant packet statistics

```
diagnose sys fortiswitch-heartbeat assist-pkt-stats
```

diagnose sys fortiswitch-heartbeat assist-pkt-stats clear

reset assistant packet statistics

```
diagnose sys fortiswitch-heartbeat assist-pkt-stats clear
```

diagnose sys fortiswitch-heartbeat config

calculated ELBC config

```
diagnose sys fortiswitch-heartbeat config
```

diagnose sys fortiswitch-heartbeat status

heartbeat status

```
diagnose sys fortiswitch-heartbeat status
```

diagnose sys fullcone

Fullcone diagnostics.

```
diagnose sys fullcone
```

diagnose sys geneve

GENEVE diagnostics.

```
diagnose sys geneve
```

diagnose sys geneve list

Display GENEVE devices.

```
diagnose sys geneve list
```

diagnose sys geneve stat

Display GENEVE statistics.

```
diagnose sys geneve stat
```

diagnose sys gre

GRE diagnostics.

```
diagnose sys gre
```

diagnose sys gre keepalive

Keepalive status in GRE tunnels.

```
diagnose sys gre keepalive <name | all>
```

Parameter	Description	Type	Size
<name all>	GRE tunnel name	string	

diagnose sys gre list

List GRE tunnels.

```
diagnose sys gre list
```

diagnose sys h323

H323 diagnostics.

```
diagnose sys h323
```

diagnose sys h323 call

H323 calls.

```
diagnose sys h323 call
```

diagnose sys h323 call list

List H323 calls.

```
diagnose sys h323 call list
```


diagnose sys h323 debug-mask

Mask for H323 kernel trace.

```
diagnose sys h323 debug-mask <mask>
```

Parameter	Description	Type	Size
<mask>	0-disable, 1-parser, 2-CS, 4-RAS, 8-h245.	string	

diagnose sys h323 peer

H323 peers.

```
diagnose sys h323 peer
```

diagnose sys h323 peer list

List H323 peers.

```
diagnose sys h323 peer list
```

diagnose sys h323 status

Display h323 status.

```
diagnose sys h323 status
```

diagnose sys ha

High availability.

```
diagnose sys ha
```

diagnose sys ha check-vc

check-vc

```
diagnose sys ha check-vc
```

diagnose sys ha checksum

checksum.

```
diagnose sys ha checksum
```

diagnose sys ha checksum cached

Show HA cached checksum.

```
diagnose sys ha checksum cached <global/vdom-name>
```

Parameter	Description	Type	Size
<global/vdom-name>	Show global or a specific vdom's cached HA checksum.	string	

diagnose sys ha checksum cluster

Show HA cluster checksum by serial number.

```
diagnose sys ha checksum cluster
```

diagnose sys ha checksum log

Enable/disable log.

```
diagnose sys ha checksum log
```

diagnose sys ha checksum log clear

Clear log.

```
diagnose sys ha checksum log clear
```

diagnose sys ha checksum log disable

Disable log.

```
diagnose sys ha checksum log disable
```

diagnose sys ha checksum log enable

Enable log.

```
diagnose sys ha checksum log enable
```

diagnose sys ha checksum recalculate

Re-calculate HA checksum.

```
diagnose sys ha checksum recalculate <Enter> or <global/vdom-name>
```

Parameter	Description	Type	Size
<Enter> or <global/vdom-name>	<Enter> to re-calculate all checksums, or global/vdom-name to re-calculate global or a specific vdom HA checksum.	string	

diagnose sys ha checksum show

Show HA checksum.

```
diagnose sys ha checksum show <Enter> or <global/vdom-name> <Enter> or <object-fullpath> <Enter> or <entry-name>
```

Parameter	Description	Type	Size
<Enter> or <global/vdom-name>	<Enter> to show system checksum; <global/vdom-name> to show global/vdom-name detail checksum.	string	
<Enter> or <object-fullpath>	<Enter> to show objects checksum; <object-fullpath> to show individual object's detail checksum.	string	
<Enter> or <entry-name>	<Enter> to show the specific object's detail checksum; <entry-name> to show a single entry's detail checksum.	string	

diagnose sys ha checksum show-nonsync

Show non-sync HA checksum.

```
diagnose sys ha checksum show-nonsync
```

diagnose sys ha checksum test

test.

```
diagnose sys ha checksum test
```

diagnose sys ha dump-by

Dump HA data by name.

```
diagnose sys ha dump-by
```

diagnose sys ha dump-by debug-zone

Dump HA debug zone.

```
diagnose sys ha dump-by debug-zone
```

diagnose sys ha dump-by device

Dump HA device.

```
diagnose sys ha dump-by device
```

diagnose sys ha dump-by group

Dump all group.

```
diagnose sys ha dump-by group
```

diagnose sys ha dump-by kernel

Dump HA kernel info.

```
diagnose sys ha dump-by kernel
```

diagnose sys ha dump-by rcache

Dump rcache.

```
diagnose sys ha dump-by rcache
```

diagnose sys ha dump-by vcluster

Dump all vcluster.

```
diagnose sys ha dump-by vcluster
```

diagnose sys ha dump-by vdom

Dump HA vdom info.

```
diagnose sys ha dump-by vdom
```

diagnose sys ha extfile-sig

Dump extfile's signature.

```
diagnose sys ha extfile-sig
```

diagnose sys ha fgsp-zone

FGSP zone information.

```
diagnose sys ha fgsp-zone
```

diagnose sys ha fib

FIB information.

```
diagnose sys ha fib
```

diagnose sys ha hactx-stats

HA context statistics

```
diagnose sys ha hactx-stats
```

diagnose sys ha hactx-stats clear

HA context statistics

```
diagnose sys ha hactx-stats clear
```

diagnose sys ha hadiff

HA diff debug.

```
diagnose sys ha hadiff
```

diagnose sys ha hadiff log

Enable/disable log.

```
diagnose sys ha hadiff log
```

diagnose sys ha hadiff log clear

Clear log.

```
diagnose sys ha hadiff log clear
```

diagnose sys ha hadiff log disable

Disable log.

```
diagnose sys ha hadiff log disable
```

diagnose sys ha hadiff log enable

Enable log.

```
diagnose sys ha hadiff log enable
```

diagnose sys ha hadiff max-sync-turns

Set/get max number of sync turns.

```
diagnose sys ha hadiff max-sync-turns <integer>
```

Parameter	Description	Type	Size
<integer>	Set/get max number of sync turns.	string	

diagnose sys ha hadiff max-unsync-wait

Set/get max unsync wait times.

```
diagnose sys ha hadiff max-unsync-wait <integer>
```

Parameter	Description	Type	Size
<integer>	Maximum unsync wait times.	string	

diagnose sys ha hadiff status

HA diff status.

```
diagnose sys ha hadiff status
```

diagnose sys ha hasync-conn-max-buf

Set the hasync connection maximum buffer number.

```
diagnose sys ha hasync-conn-max-buf <hasync-conn-max-buf>
```

Parameter	Description	Type	Size
<hasync-conn-max-buf>	Max number of buffers.	string	

diagnose sys ha hasync-stats

hasync daemon stats.

```
diagnose sys ha hasync-stats
```

diagnose sys ha hasync-stats all

Display hasync all objects' stats.

```
diagnose sys ha hasync-stats all
```

diagnose sys ha hasync-stats by-object

Display hasync stats by object.

```
diagnose sys ha hasync-stats by-object <integer>
```

Parameter	Description	Type	Size
<integer>	Object number.	string	

diagnose sys ha hasync-stats most-recent

Display hasync objects recent stats.

```
diagnose sys ha hasync-stats most-recent [integer]
```

Parameter	Description	Type	Size
[integer]	Most recent # of objects to display.	string	

diagnose sys ha hasync-stats most-time

Display hasync objects ranked by total time.


```
diagnose sys ha hasync-stats most-time [interger]
```

Parameter	Description	Type	Size
[interger]	# of top objects to display.	string	

diagnose sys ha heartbeat

Show kernel heartbeat stats.

```
diagnose sys ha heartbeat
```

diagnose sys ha history

Cluster history information.

```
diagnose sys ha history
```

diagnose sys ha history clear

Clear cluster history.

```
diagnose sys ha history clear
```

diagnose sys ha history read

Display cluster history.

```
diagnose sys ha history read
```

diagnose sys ha mac

Mac Information.

```
diagnose sys ha mac
```

diagnose sys ha pingsvr-secondary-force-reset

Reset HA up time.

```
diagnose sys ha pingsvr-secondary-force-reset
```

diagnose sys ha recalculate-extfile-signature

Recalculate external files signature in hasync daemon.

```
diagnose sys ha recalculate-extfile-signature
```

diagnose sys ha reset-health-status

Reset HA health status.

```
diagnose sys ha reset-health-status
```

diagnose sys ha reset-uptime

Reset HA up time.

```
diagnose sys ha reset-uptime
```

diagnose sys ha session-sync-dev

Session sync ports.

```
diagnose sys ha session-sync-dev
```

diagnose sys ha session-sync-dev clear

Clear session sync ports.

```
diagnose sys ha session-sync-dev clear
```

diagnose sys ha session-sync-dev set

Configure session sync ports.

```
diagnose sys ha session-sync-dev set
```

diagnose sys ha standalone-peers

Standalone peers on kernel.

```
diagnose sys ha standalone-peers
```

diagnose sys ha standalone-peers reset-stats

Reset standalone peers session/packet type counters in kernel.

```
diagnose sys ha standalone-peers reset-stats
```

diagnose sys ha stats

statistics

```
diagnose sys ha stats
```

diagnose sys ha status

status

```
diagnose sys ha status
```

diagnose sys ha sync-stats

Dump HA sync statistics.

```
diagnose sys ha sync-stats
```

diagnose sys ha sync-stats-reset

Reset HA sync statistics.

```
diagnose sys ha sync-stats-reset
```

diagnose sys ha vlan-hb-monitor

Dump vlan heartbeat monitor list.

```
diagnose sys ha vlan-hb-monitor
```

diagnose sys ipam

IP Address Management diagnostics.

```
diagnose sys ipam
```

diagnose sys ipam delete-device-from-ipams

Delete device from ipam server

```
diagnose sys ipam delete-device-from-ipams
```

diagnose sys ipam dump-ipams-entries

dump all ipams entries

```
diagnose sys ipam dump-ipams-entries
```

diagnose sys ipam dump-ipams-free-subnets

dump free ipam subnets

```
diagnose sys ipam dump-ipams-free-subnets
```

diagnose sys ipam largest-available-subnet

Get the largest currently available subnet size.

```
diagnose sys ipam largest-available-subnet
```

diagnose sys ipsec-aggregate

IPsec aggregate diagnostics.

```
diagnose sys ipsec-aggregate
```

diagnose sys ipsec-aggregate list

List IPsec aggregates.

```
diagnose sys ipsec-aggregate list <name>
```

Parameter	Description	Type	Size
<name>	IPsec aggregate name	string	

diagnose sys kill

Kill the process ID.

```
diagnose sys kill <signal> <pid>
```

Parameter	Description	Type	Size
<signal>	Signal number.	string	
<pid>	Process ID.	string	

diagnose sys link-monitor

Link Monitor.

```
diagnose sys link-monitor
```

diagnose sys link-monitor filter

Filter link-monitor

```
diagnose sys link-monitor filter
```

diagnose sys link-monitor filter clear

Clear all filters.

```
diagnose sys link-monitor filter clear
```

diagnose sys link-monitor filter name

Link monitor names <name>.

```
diagnose sys link-monitor filter name <name>
```

Parameter	Description	Type	Size
<name>	Link monitor name.	string	

diagnose sys link-monitor interface

interface quality.

```
diagnose sys link-monitor interface <name> <childname>
```

Parameter	Description	Type	Size
<name>	Show details of an interface entry.	string	
<childname>	Child interface name.	string	

diagnose sys link-monitor launch

Launching a link monitor entry manually.

```
diagnose sys link-monitor launch <entry name>
```

Parameter	Description	Type	Size
<entry name>	Entry.	string	

diagnose sys link-monitor sdwan-hc

SD-WAN health-check monitors.

```
diagnose sys link-monitor sdwan-hc <name> <seq>
```

Parameter	Description	Type	Size
<name>	Health check name.	string	
<seq>	Sequence number.	string	

diagnose sys link-monitor sdwan-service

SD-WAN rule monitors.

```
diagnose sys link-monitor sdwan-service <name> <seq>
```

Parameter	Description	Type	Size
<name>	Health check name.	string	
<seq>	Sequence number.	string	

diagnose sys link-monitor status

status

```
diagnose sys link-monitor status <name | all>
```

Parameter	Description	Type	Size
<name all>	Show details of monitor entry.	string	

diagnose sys link-monitor tunnel

tunnel

```
diagnose sys link-monitor tunnel <name | all> <child name>
```

Parameter	Description	Type	Size
<name all>	Show details of tunnel monitor entry.	string	
<child name>	Show details of child monitor for tunnel.	string	

diagnose sys link-monitor-passive

Link Monitor passive.

```
diagnose sys link-monitor-passive
```

diagnose sys link-monitor-passive admin

Passive reports measured by the kernel.

```
diagnose sys link-monitor-passive admin
```

diagnose sys link-monitor-passive admin app-id-map

List cached application ID maps.

```
diagnose sys link-monitor-passive admin app-id-map
```

diagnose sys link-monitor-passive admin delete

Delete a report.

```
diagnose sys link-monitor-passive admin delete <interface> <application>
```

Parameter	Description	Type	Size
<interface>	Interface device index.	string	
<application>	Internet service or application ID.	string	

diagnose sys link-monitor-passive admin flush

Flush all the reports.

```
diagnose sys link-monitor-passive admin flush
```

diagnose sys link-monitor-passive admin list

List one or all the collected passive reports.

```
diagnose sys link-monitor-passive admin list <interface> <application> <application>
```

Parameter	Description	Type	Size
<interface> <application>	List the passive report by the given interface and application.	string	
<application>	Set the application.	string	

diagnose sys link-monitor-passive admin list by-application

List passive reports and sort by application.

```
diagnose sys link-monitor-passive admin list by-application <application>
```

Parameter	Description	Type	Size
<application>	List reports of the given application.	string	

diagnose sys link-monitor-passive admin list by-interface

List passive reports and sort by interface.

```
diagnose sys link-monitor-passive admin list by-interface <interface>
```

Parameter	Description	Type	Size
<interface>	List reports of the given interface	string	

diagnose sys link-monitor-passive agent

Passive reports measured by agents.

```
diagnose sys link-monitor-passive agent
```

diagnose sys link-monitor-passive agent agent-oif-map

List agent and interface maps.

```
diagnose sys link-monitor-passive agent agent-oif-map
```

diagnose sys link-monitor-passive agent flush

Flush all the collected reports.

```
diagnose sys link-monitor-passive agent flush
```

diagnose sys link-monitor-passive agent flush-app

Flush details of all the applications.

```
diagnose sys link-monitor-passive agent flush-app
```

diagnose sys link-monitor-passive agent list

List all the collected reports.

```
diagnose sys link-monitor-passive agent list
```

diagnose sys link-monitor-passive agent list-app

List details of each application.

```
diagnose sys link-monitor-passive agent list-app
```

diagnose sys link-monitor-passive agent send-report

Mock an agent to send application performance.

```
diagnose sys link-monitor-passive agent send-report <src> <app_id> <app_name> <latency> <jitter>  
<pktloss> <ntt> <srt> <app_err>
```

Parameter	Description	Type	Size
<src>	Agent address.	string	
<app_id>	Application ID.	string	
<app_name>	Application name.	string	
<latency>	Collected latency.	string	
<jitter>	Collected jitter.	string	
<pktloss>	Collected pktloss	string	
<ntt>	Collected ntt.	string	
<srt>	Collected srt.	string	
<app_err>	Collected application errors	string	

diagnose sys link-monitor-passive remote

Passive reports measured by remote peer.

```
diagnose sys link-monitor-passive remote
```

diagnose sys link-monitor-passive remote list

List one or all the collected reports.

```
diagnose sys link-monitor-passive remote list
```

diagnose sys logdisk

Display log disk status.

```
diagnose sys logdisk
```

diagnose sys logdisk purge-log-data

Purge disk log data, including disk logs and FortiView data.

```
diagnose sys logdisk purge-log-data
```

diagnose sys logdisk quota

Show log disk quota info.

```
diagnose sys logdisk quota
```

diagnose sys logdisk smart

Show log disk S.M.A.R.T. info.

```
diagnose sys logdisk smart
```

diagnose sys logdisk status

Display log disk status.

```
diagnose sys logdisk status
```

diagnose sys logdisk status monitor

Monitor log disk status.

```
diagnose sys logdisk status monitor
```

diagnose sys logdisk usage

Show log disk stats.

```
diagnose sys logdisk usage
```

diagnose sys lte-modem

lte-modem

```
diagnose sys lte-modem
```

diagnose sys lte-modem info

LTE Modem information

```
diagnose sys lte-modem info
```

diagnose sys mcast-session

multicast session

```
diagnose sys mcast-session
```

diagnose sys mcast-session clear

Clear the sessions defined by filter.

```
diagnose sys mcast-session clear
```

diagnose sys mcast-session filter

List session with filters.

```
diagnose sys mcast-session filter
```

diagnose sys mcast-session filter clear

Clear session filter.

```
diagnose sys mcast-session filter clear
```

diagnose sys mcast-session filter clear dport

Clear destination port filter.

```
diagnose sys mcast-session filter clear dport
```

diagnose sys mcast-session filter clear dst

Clear destination IP filter.

```
diagnose sys mcast-session filter clear dst
```

diagnose sys mcast-session filter clear proto

Clear protocol filter.

```
diagnose sys mcast-session filter clear proto
```

diagnose sys mcast-session filter clear sintf

Clear source interface filter.

```
diagnose sys mcast-session filter clear sintf
```

diagnose sys mcast-session filter clear sport

Clear source port filter.

```
diagnose sys mcast-session filter clear sport
```

diagnose sys mcast-session filter clear src

Clear source IP filter.

```
diagnose sys mcast-session filter clear src
```

diagnose sys mcast-session filter clear vd

Clear virtual domain filter.

```
diagnose sys mcast-session filter clear vd
```

diagnose sys mcast-session filter dport

Destination port.

```
diagnose sys mcast-session filter dport <xxxx> <xxxx>
```

Parameter	Description	Type	Size
<xxxx>	<0-65535> (from).	string	
<xxxx>	<0-65535> (to).	string	

diagnose sys mcast-session filter dst

Destination IP address.

```
diagnose sys mcast-session filter dst <xxx.xxx.xxx.xxx> <xxx.xxx.xxx.xxx>
```

Parameter	Description	Type	Size
<xxx.xxx.xxx.xxx>	Destination IP (from).	string	
<xxx.xxx.xxx.xxx>	Destination IP (to).	string	

diagnose sys mcast-session filter negate

Inverse filter.

```
diagnose sys mcast-session filter negate
```

diagnose sys mcast-session filter negate dport

Inverse destination port.

```
diagnose sys mcast-session filter negate dport
```

diagnose sys mcast-session filter negate dst

Inverse destination IP.

```
diagnose sys mcast-session filter negate dst
```

diagnose sys mcast-session filter negate proto

Inverse protocol.

```
diagnose sys mcast-session filter negate proto
```

diagnose sys mcast-session filter negate intf

Inverse source interface.

```
diagnose sys mcast-session filter negate intf
```

diagnose sys mcast-session filter negate sport

Inverse source port.

```
diagnose sys mcast-session filter negate sport
```

diagnose sys mcast-session filter negate src

Inverse source IP.

```
diagnose sys mcast-session filter negate src
```

diagnose sys mcast-session filter negate vd

Inverse virtual domain.

```
diagnose sys mcast-session filter negate vd
```

diagnose sys mcast-session filter proto

Protocol number.

```
diagnose sys mcast-session filter proto <xx> <xx>
```

Parameter	Description	Type	Size
<xx>	<0-255> (from).	string	
<xx>	<0-255> (to).	string	

diagnose sys mcast-session filter intf

Source interface.

```
diagnose sys mcast-session filter intf <xxxx>
```

Parameter	Description	Type	Size
<xxxx>	Interface name.	string	

diagnose sys mcast-session filter sport

Source port.

```
diagnose sys mcast-session filter sport <xxxx> <xxxx>
```


Parameter	Description	Type	Size
<xxxx>	<0-65535> (from).	string	
<xxxx>	<0-65535> (to).	string	

diagnose sys mcast-session filter src

Source IP address.

```
diagnose sys mcast-session filter src <xxx.xxx.xxx.xxx> <xxx.xxx.xxx.xxx>
```

Parameter	Description	Type	Size
<xxx.xxx.xxx.xxx>	Source IP (from).	string	
<xxx.xxx.xxx.xxx>	Source IP (to).	string	

diagnose sys mcast-session filter vd

Index of virtual domain. -1 matches all.

```
diagnose sys mcast-session filter vd <xxx>
```

Parameter	Description	Type	Size
<xxx>	Index of virtual domain. -1 matches all.	string	

diagnose sys mcast-session list

List session.

```
diagnose sys mcast-session list
```

diagnose sys mcast-session stat

Stat session.

```
diagnose sys mcast-session stat
```

diagnose sys mcast-session6

IPv6 multicast session.

```
diagnose sys mcast-session6
```

diagnose sys mcast-session6 clear

Clear IPv6 multicast sessions defined by filter.

```
diagnose sys mcast-session6 clear
```

diagnose sys mcast-session6 filter

List IPv6 multicast session with filters.

```
diagnose sys mcast-session6 filter
```

diagnose sys mcast-session6 filter clear

Clear IPv6 multicast session filter.

```
diagnose sys mcast-session6 filter clear
```

diagnose sys mcast-session6 filter clear dport

Clear destination port filter.

```
diagnose sys mcast-session6 filter clear dport
```

diagnose sys mcast-session6 filter clear dst

Clear destination IP filter.

```
diagnose sys mcast-session6 filter clear dst
```

diagnose sys mcast-session6 filter clear proto

Clear protocol filter.

```
diagnose sys mcast-session6 filter clear proto
```

diagnose sys mcast-session6 filter clear intf

Clear source interface filter.

```
diagnose sys mcast-session6 filter clear intf
```

diagnose sys mcast-session6 filter clear sport

Clear source port filter.

```
diagnose sys mcast-session6 filter clear sport
```

diagnose sys mcast-session6 filter clear src

Clear source IP filter.

```
diagnose sys mcast-session6 filter clear src
```

diagnose sys mcast-session6 filter clear vd

Clear virtual domain filter.

```
diagnose sys mcast-session6 filter clear vd
```

diagnose sys mcast-session6 filter dport

Destination port.

```
diagnose sys mcast-session6 filter dport <xxxx> <xxxx>
```

Parameter	Description	Type	Size
<xxxx>	<0-65535> (from).	string	
<xxxx>	<0-65535> (to).	string	

diagnose sys mcast-session6 filter dst

Destination IP address.

```
diagnose sys mcast-session6 filter dst <xxx.xxx.xxx.xxx> <xxx.xxx.xxx.xxx>
```

Parameter	Description	Type	Size
<xxx.xxx.xxx.xxx>	Destination IP (from).	string	
<xxx.xxx.xxx.xxx>	Destination IP (to).	string	

diagnose sys mcast-session6 filter negate

Inverse filter.

```
diagnose sys mcast-session6 filter negate
```

diagnose sys mcast-session6 filter negate dport

Inverse destination port.

```
diagnose sys mcast-session6 filter negate dport
```

diagnose sys mcast-session6 filter negate dst

Inverse destination IP.

```
diagnose sys mcast-session6 filter negate dst
```

diagnose sys mcast-session6 filter negate proto

Inverse protocol.

```
diagnose sys mcast-session6 filter negate proto
```

diagnose sys mcast-session6 filter negate intf

Inverse source interface.

```
diagnose sys mcast-session6 filter negate intf
```

diagnose sys mcast-session6 filter negate sport

Inverse source port.

```
diagnose sys mcast-session6 filter negate sport
```

diagnose sys mcast-session6 filter negate src

Inverse source IP.

```
diagnose sys mcast-session6 filter negate src
```

diagnose sys mcast-session6 filter negate vd

Inverse virtual domain.

```
diagnose sys mcast-session6 filter negate vd
```

diagnose sys mcast-session6 filter proto

Protocol number.

```
diagnose sys mcast-session6 filter proto <xx> <xx>
```

Parameter	Description	Type	Size
<xx>	<0-255> (from).	string	
<xx>	<0-255> (to).	string	

diagnose sys mcast-session6 filter intf

Source interface.

```
diagnose sys mcast-session6 filter intf <xxxxxx>
```

Parameter	Description	Type	Size
<xxxxxx>	Interface name.	string	

diagnose sys mcast-session6 filter sport

Source port.

```
diagnose sys mcast-session6 filter sport <xxxx> <xxxx>
```

Parameter	Description	Type	Size
<xxxx>	<0-65535> (from).	string	
<xxxx>	<0-65535> (to).	string	

diagnose sys mcast-session6 filter src

Source IP address.

```
diagnose sys mcast-session6 filter src <xxx.xxx.xxx.xxx> <xxx.xxx.xxx.xxx>
```

Parameter	Description	Type	Size
<xxx.xxx.xxx.xxx>	Source IP (from).	string	
<xxx.xxx.xxx.xxx>	Source IP (to).	string	

diagnose sys mcast-session6 filter vd

Index of virtual domain. -1 matches all.

```
diagnose sys mcast-session6 filter vd <xxx>
```

Parameter	Description	Type	Size
<xxx>	Index of virtual domain. -1 matches all.	string	

diagnose sys mcast-session6 list

List IPv6 multicast session.

```
diagnose sys mcast-session6 list
```

diagnose sys mcast-session6 stat

Stat IPv6 multicast session.

```
diagnose sys mcast-session6 stat
```

diagnose sys modem

modem

```
diagnose sys modem
```

diagnose sys modem cmd

cmd

```
diagnose sys modem cmd <at>
```

Parameter	Description	Type	Size
<at>	AT command for MODEM.	string	

diagnose sys modem com

Start a interactive session.

```
diagnose sys modem com
```

diagnose sys modem detect

detect

```
diagnose sys modem detect
```

diagnose sys modem external-modem

Show external MODEM information.

```
diagnose sys modem external-modem
```

diagnose sys modem history

List MODEM usage history.

```
diagnose sys modem history
```

diagnose sys modem query

Query information from external MODEM.

```
diagnose sys modem query <[0|1]>
```

Parameter	Description	Type	Size
<[0 1]>	1 to force re-query via AT command.	string	

diagnose sys modem reset

Reset serial driver from external MODEM.

```
diagnose sys modem reset
```

diagnose sys mpstat

mpstat

```
diagnose sys mpstat <value> <value>
```

Parameter	Description	Type	Size
<value>	Delay in seconds (default 5).	string	
<value>	Loop times (default = 1,000,000).	string	

diagnose sys mvl

Marvell

```
diagnose sys mvl
```

diagnose sys mvl cli

Enter CPSS command line

```
diagnose sys mvl cli
```


diagnose sys mvl log

Show CPSS log

```
diagnose sys mvl log
```

diagnose sys mvl sharedmem

Show shared memory

```
diagnose sys mvl sharedmem
```

diagnose sys mvl stats

Show API stats

```
diagnose sys mvl stats
```

diagnose sys nmi-watchdog

nmi-watchdog

```
diagnose sys nmi-watchdog
```

diagnose sys nmi-watchdog disable

Disable NMI watchdog.

```
diagnose sys nmi-watchdog disable
```

diagnose sys nmi-watchdog enable

Enable NMI watchdog.

```
diagnose sys nmi-watchdog enable
```

diagnose sys ntp

NTP daemon command.

```
diagnose sys ntp
```

diagnose sys ntp status

List NTP servers information.

```
diagnose sys ntp status
```

diagnose sys pair

Pair device.

```
diagnose sys pair
```

diagnose sys platform

Platform information.

```
diagnose sys platform
```

diagnose sys platform info

Information.

```
diagnose sys platform info
```

diagnose sys print-conserve-info

Print all conserve related info.

```
diagnose sys print-conserve-info
```

diagnose sys process

Dump process stack.

```
diagnose sys process
```

diagnose sys process daemon-auto-restart

Set daemon respawn behaviour.

```
diagnose sys process daemon-auto-restart <action> <daemon>
```

Parameter	Description	Type	Size
<action>	(enable disable)	string	
<daemon>	Daemon name.	string	

diagnose sys process dump

Dump process kernel stack.

```
diagnose sys process dump <pid>
```

Parameter	Description	Type	Size
<pid>	PID of the process to dump.	string	

diagnose sys process nameof

List name of process with a specific PID.

```
diagnose sys process nameof <integer>
```

Parameter	Description	Type	Size
<integer>	PID to find the process name.	string	

diagnose sys process pidof

List PIDs of processes with a specific name.

```
diagnose sys process pidof <string>
```

Parameter	Description	Type	Size
<string>	Name to find PIDs for.	string	

diagnose sys process pstack

Dump process userspace stack.

```
diagnose sys process pstack <pid>
```

Parameter	Description	Type	Size
<pid>	PID of the process to dump.	string	

diagnose sys process sock-mem

Show process socket mem usage.

```
diagnose sys process sock-mem
```

diagnose sys process socket

Find PID of processes which owns the socket.

```
diagnose sys process socket <socket-inode>
```

Parameter	Description	Type	Size
<socket-inode>	Socket to find PID for.	string	

diagnose sys process trace

Sample process instructions.

```
diagnose sys process trace
```

diagnose sys profile

kernel profiling

```
diagnose sys profile
```

diagnose sys profile cpumask

profile which CPUs

```
diagnose sys profile cpumask
```

diagnose sys profile module

show kernel module

```
diagnose sys profile module
```

diagnose sys profile show

show kernel profiling result

```
diagnose sys profile show
```

diagnose sys profile show detail

show detail of kernel profiling

```
diagnose sys profile show detail
```

diagnose sys profile show order

order kernel profiling result

```
diagnose sys profile show order
```

diagnose sys profile start

start kernel profiling data

```
diagnose sys profile start
```

diagnose sys profile step

set profile step

```
diagnose sys profile step <Integer>
```

Parameter	Description	Type	Size
<Integer>	Profile step for CPU profiling. Argument should be a power of two between 2 to 32	string	

diagnose sys profile stop

copy kernel profiling data

```
diagnose sys profile stop
```

diagnose sys profile sysmap

show kernel sysmap

```
diagnose sys profile sysmap
```

diagnose sys proxy

Proxy diagnostics.

```
diagnose sys proxy
```

diagnose sys proxy bypass

Bypass setting.

```
diagnose sys proxy bypass
```

diagnose sys proxy bypass clear

Clear bypass settings.

```
diagnose sys proxy bypass clear
```

diagnose sys proxy bypass disable

Disable bypass settings.

```
diagnose sys proxy bypass disable
```

diagnose sys proxy bypass disable category

Disable category bypass.

```
diagnose sys proxy bypass disable category
```

diagnose sys proxy bypass disable category all

Bypass all.

```
diagnose sys proxy bypass disable category all
```

diagnose sys proxy bypass disable category scanunit-submission

Bypass scanunit submission.

```
diagnose sys proxy bypass disable category scanunit-submission
```

diagnose sys proxy bypass disable category ssl

Bypass SSL (no crypto, no utm).

```
diagnose sys proxy bypass disable category ssl
```

diagnose sys proxy bypass disable category utm

Bypass UTM (crypto, no utm).

```
diagnose sys proxy bypass disable category utm
```

diagnose sys proxy bypass disable protocol

Disable protocol bypass.

```
diagnose sys proxy bypass disable protocol
```

diagnose sys proxy bypass disable protocol all

All proxy protocols

```
diagnose sys proxy bypass disable protocol all
```

diagnose sys proxy bypass disable protocol ftp

FTP(S) protocol

```
diagnose sys proxy bypass disable protocol ftp
```

diagnose sys proxy bypass disable protocol imap

IMAP(S) protocol

```
diagnose sys proxy bypass disable protocol imap
```

diagnose sys proxy bypass disable protocol nntp

NNTP protocol

```
diagnose sys proxy bypass disable protocol nntp
```

diagnose sys proxy bypass disable protocol pop3

POP3(S) protocol

```
diagnose sys proxy bypass disable protocol pop3
```


diagnose sys proxy bypass disable protocol smtp

SMTP(S) protocol

```
diagnose sys proxy bypass disable protocol smtp
```

diagnose sys proxy bypass enable

Enable bypass settings.

```
diagnose sys proxy bypass enable
```

diagnose sys proxy bypass enable category

Enable category bypass.

```
diagnose sys proxy bypass enable category
```

diagnose sys proxy bypass enable category all

Bypass all.

```
diagnose sys proxy bypass enable category all
```

diagnose sys proxy bypass enable category scanunit-submission

Bypass scanunit submission.

```
diagnose sys proxy bypass enable category scanunit-submission
```

diagnose sys proxy bypass enable category ssl

Bypass SSL (no crypto, no utm).

```
diagnose sys proxy bypass enable category ssl
```

diagnose sys proxy bypass enable category utm

Bypass UTM (crypto, no utm).

```
diagnose sys proxy bypass enable category utm
```

diagnose sys proxy bypass enable protocol

Enable protocol bypass.

```
diagnose sys proxy bypass enable protocol
```

diagnose sys proxy bypass enable protocol all

All proxy protocols

```
diagnose sys proxy bypass enable protocol all
```

diagnose sys proxy bypass enable protocol ftp

FTP(S) protocol

```
diagnose sys proxy bypass enable protocol ftp
```

diagnose sys proxy bypass enable protocol imap

IMAP(S) protocol

```
diagnose sys proxy bypass enable protocol imap
```

diagnose sys proxy bypass enable protocol nntp

NNTP protocol

```
diagnose sys proxy bypass enable protocol nntp
```

diagnose sys proxy bypass enable protocol pop3

POP3(S) protocol

```
diagnose sys proxy bypass enable protocol pop3
```

diagnose sys proxy bypass enable protocol smtp

SMTP(S) protocol

```
diagnose sys proxy bypass enable protocol smtp
```

diagnose sys proxy bypass show

Show bypass settings.

```
diagnose sys proxy bypass show
```

diagnose sys proxy certificate-blocklist

Certificate blocklist diagnostics.

```
diagnose sys proxy certificate-blocklist
```

diagnose sys proxy certificate-blocklist flush

Flush certificate blocklist database.

```
diagnose sys proxy certificate-blocklist flush
```

diagnose sys proxy certificate-blocklist status

Display per worker certificate blocklist status.

```
diagnose sys proxy certificate-blocklist status
```

diagnose sys proxy debug-filter

Filter for displaying debug information.

```
diagnose sys proxy debug-filter
```

diagnose sys proxy debug-filter clear

Erase the current filter.

```
diagnose sys proxy debug-filter clear
```

diagnose sys proxy debug-filter list

Display the current filter.

```
diagnose sys proxy debug-filter list
```

diagnose sys proxy debug-filter src

Source address range to filter by.

```
diagnose sys proxy debug-filter src <ip-address> <ip-address>
```

Parameter	Description	Type	Size
<ip-address>	Source IP address (from).	string	
<ip-address>	Source IP address (to).	string	

diagnose sys proxy filter

Diagnostics filter.

```
diagnose sys proxy filter
```

diagnose sys proxy filter clear

Clear the current filter.

```
diagnose sys proxy filter clear
```

diagnose sys proxy filter list

Display the current filter.

```
diagnose sys proxy filter list
```

diagnose sys proxy filter negate

Negate the specified filter parameter.

```
diagnose sys proxy filter negate
```

diagnose sys proxy filter negate vd

Negate virtual domain.

```
diagnose sys proxy filter negate vd
```

diagnose sys proxy filter negate worker

Negate worker ID.

```
diagnose sys proxy filter negate worker
```

diagnose sys proxy filter vd

Index of virtual domain. -1 matches all.

```
diagnose sys proxy filter vd <index>
```

Parameter	Description	Type	Size
<index>	Index of virtual domain. -1 matches all.	string	

diagnose sys proxy filter worker

ID of worker or "m" for manager. Invalid ID matches all.

```
diagnose sys proxy filter worker <id>
```

Parameter	Description	Type	Size
<id>	ID of worker or "m" for manager. Invalid ID matches all.	string	

diagnose sys proxy log

Logging diagnostics.

```
diagnose sys proxy log
```

diagnose sys proxy log filter

Debug log filter.

```
diagnose sys proxy log filter
```

diagnose sys proxy log filter clear

Clear the current filter.

```
diagnose sys proxy log filter clear
```

diagnose sys proxy log filter list

Display the current filter.

```
diagnose sys proxy log filter list
```

diagnose sys proxy log filter negate

Negate the specified filter parameter.

```
diagnose sys proxy log filter negate
```

diagnose sys proxy log filter negate vd

Negate virtual domain.

```
diagnose sys proxy log filter negate vd
```

diagnose sys proxy log filter negate worker

Negate worker ID.

```
diagnose sys proxy log filter negate worker
```

diagnose sys proxy log filter vd

Index of virtual domain. -1 matches all.

```
diagnose sys proxy log filter vd <index>
```

Parameter	Description	Type	Size
<index>	Index of virtual domain. -1 matches all.	string	

diagnose sys proxy log filter worker

ID of worker or "m" for manager. Invalid ID matches all.

```
diagnose sys proxy log filter worker <id>
```

Parameter	Description	Type	Size
<id>	ID of worker or "m" for manager. Invalid ID matches all.	string	

diagnose sys proxy log-debug

Enable/disable sys proxy log on console.

```
diagnose sys proxy log-debug <integer>
```

Parameter	Description	Type	Size
<integer>	Enable/disable log on console, 0 off, otherwise, on.	string	

diagnose sys proxy memory

Memory configuration

```
diagnose sys proxy memory
```

diagnose sys proxy memory allocator

Show the current memory allocator

```
diagnose sys proxy memory allocator
```

diagnose sys proxy memory conserve

Enter/exit conserve mode.

```
diagnose sys proxy memory conserve
```

diagnose sys proxy memory conserve enter

Enter conserve mode.

```
diagnose sys proxy memory conserve enter
```

diagnose sys proxy memory conserve exit

Exit conserve mode.

```
diagnose sys proxy memory conserve exit
```

diagnose sys proxy memory jemalloc

Use jemalloc for memory allocation

```
diagnose sys proxy memory jemalloc
```

diagnose sys proxy memory malloc

Use malloc for memory allocation

```
diagnose sys proxy memory malloc
```


diagnose sys proxy memory usage

Per-worker memory allocation statistics

```
diagnose sys proxy memory usage
```

diagnose sys proxy restart

Restart proxy.

```
diagnose sys proxy restart
```

diagnose sys proxy simulate-error

Error test options.

```
diagnose sys proxy simulate-error
```

diagnose sys proxy simulate-error scan-drop

Enable/disable proxy error scan drop.

```
diagnose sys proxy simulate-error scan-drop
```

diagnose sys proxy simulate-error scan-drop disable

Disable scan-drop (default)

```
diagnose sys proxy simulate-error scan-drop disable
```

diagnose sys proxy simulate-error scan-drop enable

Enable scan-drop

```
diagnose sys proxy simulate-error scan-drop enable
```

diagnose sys proxy simulate-error status

Display per worker error test options.

```
diagnose sys proxy simulate-error status
```

diagnose sys proxy socket-options

Socket options configuration

```
diagnose sys proxy socket-options
```

diagnose sys proxy socket-options linger

SO_LINGER socket option

```
diagnose sys proxy socket-options linger
```

diagnose sys proxy socket-options linger disable

Disable SO_LINGER

```
diagnose sys proxy socket-options linger disable
```

diagnose sys proxy socket-options linger enable

Enable SO_LINGER

```
diagnose sys proxy socket-options linger enable
```

diagnose sys proxy socket-options nagle

SSL TCP_NODELAY socket option

```
diagnose sys proxy socket-options nagle
```

diagnose sys proxy socket-options nagle disable

Disable TCP_NODELAY for SSL connections (Default)

```
diagnose sys proxy socket-options nagle disable
```

diagnose sys proxy socket-options nagle enable

Enable TCP_NODELAY for SSL connections

```
diagnose sys proxy socket-options nagle enable
```

diagnose sys proxy socket-options status

Display per worker socket options

```
diagnose sys proxy socket-options status
```

diagnose sys proxy ssl

SSL options

```
diagnose sys proxy ssl
```

diagnose sys proxy ssl bypass

SSL bypass cache

```
diagnose sys proxy ssl bypass
```

diagnose sys proxy ssl bypass flush

Flush ssl bypass cache

```
diagnose sys proxy ssl bypass flush
```

diagnose sys proxy ssl bypass list

List ssl bypass cache

```
diagnose sys proxy ssl bypass list
```

diagnose sys proxy ssl crypto

Set hardware crypto mode

```
diagnose sys proxy ssl crypto
```

diagnose sys proxy ssl crypto async

Asynchronous hardware crypto

```
diagnose sys proxy ssl crypto async
```

diagnose sys proxy ssl crypto sync

Synchronous hardware crypto

```
diagnose sys proxy ssl crypto sync
```

diagnose sys proxy ssl exempt

Ssl exempt cache

```
diagnose sys proxy ssl exempt
```

diagnose sys proxy ssl exempt flush

Flush ssl exempt cache

```
diagnose sys proxy ssl exempt flush
```

diagnose sys proxy ssl exempt list

List ssl exempt cache

```
diagnose sys proxy ssl exempt list
```

diagnose sys proxy ssl rsa-blinding

Set RSA blinding

```
diagnose sys proxy ssl rsa-blinding
```

diagnose sys proxy ssl rsa-blinding off

RSA blinding off

```
diagnose sys proxy ssl rsa-blinding off
```

diagnose sys proxy ssl rsa-blinding on

RSA blinding on

```
diagnose sys proxy ssl rsa-blinding on
```

diagnose sys proxy ssl session

List of current SSL sessions

```
diagnose sys proxy ssl session
```

diagnose sys proxy stats

Proxy statistics.

```
diagnose sys proxy stats
```

diagnose sys proxy stats all

Per-process proxy statistics.

```
diagnose sys proxy stats all
```

diagnose sys proxy stats binary

Write binary connection data to file.

```
diagnose sys proxy stats binary
```

diagnose sys proxy stats binary clean

Remove all binary files generated from disk.

```
diagnose sys proxy stats binary clean
```

diagnose sys proxy stats binary disable

Disable.

```
diagnose sys proxy stats binary disable
```

diagnose sys proxy stats binary enable

Enable.

```
diagnose sys proxy stats binary enable
```

diagnose sys proxy stats clear

Clear proxy statistics.

```
diagnose sys proxy stats clear
```

diagnose sys proxy stats debug

Debug sink statistics

```
diagnose sys proxy stats debug
```

diagnose sys proxy stats list

Summarized proxy statistics.

```
diagnose sys proxy stats list
```

diagnose sys proxy stats protocol

Per-process proxy worker protocol statistics.

```
diagnose sys proxy stats protocol
```

diagnose sys proxy stats vdom

Proxy vdom statistics.

```
diagnose sys proxy stats vdom
```

diagnose sys proxy stats vdom all

Proxy per-vdom statistics.

```
diagnose sys proxy stats vdom all
```

diagnose sys proxy stats vdom list

List current vdoms.

```
diagnose sys proxy stats vdom list
```

diagnose sys proxy stats vdom summary

Summarized vdom proxy statistics.

```
diagnose sys proxy stats vdom summary
```

diagnose sys proxy valgrind

Valgrind analysis.

```
diagnose sys proxy valgrind
```

diagnose sys proxy valgrind disable

Force daemon to restart.

```
diagnose sys proxy valgrind disable
```

diagnose sys proxy valgrind enable

Force daemon to restart.

```
diagnose sys proxy valgrind enable
```

diagnose sys proxy valgrind log

Valgrind logs.

```
diagnose sys proxy valgrind log
```

diagnose sys proxy valgrind log clear

Clear logs.

```
diagnose sys proxy valgrind log clear
```


diagnose sys proxy valgrind log show

Show logs.

```
diagnose sys proxy valgrind log show
```

diagnose sys proxy valgrind memcheck

Force daemon to restart.

```
diagnose sys proxy valgrind memcheck
```

diagnose sys proxy valgrind memcheck_less

Force daemon to restart.

```
diagnose sys proxy valgrind memcheck_less
```

diagnose sys proxy valgrind status

Show valgrind status.

```
diagnose sys proxy valgrind status
```

diagnose sys ptp

PTP daemon command.

```
diagnose sys ptp
```

diagnose sys ptp status

List PTP information.

```
diagnose sys ptp status
```

diagnose sys saml

SAML diagnostics.

```
diagnose sys saml
```

diagnose sys saml metadata

Test metadata.

```
diagnose sys saml metadata
```

diagnose sys scanunit

Scanunit diagnostics.

```
diagnose sys scanunit
```

diagnose sys scanunit auto-restart

Auto-restart settings.

```
diagnose sys scanunit auto-restart
```

diagnose sys scanunit auto-restart requests

Number of scan requests before restarting.

```
diagnose sys scanunit auto-restart requests <Integer>
```

Parameter	Description	Type	Size
<Integer>	Number of requests before restarting (0 disables auto restart).	string	

diagnose sys scanunit auto-restart reset

Reset auto restart settings.

```
diagnose sys scanunit auto-restart reset
```

diagnose sys scanunit auto-restart status

Show auto restart settings.

```
diagnose sys scanunit auto-restart status
```

diagnose sys scanunit auto-restart time

Minimum interval in seconds between restarting workers.

```
diagnose sys scanunit auto-restart time <Integer>
```

Parameter	Description	Type	Size
<Integer>	Minimum interval in seconds between restarting workers.	string	

diagnose sys scanunit av-filetype-reuse

Enable/disable AV filetype reuse.

```
diagnose sys scanunit av-filetype-reuse
```

diagnose sys scanunit av-filetype-reuse disable

Disable scanunit AV filetype reuse.

```
diagnose sys scanunit av-filetype-reuse disable
```

diagnose sys scanunit av-filetype-reuse enable

Enable scanunit AV filetype reuse.

```
diagnose sys scanunit av-filetype-reuse enable
```

diagnose sys scanunit bypass

Bypass setting.

```
diagnose sys scanunit bypass
```

diagnose sys scanunit bypass clear

Clear bypass settings.

```
diagnose sys scanunit bypass clear
```

diagnose sys scanunit bypass disable

Disable bypass settings.

```
diagnose sys scanunit bypass disable
```

diagnose sys scanunit bypass disable category

Disable category bypass.

```
diagnose sys scanunit bypass disable category
```

diagnose sys scanunit bypass disable category all

Bypass all.

```
diagnose sys scanunit bypass disable category all
```

diagnose sys scanunit bypass disable category av-engine

Bypass AV engine.

```
diagnose sys scanunit bypass disable category av-engine
```

diagnose sys scanunit bypass disable category scanunit

Bypass scanunit.

```
diagnose sys scanunit bypass disable category scanunit
```

diagnose sys scanunit bypass disable protocol

Disable protocol bypass.

```
diagnose sys scanunit bypass disable protocol
```

diagnose sys scanunit bypass disable protocol all

All proxy protocols

```
diagnose sys scanunit bypass disable protocol all
```

diagnose sys scanunit bypass disable protocol cifs

CIFS protocol

```
diagnose sys scanunit bypass disable protocol cifs
```

diagnose sys scanunit bypass disable protocol ftp

FTP(S) protocol

```
diagnose sys scanunit bypass disable protocol ftp
```

diagnose sys scanunit bypass disable protocol http

HTTP(S) protocol

```
diagnose sys scanunit bypass disable protocol http
```

diagnose sys scanunit bypass disable protocol imap

IMAP(S) protocol

```
diagnose sys scanunit bypass disable protocol imap
```

diagnose sys scanunit bypass disable protocol nntp

NNTP protocol

```
diagnose sys scanunit bypass disable protocol nntp
```

diagnose sys scanunit bypass disable protocol pop3

POP3(S) protocol

```
diagnose sys scanunit bypass disable protocol pop3
```

diagnose sys scanunit bypass disable protocol smtp

SMTP(S) protocol

```
diagnose sys scanunit bypass disable protocol smtp
```

diagnose sys scanunit bypass enable

Enable bypass settings.

```
diagnose sys scanunit bypass enable
```

diagnose sys scanunit bypass enable category

Enable category bypass.

```
diagnose sys scanunit bypass enable category
```

diagnose sys scanunit bypass enable category all

Bypass all.

```
diagnose sys scanunit bypass enable category all
```

diagnose sys scanunit bypass enable category av-engine

Bypass AV engine.

```
diagnose sys scanunit bypass enable category av-engine
```

diagnose sys scanunit bypass enable category scanunit

Bypass scanunit.

```
diagnose sys scanunit bypass enable category scanunit
```

diagnose sys scanunit bypass enable protocol

Enable protocol bypass.

```
diagnose sys scanunit bypass enable protocol
```

diagnose sys scanunit bypass enable protocol all

All proxy protocols

```
diagnose sys scanunit bypass enable protocol all
```

diagnose sys scanunit bypass enable protocol cifs

CIFS protocol

```
diagnose sys scanunit bypass enable protocol cifs
```

diagnose sys scanunit bypass enable protocol ftp

FTP(S) protocol

```
diagnose sys scanunit bypass enable protocol ftp
```

diagnose sys scanunit bypass enable protocol http

HTTP(S) protocol

```
diagnose sys scanunit bypass enable protocol http
```

diagnose sys scanunit bypass enable protocol imap

IMAP(S) protocol

```
diagnose sys scanunit bypass enable protocol imap
```

diagnose sys scanunit bypass enable protocol nntp

NNTP protocol

```
diagnose sys scanunit bypass enable protocol nntp
```

diagnose sys scanunit bypass enable protocol pop3

POP3(S) protocol

```
diagnose sys scanunit bypass enable protocol pop3
```

diagnose sys scanunit bypass enable protocol smtp

SMTP(S) protocol

```
diagnose sys scanunit bypass enable protocol smtp
```

diagnose sys scanunit bypass show

Show bypass settings.

```
diagnose sys scanunit bypass show
```


diagnose sys scanunit cfg

Cached configuration.

```
diagnose sys scanunit cfg
```

diagnose sys scanunit cfg clear

Clear cached configuration.

```
diagnose sys scanunit cfg clear
```

diagnose sys scanunit cfg list

List the key for each cached configuration entry.

```
diagnose sys scanunit cfg list
```

diagnose sys scanunit crash-dump

Enable/disable crash dump.

```
diagnose sys scanunit crash-dump
```

diagnose sys scanunit crash-dump clear

Clear scanunit crash dump.

```
diagnose sys scanunit crash-dump clear
```

diagnose sys scanunit crash-dump disable

Disable scanunit crash dump.

```
diagnose sys scanunit crash-dump disable
```

diagnose sys scanunit crash-dump enable

Enable scanunit crash dump.

```
diagnose sys scanunit crash-dump enable
```

diagnose sys scanunit crash-dump read

Read the last crash dump.

```
diagnose sys scanunit crash-dump read
```

diagnose sys scanunit debug

Debug settings.

```
diagnose sys scanunit debug
```

diagnose sys scanunit debug all

Enable all debug categories.

```
diagnose sys scanunit debug all <status>
```

Parameter	Description	Type	Size
<status>	Enable or disable debug category.	string	

diagnose sys scanunit debug analytics

Enable analytics category.

```
diagnose sys scanunit debug analytics <status>
```

Parameter	Description	Type	Size
<status>	Enable or disable debug category.	string	

diagnose sys scanunit debug antispam

Enable antispam category.

```
diagnose sys scanunit debug antispam <status>
```

Parameter	Description	Type	Size
<status>	Enable or disable debug category.	string	

diagnose sys scanunit debug daemon

Enable scanunit daemon category.

```
diagnose sys scanunit debug daemon <status>
```

Parameter	Description	Type	Size
<status>	Enable or disable debug category.	string	

diagnose sys scanunit debug dlp

Enable DLP category.

```
diagnose sys scanunit debug dlp <status>
```

Parameter	Description	Type	Size
<status>	Enable or disable debug category.	string	

diagnose sys scanunit debug file-filter

Enable file filter category.

```
diagnose sys scanunit debug file-filter <status>
```

Parameter	Description	Type	Size
<status>	Enable or disable debug category.	string	

diagnose sys scanunit debug icb

Enable ICB category.

```
diagnose sys scanunit debug icb <status>
```

Parameter	Description	Type	Size
<status>	Enable or disable debug category.	string	

diagnose sys scanunit debug job

Enable scanunit job category.

```
diagnose sys scanunit debug job <status>
```

Parameter	Description	Type	Size
<status>	Enable or disable debug category.	string	

diagnose sys scanunit debug level

Set debug level.

```
diagnose sys scanunit debug level
```

diagnose sys scanunit debug level error

Error level.

```
diagnose sys scanunit debug level error
```

diagnose sys scanunit debug level info

Info level.

```
diagnose sys scanunit debug level info
```

diagnose sys scanunit debug level verbose

Verbose level.

```
diagnose sys scanunit debug level verbose
```

diagnose sys scanunit debug level warning

Warning level.

```
diagnose sys scanunit debug level warning
```

diagnose sys scanunit debug outbreak-prevention

Enable outbreak prevention category.

```
diagnose sys scanunit debug outbreak-prevention <status>
```

Parameter	Description	Type	Size
<status>	Enable or disable debug category.	string	

diagnose sys scanunit debug quarantine

Enable quarantine category.

```
diagnose sys scanunit debug quarantine <status>
```

Parameter	Description	Type	Size
<status>	Enable or disable debug category.	string	

diagnose sys scanunit debug reset

Reset debug category and level.

```
diagnose sys scanunit debug reset
```

diagnose sys scanunit debug sane

Enable a sane group of categories.

```
diagnose sys scanunit debug sane <status>
```

Parameter	Description	Type	Size
<status>	Enable or disable debug category.	string	

diagnose sys scanunit debug show

Show current debug settings.

```
diagnose sys scanunit debug show
```

diagnose sys scanunit dlp

DLP data size scanning threshold settings.

```
diagnose sys scanunit dlp
```

diagnose sys scanunit dlp reset

Reset DLP data size scanning threshold value.

```
diagnose sys scanunit dlp reset
```

diagnose sys scanunit dlp status

Show DLP data size scanning threshold value.

```
diagnose sys scanunit dlp status
```

diagnose sys scanunit dlp threshold

Set DLP data size scanning threshold in bytes (0 = default).

```
diagnose sys scanunit dlp threshold <Integer>
```

Parameter	Description	Type	Size
<Integer>	DLP data size scanning threshold.	string	

diagnose sys scanunit file-hash

File hash list.

```
diagnose sys scanunit file-hash
```

diagnose sys scanunit file-hash list

List malware hashes.

```
diagnose sys scanunit file-hash list
```

diagnose sys scanunit file-hash list all

List all malware hashes.

```
diagnose sys scanunit file-hash list all
```

diagnose sys scanunit file-hash list md5

List md5 malware hashes.

```
diagnose sys scanunit file-hash list md5
```

diagnose sys scanunit file-hash list sha1

List sha1 malware hashes.

```
diagnose sys scanunit file-hash list sha1
```

diagnose sys scanunit file-hash list sha256

List sha256 malware hashes.

```
diagnose sys scanunit file-hash list sha256
```

diagnose sys scanunit file-hash query

Query a malware hash.

```
diagnose sys scanunit file-hash query
```

diagnose sys scanunit file-hash query md5

Query an md5 malware hash.

```
diagnose sys scanunit file-hash query md5 <value>
```

Parameter	Description	Type	Size
<value>	md5 hash	string	

diagnose sys scanunit file-hash query sha1

Query a sha1 malware hash.

```
diagnose sys scanunit file-hash query sha1 <value>
```

Parameter	Description	Type	Size
<value>	sha1 hash	string	

diagnose sys scanunit file-hash query sha256

Query a sha256 malware hash.

```
diagnose sys scanunit file-hash query sha256 <value>
```

Parameter	Description	Type	Size
<value>	sha256 hash	string	

diagnose sys scanunit file-hash status

File hash database status.

```
diagnose sys scanunit file-hash status
```

diagnose sys scanunit filter

Diagnostics filter.

```
diagnose sys scanunit filter
```


diagnose sys scanunit filter clear

Clear the current filter.

```
diagnose sys scanunit filter clear
```

diagnose sys scanunit filter list

Display the current filter.

```
diagnose sys scanunit filter list
```

diagnose sys scanunit filter negate

Negate the specified filter parameter.

```
diagnose sys scanunit filter negate
```

diagnose sys scanunit filter negate vd

Negate virtual domain.

```
diagnose sys scanunit filter negate vd
```

diagnose sys scanunit filter negate worker

Negate worker ID.

```
diagnose sys scanunit filter negate worker
```

diagnose sys scanunit filter vd

Index of virtual domain. -1 matches all.

```
diagnose sys scanunit filter vd <index>
```

Parameter	Description	Type	Size
<index>	Index of virtual domain. -1 matches all.	string	

diagnose sys scanunit filter worker

ID of worker or "m" for manager. Invalid ID matches all.

```
diagnose sys scanunit filter worker <id>
```

Parameter	Description	Type	Size
<id>	ID of worker or "m" for manager. Invalid ID matches all.	string	

diagnose sys scanunit log

Logging diagnostics.

```
diagnose sys scanunit log
```

diagnose sys scanunit log filter

Debug log filter.

```
diagnose sys scanunit log filter
```

diagnose sys scanunit log filter clear

Clear the current filter.

```
diagnose sys scanunit log filter clear
```

diagnose sys scanunit log filter list

Display the current filter.

```
diagnose sys scanunit log filter list
```

diagnose sys scanunit log filter negate

Negate the specified filter parameter.

```
diagnose sys scanunit log filter negate
```

diagnose sys scanunit log filter negate vd

Negate virtual domain.

```
diagnose sys scanunit log filter negate vd
```

diagnose sys scanunit log filter negate worker

Negate worker ID.

```
diagnose sys scanunit log filter negate worker
```

diagnose sys scanunit log filter vd

Index of virtual domain. -1 matches all.

```
diagnose sys scanunit log filter vd <index>
```

Parameter	Description	Type	Size
<index>	Index of virtual domain. -1 matches all.	string	

diagnose sys scanunit log filter worker

ID of worker or "m" for manager. Invalid ID matches all.

```
diagnose sys scanunit log filter worker <id>
```

Parameter	Description	Type	Size
<id>	ID of worker or "m" for manager. Invalid ID matches all.	string	

diagnose sys scanunit reload-avdb

Reload AVDB.

```
diagnose sys scanunit reload-avdb
```

diagnose sys scanunit reload-aveng

Reload AV engine.

```
diagnose sys scanunit reload-aveng
```

diagnose sys scanunit reload-fsa-ext

Reload FSA extensions list.

```
diagnose sys scanunit reload-fsa-ext
```

diagnose sys scanunit restart

Restart scanunit.

```
diagnose sys scanunit restart
```

diagnose sys scanunit simulate-crash

Simulate scanunit crashes.

```
diagnose sys scanunit simulate-crash
```

diagnose sys scanunit simulate-crash lockup-workers

Simulate locked up scanunit workers.

```
diagnose sys scanunit simulate-crash lockup-workers
```

diagnose sys scanunit simulate-crash lockup-workers all

Lock up all workers.

```
diagnose sys scanunit simulate-crash lockup-workers all
```

diagnose sys scanunit simulate-crash lockup-workers worker

Lock up worker <id>.

```
diagnose sys scanunit simulate-crash lockup-workers worker <id>
```

Parameter	Description	Type	Size
<id>	ID of worker to lock up.	string	

diagnose sys scanunit simulate-error

Simulate scanunit errors.

```
diagnose sys scanunit simulate-error
```

diagnose sys scanunit simulate-error av-engine-delay

Add delay in AV engine filetype callback

```
diagnose sys scanunit simulate-error av-engine-delay <Integer>
```

Parameter	Description	Type	Size
<Integer>	Delay (in seconds) to introduce in AV engine filetype callback	string	

diagnose sys scanunit simulate-error av-error

Simulate AV engine error codes

```
diagnose sys scanunit simulate-error av-error <Integer>
```

Parameter	Description	Type	Size
<Integer>	AV engine error code, interpreted as bitmask.	string	

diagnose sys scanunit simulate-error av-status

Simulate AV engine status codes.

```
diagnose sys scanunit simulate-error av-status <Integer>
```

Parameter	Description	Type	Size
<Integer>	AV engine status code. (-1 == INFECTED_ERROR, 1 == INFECTED_VIRUS, etc.)	string	

diagnose sys scanunit simulate-error cdr-error

Simulate CDR engine internal error when active content detected.

```
diagnose sys scanunit simulate-error cdr-error
```

diagnose sys scanunit simulate-error reset

Reset all error simulation settings.

```
diagnose sys scanunit simulate-error reset
```

diagnose sys scanunit simulate-error scan-error-code

Simulate scanunit scan error.

```
diagnose sys scanunit simulate-error scan-error-code <Integer>
```

Parameter	Description	Type	Size
<Integer>	Scanunit error code (negated) (e.g., 0 = none, 3 = invalid infection pointer, 5 = scanunit crash).	string	

diagnose sys scanunit simulate-error status

Show error simulation settings.

```
diagnose sys scanunit simulate-error status
```

diagnose sys scanunit stats

Statistics.

```
diagnose sys scanunit stats
```

diagnose sys scanunit stats all

Per-process statistics.

```
diagnose sys scanunit stats all
```

diagnose sys scanunit stats clear

Clear all statistics.

```
diagnose sys scanunit stats clear
```

diagnose sys scanunit stats list

List statistics.

```
diagnose sys scanunit stats list
```

diagnose sys scanunit valgrind

Valgrind analysis.

```
diagnose sys scanunit valgrind
```

diagnose sys scanunit valgrind disable

Force daemon to restart.

```
diagnose sys scanunit valgrind disable
```

diagnose sys scanunit valgrind enable

Force daemon to restart.

```
diagnose sys scanunit valgrind enable
```

diagnose sys scanunit valgrind log

Valgrind logs.

```
diagnose sys scanunit valgrind log
```

diagnose sys scanunit valgrind log clear

Clear logs.

```
diagnose sys scanunit valgrind log clear
```

diagnose sys scanunit valgrind log show

Show logs.

```
diagnose sys scanunit valgrind log show
```

diagnose sys scanunit valgrind memcheck

Force daemon to restart.

```
diagnose sys scanunit valgrind memcheck
```

diagnose sys scanunit valgrind memcheck_less

Force daemon to restart.

```
diagnose sys scanunit valgrind memcheck_less
```

diagnose sys scanunit valgrind status

Show valgrind status.

```
diagnose sys scanunit valgrind status
```


diagnose sys scanunit vdom-stats

Current VDOM statistics.

```
diagnose sys scanunit vdom-stats
```

diagnose sys scanunit vdom-stats all

List all VDOM statistics.

```
diagnose sys scanunit vdom-stats all
```

diagnose sys scanunit vdom-stats clear

Clear current VDOM statistics.

```
diagnose sys scanunit vdom-stats clear
```

diagnose sys scanunit vdom-stats clear-all

Clear all VDOM statistics.

```
diagnose sys scanunit vdom-stats clear-all
```

diagnose sys scanunit vdom-stats list

List current VDOM statistics.

```
diagnose sys scanunit vdom-stats list
```

diagnose sys sccp-proxy

SCCP proxy diagnostics.

```
diagnose sys sccp-proxy
```

diagnose sys sccp-proxy debug-console

Debug consoles.

```
diagnose sys sccp-proxy debug-console
```

diagnose sys sccp-proxy phone

SCCP phones.

```
diagnose sys sccp-proxy phone
```

diagnose sys sccp-proxy phone list

List SCCP phones.

```
diagnose sys sccp-proxy phone list
```

diagnose sys sccp-proxy redirect

Redirects

```
diagnose sys sccp-proxy redirect
```

diagnose sys sccp-proxy redirect list

List SIP redirects.

```
diagnose sys sccp-proxy redirect list
```

diagnose sys sccp-proxy restart

Restart SIP and SCCP.

```
diagnose sys sccp-proxy restart
```

diagnose sys sccp-proxy stats

SCCP statistics.

```
diagnose sys sccp-proxy stats
```

diagnose sys sccp-proxy stats clear

Clear SCCP statistics.

```
diagnose sys sccp-proxy stats clear
```

diagnose sys sccp-proxy stats list

List SCCP statistics.

```
diagnose sys sccp-proxy stats list
```

diagnose sys sccp-proxy stats mem

Memory usage.

```
diagnose sys sccp-proxy stats mem
```

diagnose sys sccp-proxy stats mem full

Memory usage details.

```
diagnose sys sccp-proxy stats mem full
```

diagnose sys sccp-proxy stats mem summary

Memory usage summary.

```
diagnose sys sccp-proxy stats mem summary
```

diagnose sys sccp-proxy stats proto

SCCP proxy general protocol statistics summary.

```
diagnose sys sccp-proxy stats proto
```

diagnose sys sccp-proxy valgrind

Valgrind analysis.

```
diagnose sys sccp-proxy valgrind
```

diagnose sys sccp-proxy valgrind disable

Force daemon to restart.

```
diagnose sys sccp-proxy valgrind disable
```

diagnose sys sccp-proxy valgrind enable

Force daemon to restart.

```
diagnose sys sccp-proxy valgrind enable
```

diagnose sys sccp-proxy valgrind log

Valgrind logs.

```
diagnose sys sccp-proxy valgrind log
```

diagnose sys sccp-proxy valgrind log clear

Clear logs.

```
diagnose sys sccp-proxy valgrind log clear
```

diagnose sys sccp-proxy valgrind log show

Show logs.

```
diagnose sys sccp-proxy valgrind log show
```

diagnose sys sccp-proxy valgrind memcheck

Force daemon to restart.

```
diagnose sys sccp-proxy valgrind memcheck
```

diagnose sys sccp-proxy valgrind memcheck_less

Force daemon to restart.

```
diagnose sys sccp-proxy valgrind memcheck_less
```

diagnose sys sccp-proxy valgrind status

Show valgrind status.

```
diagnose sys sccp-proxy valgrind status
```

diagnose sys sdn

SDN Connector diagnostics.

```
diagnose sys sdn
```

diagnose sys sdn cache

Show SDN Connector cache.

```
diagnose sys sdn cache <sdn-data-type> <sdn-connector-name>
```

Parameter	Description	Type	Size
<sdn-data-type>	Specify the data type of the SDN Connector: address/service.	string	
<sdn-connector-name>	Specify the name of the SDN connector.	string	

diagnose sys sdn status

Show SDN Connector status.

```
diagnose sys sdn status <sdn-connector-name> <server-ip-address>
```

Parameter	Description	Type	Size
<sdn-connector-name>	Specify the name of the SDN Connector.	string	
<server-ip-address>	Specify the IP address of the SDN connector.	string	

diagnose sys sdwan

SD-WAN.

```
diagnose sys sdwan
```

diagnose sys sdwan health-check

Health Check.

```
diagnose sys sdwan health-check
```

diagnose sys sdwan health-check filter

Filter health-check

```
diagnose sys sdwan health-check filter
```

diagnose sys sdwan health-check filter clear

Clear all filters.

```
diagnose sys sdwan health-check filter clear
```

diagnose sys sdwan health-check filter member

Member sequence numbers <seq>.

```
diagnose sys sdwan health-check filter member <member>
```

Parameter	Description	Type	Size
<member>	Member sequence numbers.	string	

diagnose sys sdwan health-check filter name

Health Check names <name>.

```
diagnose sys sdwan health-check filter name <name>
```

Parameter	Description	Type	Size
<name>	Health Check name.	string	

diagnose sys sdwan health-check remote

Remote health check.

```
diagnose sys sdwan health-check remote <name> <seq-num>
```

Parameter	Description	Type	Size
<name>	Show status of the remote health check.	string	
<seq-num>	Sequence number of the member.	string	

diagnose sys sdwan health-check status

Health Check Status.

```
diagnose sys sdwan health-check status <name>
```

Parameter	Description	Type	Size
<name>	Show running status of the health check in SD-WAN.	string	

diagnose sys sdwan internet-service-app-ctrl-3t-info-set

Set application control Internet Service 3T Info: ctrl-app-id, IP address, protocol & port

```
diagnose sys sdwan internet-service-app-ctrl-3t-info-set <ctrl-app-id> <ip> <proto> <port>
```

Parameter	Description	Type	Size
<ctrl-app-id>	ctrl app id	string	
<ip>	Service IP address.	string	
<proto>	Service protocol(0-255) for instance: tcp is 6	string	
<port>	Service port(0-65535).	string	

diagnose sys sdwan internet-service-app-ctrl-category-list

Show application control internet service ID by category.

```
diagnose sys sdwan internet-service-app-ctrl-category-list <ctrl-app-cat-id>
```

Parameter	Description	Type	Size
<ctrl-app-cat-id>	Show details of Ctrl-based Internet Service in the category.	string	

diagnose sys sdwan internet-service-app-ctrl-flush

Flush application control Internet Service.

```
diagnose sys sdwan internet-service-app-ctrl-flush
```

diagnose sys sdwan internet-service-app-ctrl-list

Show application control Internet Service ID list.

```
diagnose sys sdwan internet-service-app-ctrl-list <ctrl-app-id>
```


Parameter	Description	Type	Size
<ctrl-app-id>	Show details of Ctrl-based Internet Service.	string	

diagnose sys sdwan intf-sla-log

Show details of interface quality information.

```
diagnose sys sdwan intf-sla-log <name>
```

Parameter	Description	Type	Size
<name>	Interface name.	string	

diagnose sys sdwan log

Log.

```
diagnose sys sdwan log <service-id>
```

Parameter	Description	Type	Size
<service-id>	Show details of traffic log on service in SD-WAN.	string	

diagnose sys sdwan member

Member.

```
diagnose sys sdwan member <seq-num>
```

Parameter	Description	Type	Size
<seq-num>	Show details of member in SD-WAN.	string	

diagnose sys sdwan neighbor

Neighbor.

```
diagnose sys sdwan neighbor <name>
```

Parameter	Description	Type	Size
<name>	Show running status of the neighbor in SD-WAN.	string	

diagnose sys sdwan reset

Reset SD-WAN.

```
diagnose sys sdwan reset
```

diagnose sys sdwan route

Dump SD-WAN routes.

```
diagnose sys sdwan route <seq-num>
```

Parameter	Description	Type	Size
<seq-num>	Show details of SD-WAN routes.	string	

diagnose sys sdwan route-tag-flush

Flush route tag address.

```
diagnose sys sdwan route-tag-flush <route-tag>
```

Parameter	Description	Type	Size
<route-tag>	Flush cache of route-tag address in SD-WAN.	string	

diagnose sys sdwan route-tag-list

Show route tag address.

```
diagnose sys sdwan route-tag-list <route-tag>
```

Parameter	Description	Type	Size
<route-tag>	Show details of route-tag address in SD-WAN.	string	

diagnose sys sdwan route6

Dump IPv6 SD-WAN routes.

```
diagnose sys sdwan route6 <seq-num>
```

Parameter	Description	Type	Size
<seq-num>	Show details of IPv6 SD-WAN routes.	string	

diagnose sys sdwan service

Service.

```
diagnose sys sdwan service <id>
```

Parameter	Description	Type	Size
<id>	Show details of service in SD-WAN.	string	

diagnose sys sdwan sla-log

Show details of health-check quality information in last 10 minutes

```
diagnose sys sdwan sla-log <name> <seq-num> <childname>
```

Parameter	Description	Type	Size
<name>	Health check name.	string	
<seq-num>	Sequence number of the member.	string	
<childname>	Child interface name.	string	

diagnose sys sdwan zone

Dump sdwan zone info in kernel.

```
diagnose sys sdwan zone
```

diagnose sys server-probe

Server probe.

```
diagnose sys server-probe
```

diagnose sys server-probe response

Probe response.

```
diagnose sys server-probe response
```

diagnose sys service-communication

Show historical statistics for communication with FortiGuard services.

```
diagnose sys service-communication
```

diagnose sys session

IPv4 session.

```
diagnose sys session
```

diagnose sys session clear

Clear the sessions defined by filter.

```
diagnose sys session clear
```

diagnose sys session exp-stat

Expectation session statistics.

```
diagnose sys session exp-stat
```

diagnose sys session filter

List session with filters.

```
diagnose sys session filter
```

diagnose sys session filter clear

Clear session filter.

```
diagnose sys session filter clear
```

diagnose sys session filter clear dintf

Clear destination interface filter.

```
diagnose sys session filter clear dintf
```

diagnose sys session filter clear dport

Clear destination port filter.

```
diagnose sys session filter clear dport
```

diagnose sys session filter clear dst

Clear destination IP filter.

```
diagnose sys session filter clear dst
```

diagnose sys session filter clear duration

Clear duration filter.

```
diagnose sys session filter clear duration
```

diagnose sys session filter clear expire

Clear expire filter.

```
diagnose sys session filter clear expire
```

diagnose sys session filter clear nport

clear NAT'd source port filter

```
diagnose sys session filter clear nport
```

diagnose sys session filter clear nsrc

clear NAT'd source IP filter

```
diagnose sys session filter clear nsrc
```

diagnose sys session filter clear policy

Clear policy ID filter.

```
diagnose sys session filter clear policy
```

diagnose sys session filter clear proto

Clear protocol filter.

```
diagnose sys session filter clear proto
```

diagnose sys session filter clear proto-state

Clear protocol state filter.

```
diagnose sys session filter clear proto-state
```

diagnose sys session filter clear session-state1

Clear session-state1 filter.

```
diagnose sys session filter clear session-state1
```

diagnose sys session filter clear session-state2

Clear session-state2 filter.

```
diagnose sys session filter clear session-state2
```

diagnose sys session filter clear sintf

Clear source interface filter.

```
diagnose sys session filter clear sintf
```

diagnose sys session filter clear sport

Clear source port filter.

```
diagnose sys session filter clear sport
```

diagnose sys session filter clear src

Clear source IP filter.

```
diagnose sys session filter clear src
```

diagnose sys session filter clear vd

Clear virtual domain filter.

```
diagnose sys session filter clear vd
```

diagnose sys session filter dintf

Destination interface.

```
diagnose sys session filter dintf <xxxx>
```

Parameter	Description	Type	Size
<xxxx>	Interface name.	string	

diagnose sys session filter dport

Destination port.

```
diagnose sys session filter dport <xxxx> <xxxx>
```

Parameter	Description	Type	Size
<xxxx>	<0-65535> (from).	string	
<xxxx>	<0-65535> (to).	string	

diagnose sys session filter dst

Destination IP address.

```
diagnose sys session filter dst <xxx.xxx.xxx.xxx> <xxx.xxx.xxx.xxx>
```

Parameter	Description	Type	Size
<xxx.xxx.xxx.xxx>	Destination IP (from).	string	
<xxx.xxx.xxx.xxx>	Destination IP (to).	string	

diagnose sys session filter duration

duration

```
diagnose sys session filter duration <xxx> <xxx>
```

Parameter	Description	Type	Size
<xxx>	Duration (from).	string	
<xxx>	Duration (to).	string	

diagnose sys session filter expire

expire

```
diagnose sys session filter expire <xxx> <xxx>
```


Parameter	Description	Type	Size
<xxx>	Expire (from).	string	
<xxx>	Expire (to).	string	

diagnose sys session filter ext-dst

Add a destination address to the extended match list.

```
diagnose sys session filter ext-dst <xxx.xxx.xxx.xxx>
```

Parameter	Description	Type	Size
<xxx.xxx.xxx.xxx>	Destination IP.	string	

diagnose sys session filter ext-dst-negate

Add a destination address to the negated extended match list.

```
diagnose sys session filter ext-dst-negate <xxx.xxx.xxx.xxx>
```

Parameter	Description	Type	Size
<xxx.xxx.xxx.xxx>	Destination IP.	string	

diagnose sys session filter ext-src

Add a source address to the extended match list.

```
diagnose sys session filter ext-src <xxx.xxx.xxx.xxx>
```

Parameter	Description	Type	Size
<xxx.xxx.xxx.xxx>	Source IP.	string	

diagnose sys session filter ext-src-negate

Add a source address to the negated extended match list.

```
diagnose sys session filter ext-src-negate <xxx.xxx.xxx.xxx>
```

Parameter	Description	Type	Size
<xxx.xxx.xxx.xxx>	Source IP.	string	

diagnose sys session filter negate

Inverse filter.

```
diagnose sys session filter negate
```

diagnose sys session filter negate dintf

Inverse destination interface.

```
diagnose sys session filter negate dintf
```

diagnose sys session filter negate dport

Inverse destination port.

```
diagnose sys session filter negate dport
```

diagnose sys session filter negate dst

Inverse destination IP.

```
diagnose sys session filter negate dst
```

diagnose sys session filter negate duration

Inverse duration.

```
diagnose sys session filter negate duration
```

diagnose sys session filter negate expire

Inverse expire.

```
diagnose sys session filter negate expire
```

diagnose sys session filter negate nport

inverse NAT'd source port

```
diagnose sys session filter negate nport
```

diagnose sys session filter negate nsrc

inverse NAT'd source IP

```
diagnose sys session filter negate nsrc
```

diagnose sys session filter negate policy

Inverse policy ID.

```
diagnose sys session filter negate policy
```

diagnose sys session filter negate proto

Inverse protocol.

```
diagnose sys session filter negate proto
```

diagnose sys session filter negate proto-state

Inverse protocol state.

```
diagnose sys session filter negate proto-state
```

diagnose sys session filter negate session-state1

Inverse session-state1.

```
diagnose sys session filter negate session-state1
```

diagnose sys session filter negate session-state2

Inverse session-state2.

```
diagnose sys session filter negate session-state2
```

diagnose sys session filter negate intf

Inverse source interface.

```
diagnose sys session filter negate intf
```

diagnose sys session filter negate sport

Inverse source port.

```
diagnose sys session filter negate sport
```

diagnose sys session filter negate src

Inverse source IP.

```
diagnose sys session filter negate src
```

diagnose sys session filter negate vd

Inverse virtual domain.

```
diagnose sys session filter negate vd
```

diagnose sys session filter nport

NAT'd source port

```
diagnose sys session filter nport <xxxx> <xxxx>
```

Parameter	Description	Type	Size
<xxxx>	<0-65535> (from).	string	
<xxxx>	<0-65535> (to).	string	

diagnose sys session filter nsrc

NAT'd source ip address

```
diagnose sys session filter nsrc <xxx.xxx.xxx.xxx> <xxx.xxx.xxx.xxx>
```

Parameter	Description	Type	Size
<xxx.xxx.xxx.xxx>	NAT'd source ip (from)	string	
<xxx.xxx.xxx.xxx>	NAT'd source ip (to)	string	

diagnose sys session filter policy

Policy ID.

```
diagnose sys session filter policy <xxx> <xxx>
```

Parameter	Description	Type	Size
<xxx>	Policy ID (from).	string	
<xxx>	Policy ID (to).	string	

diagnose sys session filter proto

Protocol number.

```
diagnose sys session filter proto <xx> <xx>
```

Parameter	Description	Type	Size
<xx>	<0-255> (from).	string	
<xx>	<0-255> (to).	string	

diagnose sys session filter proto-state

Protocol state.

```
diagnose sys session filter proto-state <x> <x>
```

Parameter	Description	Type	Size
<x>	<0-9> (from). 0: ANY 1: TCP_S_ESTABLISHED, SCTP_S_ESTABLISHED 2: TCP_S_SYN_SENT, SCTP_S_CLOSED 3: TCP_S_SYN_RECV, SCTP_S_COOKIE_WAIT 4: TCP_S_FIN_WAIT, SCTP_S_COOKIE_ECHOED 5: TCP_S_TIME_WAIT, SCTP_S_SHUTDOWN_SENT 6: TCP_S_CLOSE, SCTP_S_SHUTDOWN_RECV 7: TCP_S_CLOSE_WAIT, SCTP_S_SHUTDOWN_ACK_SENT 8: TCP_S_LAST_ACK 9: TCP_S_LISTEN	string	
<x>	<0-9> (to). 0: ANY 1: TCP_S_ESTABLISHED, SCTP_S_ESTABLISHED 2: TCP_S_SYN_SENT, SCTP_S_CLOSED 3: TCP_S_SYN_RECV, SCTP_S_COOKIE_WAIT 4: TCP_S_FIN_WAIT, SCTP_S_COOKIE_ECHOED 5: TCP_S_TIME_WAIT, SCTP_S_SHUTDOWN_SENT 6: TCP_S_CLOSE, SCTP_S_SHUTDOWN_RECV 7: TCP_S_CLOSE_WAIT, SCTP_S_SHUTDOWN_ACK_SENT 8: TCP_S_LAST_ACK 9: TCP_S_LISTEN	string	

diagnose sys session filter session-state1

Session state1.

```
diagnose sys session filter session-state1 <x> <x>
```

Parameter	Description	Type	Size
<x>	<0-FFFFFFFF>, state bits.	string	
<x>	<0-FFFFFFFF>, state bit mask.	string	

diagnose sys session filter session-state2

Session state2.

```
diagnose sys session filter session-state2 <x> <x>
```

Parameter	Description	Type	Size
<x>	<0-FFFFFFFF>, state bits.	string	
<x>	<0-FFFFFFFF>, state bit mask.	string	

diagnose sys session filter sintf

Source interface.

```
diagnose sys session filter sintf <xxxx>
```

Parameter	Description	Type	Size
<xxxx>	Interface name.	string	

diagnose sys session filter sport

Source port.

```
diagnose sys session filter sport <xxxx> <xxxx>
```

Parameter	Description	Type	Size
<xxxx>	<0-65535> (from).	string	
<xxxx>	<0-65535> (to).	string	

diagnose sys session filter src

Source IP address.

```
diagnose sys session filter src <xxx.xxx.xxx.xxx> <xxx.xxx.xxx.xxx>
```

Parameter	Description	Type	Size
<xxx.xxx.xxx.xxx>	Source IP (from).	string	
<xxx.xxx.xxx.xxx>	Source IP (to).	string	

diagnose sys session filter vd

Index of virtual domain. -1 matches all.

```
diagnose sys session filter vd <xxx>
```

Parameter	Description	Type	Size
<xxx>	Index of virtual domain. -1 matches all.	string	

diagnose sys session filter vd-name

Name of virtual domain. -1 or "any" matches all.

```
diagnose sys session filter vd-name <...>
```

Parameter	Description	Type	Size
<...>	Name of virtual domain. -1 or "any" matches all.	string	

diagnose sys session full-stat

Fully stat session.

```
diagnose sys session full-stat
```

diagnose sys session help

Session help.

```
diagnose sys session help
```

diagnose sys session help add

Add session help.

```
diagnose sys session help add <name> <protocol> <port>
```

Parameter	Description	Type	Size
<name>	Help name.	string	
<protocol>	Protocol number.	string	
<port>	Help port.	string	

diagnose sys session help delete

Delete session help.

```
diagnose sys session help delete <protocol> <port>
```


Parameter	Description	Type	Size
<protocol>	Protocol number.	string	
<port>	Help port.	string	

diagnose sys session help list

List session help.

```
diagnose sys session help list
```

diagnose sys session list

List session.

```
diagnose sys session list
```

diagnose sys session list expectation

List expectation session.

```
diagnose sys session list expectation
```

diagnose sys session stat

Stat session.

```
diagnose sys session stat
```

diagnose sys session sync

List session sync.

```
diagnose sys session sync
```

diagnose sys session sync reset

Reset session sync.

```
diagnose sys session sync reset
```

diagnose sys session ttl

TTL session.

```
diagnose sys session ttl
```

diagnose sys session6

IPv6 session.

```
diagnose sys session6
```

diagnose sys session6 clear

Clear IPv6 sessions defined by filter.

```
diagnose sys session6 clear
```

diagnose sys session6 exp-stat

Expectation session statistics.

```
diagnose sys session6 exp-stat
```

diagnose sys session6 filter

List IPv6 session with filters.

```
diagnose sys session6 filter
```

diagnose sys session6 filter clear

Clear IPv6 session filter.

```
diagnose sys session6 filter clear
```

diagnose sys session6 filter clear dintf

Clear destination interface filter.

```
diagnose sys session6 filter clear dintf
```

diagnose sys session6 filter clear dport

Clear destination port filter.

```
diagnose sys session6 filter clear dport
```

diagnose sys session6 filter clear dst

Clear destination IP filter.

```
diagnose sys session6 filter clear dst
```

diagnose sys session6 filter clear duration

Clear duration filter.

```
diagnose sys session6 filter clear duration
```

diagnose sys session6 filter clear expire

Clear expire filter.

```
diagnose sys session6 filter clear expire
```

diagnose sys session6 filter clear nport

Clear NAT'd source port filter.

```
diagnose sys session6 filter clear nport
```

diagnose sys session6 filter clear nsrc

Clear NAT'd source IP filter.

```
diagnose sys session6 filter clear nsrc
```

diagnose sys session6 filter clear policy

Clear policy ID filter.

```
diagnose sys session6 filter clear policy
```

diagnose sys session6 filter clear proto

Clear protocol filter.

```
diagnose sys session6 filter clear proto
```

diagnose sys session6 filter clear proto-state

Clear protocol state filter.

```
diagnose sys session6 filter clear proto-state
```

diagnose sys session6 filter clear session-state1

Clear session-state1 filter.

```
diagnose sys session6 filter clear session-state1
```

diagnose sys session6 filter clear session-state2

Clear session-state2 filter.

```
diagnose sys session6 filter clear session-state2
```

diagnose sys session6 filter clear sintf

Clear source interface filter.

```
diagnose sys session6 filter clear sintf
```

diagnose sys session6 filter clear sport

Clear source port filter.

```
diagnose sys session6 filter clear sport
```

diagnose sys session6 filter clear src

Clear source IP filter.

```
diagnose sys session6 filter clear src
```

diagnose sys session6 filter clear vd

Clear virtual domain filter.

```
diagnose sys session6 filter clear vd
```

diagnose sys session6 filter dintf

Destination interface.

```
diagnose sys session6 filter dintf <xxxxx>
```

Parameter	Description	Type	Size
<xxxxx>	Interface name.	string	

diagnose sys session6 filter dport

Destination port.

```
diagnose sys session6 filter dport <xxxx> <xxxx>
```

Parameter	Description	Type	Size
<xxxx>	<0-65535> (from).	string	
<xxxx>	<0-65535> (to).	string	

diagnose sys session6 filter dst

Destination IP address.

```
diagnose sys session6 filter dst <xxx:xxx::xxx:xxx> <xxx:xxx::xxx:xxx>
```

Parameter	Description	Type	Size
<xxx:xxx::xxx:xxx>	Destination IP (from).	string	
<xxx:xxx::xxx:xxx>	Destination IP (to).	string	

diagnose sys session6 filter duration

duration

```
diagnose sys session6 filter duration <xxx> <xxx>
```

Parameter	Description	Type	Size
<xxx>	Duration (from).	string	
<xxx>	Duration (to).	string	

diagnose sys session6 filter expire

expire

```
diagnose sys session6 filter expire <xxx> <xxx>
```

Parameter	Description	Type	Size
<xxx>	Expire (from).	string	
<xxx>	Expire (to).	string	

diagnose sys session6 filter ext-dst

Add a destination address to the extended match list.

```
diagnose sys session6 filter ext-dst <xxx:xxx::xxx:xxx>
```

Parameter	Description	Type	Size
<xxx:xxx::xxx:xxx>	Destination IP.	string	

diagnose sys session6 filter ext-dst-negate

Add a destination address to the negated extended match list.

```
diagnose sys session6 filter ext-dst-negate <xxx:xxx::xxx:xxx>
```

Parameter	Description	Type	Size
<xxx:xxx::xxx:xxx>	Destination IP.	string	

diagnose sys session6 filter ext-src

Add a source address to the extended match list.

```
diagnose sys session6 filter ext-src <xxx:xxx::xxx:xxx>
```

Parameter	Description	Type	Size
<xxx:xxx::xxx:xxx>	Source IP.	string	

diagnose sys session6 filter ext-src-negate

Add a source address to the negated extended match list.

```
diagnose sys session6 filter ext-src-negate <xxx:xxx::xxx:xxx>
```

Parameter	Description	Type	Size
<xxx:xxx::xxx:xxx>	Source IP.	string	

diagnose sys session6 filter negate

Inverse filter.

```
diagnose sys session6 filter negate
```

diagnose sys session6 filter negate dintf

Inverse destination interface.

```
diagnose sys session6 filter negate dintf
```

diagnose sys session6 filter negate dport

Inverse destination port.

```
diagnose sys session6 filter negate dport
```

diagnose sys session6 filter negate dst

Inverse destination IP.

```
diagnose sys session6 filter negate dst
```

diagnose sys session6 filter negate duration

Inverse duration.

```
diagnose sys session6 filter negate duration
```

diagnose sys session6 filter negate expire

Inverse expire.

```
diagnose sys session6 filter negate expire
```

diagnose sys session6 filter negate nport

Inverse NAT'd source port.

```
diagnose sys session6 filter negate nport
```


diagnose sys session6 filter negate nsrc

Inverse NAT'd source IP.

```
diagnose sys session6 filter negate nsrc
```

diagnose sys session6 filter negate policy

Inverse policy ID.

```
diagnose sys session6 filter negate policy
```

diagnose sys session6 filter negate proto

Inverse protocol.

```
diagnose sys session6 filter negate proto
```

diagnose sys session6 filter negate proto-state

Inverse protocol state.

```
diagnose sys session6 filter negate proto-state
```

diagnose sys session6 filter negate session-state1

Inverse session-state1.

```
diagnose sys session6 filter negate session-state1
```

diagnose sys session6 filter negate session-state2

Inverse session-state2.

```
diagnose sys session6 filter negate session-state2
```

diagnose sys session6 filter negate sintf

Inverse source interface.

```
diagnose sys session6 filter negate sintf
```

diagnose sys session6 filter negate sport

Inverse source port.

```
diagnose sys session6 filter negate sport
```

diagnose sys session6 filter negate src

Inverse source IP.

```
diagnose sys session6 filter negate src
```

diagnose sys session6 filter negate vd

Inverse virtual domain.

```
diagnose sys session6 filter negate vd
```

diagnose sys session6 filter nport

NAT'd source port.

```
diagnose sys session6 filter nport <xxxx> <xxxx>
```

Parameter	Description	Type	Size
<xxxx>	<0-65535> (from).	string	
<xxxx>	<0-65535> (to).	string	

diagnose sys session6 filter nsrc

NAT'd source IP address.

```
diagnose sys session6 filter nsrc <xxx:xxx::xxx:xxx> <xxx:xxx::xxx:xxx>
```

Parameter	Description	Type	Size
<xxx:xxx::xxx:xxx>	NAT'd source IP (from).	string	
<xxx:xxx::xxx:xxx>	NAT'd Source IP (to).	string	

diagnose sys session6 filter policy

Policy ID.

```
diagnose sys session6 filter policy <xxx> <xxx>
```

Parameter	Description	Type	Size
<xxx>	Policy ID (from).	string	
<xxx>	Policy ID (to).	string	

diagnose sys session6 filter proto

Protocol number.

```
diagnose sys session6 filter proto <xx> <xx>
```

Parameter	Description	Type	Size
<xx>	<0-255> (from).	string	
<xx>	<0-255> (to).	string	

diagnose sys session6 filter proto-state

Protocol state.

```
diagnose sys session6 filter proto-state <xx> <xx>
```

Parameter	Description	Type	Size
<xx>	<0-255> (from).	string	
<xx>	<0-255> (to).	string	

diagnose sys session6 filter session-state1

Session state1.

```
diagnose sys session6 filter session-state1 <x> <x>
```

Parameter	Description	Type	Size
<x>	<0-FFFFFFFF>, state bits.	string	
<x>	<0-FFFFFFFF>, state bit mask.	string	

diagnose sys session6 filter session-state2

Session state2.

```
diagnose sys session6 filter session-state2 <x> <x>
```

Parameter	Description	Type	Size
<x>	<0-FFFFFFFF>, state bits.	string	
<x>	<0-FFFFFFFF>, state bit mask.	string	

diagnose sys session6 filter intf

Source interface.

```
diagnose sys session6 filter intf <xxxxx>
```

Parameter	Description	Type	Size
<xxxxx>	Interface name.	string	

diagnose sys session6 filter sport

Source port.

```
diagnose sys session6 filter sport <xxxx> <xxxx>
```

Parameter	Description	Type	Size
<xxxx>	<0-65535> (from).	string	
<xxxx>	<0-65535> (to).	string	

diagnose sys session6 filter src

Source IP address.

```
diagnose sys session6 filter src <xxx:xxx::xxx:xxx> <xxx:xxx::xxx:xxx>
```

Parameter	Description	Type	Size
<xxx:xxx::xxx:xxx>	Source IP (from).	string	
<xxx:xxx::xxx:xxx>	Source IP (to).	string	

diagnose sys session6 filter vd

Index of virtual domain. -1 matches all.

```
diagnose sys session6 filter vd <xxx>
```

Parameter	Description	Type	Size
<xxx>	Index of virtual domain. -1 matches all.	string	

diagnose sys session6 filter vd-name

name of virtual domain. -1 or "any" matches all.

```
diagnose sys session6 filter vd-name <...>
```

Parameter	Description	Type	Size
<...>	Name of virtual domain. -1 or "any" matches all.	string	

diagnose sys session6 full-stat

Fully stat session.

```
diagnose sys session6 full-stat
```

diagnose sys session6 help

IPv6 session help.

```
diagnose sys session6 help
```

diagnose sys session6 help add

Add session help.

```
diagnose sys session6 help add <name> <protocol> <port>
```

Parameter	Description	Type	Size
<name>	Help name.	string	
<protocol>	Protocol number.	string	
<port>	Help port.	string	

diagnose sys session6 help delete

Delete session help.

```
diagnose sys session6 help delete <protocol> <port>
```

Parameter	Description	Type	Size
<protocol>	Protocol number.	string	
<port>	Help port.	string	

diagnose sys session6 help list

List IPv6 session help.

```
diagnose sys session6 help list
```

diagnose sys session6 list

List IPv6 session.

```
diagnose sys session6 list
```

diagnose sys session6 list expectation

List IPv6 expectation session.

```
diagnose sys session6 list expectation
```

diagnose sys session6 stat

Stat session.

```
diagnose sys session6 stat
```

diagnose sys session6 sync

List session6 sync.

```
diagnose sys session6 sync
```

diagnose sys session6 sync reset

Reset session6 sync.

```
diagnose sys session6 sync reset
```

diagnose sys sip

SIP diagnostics.

```
diagnose sys sip
```

diagnose sys sip debug-mask

Mask for SIP kernel trace.

```
diagnose sys sip debug-mask <mask>
```

Parameter	Description	Type	Size
<mask>	For example, 0, 1, 2, 3 ...	string	

diagnose sys sip dialog

SIP dialog.

```
diagnose sys sip dialog
```

diagnose sys sip dialog clear

Clear SIP dialogs.

```
diagnose sys sip dialog clear
```

diagnose sys sip dialog list

List SIP dialogs.

```
diagnose sys sip dialog list
```

diagnose sys sip mapping

SIP mapping.

```
diagnose sys sip mapping
```

diagnose sys sip mapping list

List SIP mappings.

```
diagnose sys sip mapping list
```

diagnose sys sip status

Display SIP status.

```
diagnose sys sip status
```

diagnose sys sip-proxy

SIP proxy diagnostics.

```
diagnose sys sip-proxy
```


diagnose sys sip-proxy alg

SIP to ALG passing.

```
diagnose sys sip-proxy alg
```

diagnose sys sip-proxy alg bypass

Pass SIP to ALG but pass it directly through without parsing.

```
diagnose sys sip-proxy alg bypass
```

diagnose sys sip-proxy alg parse-only

Pass SIP to ALG and parse but do not modify.

```
diagnose sys sip-proxy alg parse-only
```

diagnose sys sip-proxy calls

SIP calls.

```
diagnose sys sip-proxy calls
```

diagnose sys sip-proxy calls clear

Clear all active SIP calls.

```
diagnose sys sip-proxy calls clear
```

diagnose sys sip-proxy calls idle

List idle SIP calls.

```
diagnose sys sip-proxy calls idle
```

diagnose sys sip-proxy calls invite

List SIP invite transactions.

```
diagnose sys sip-proxy calls invite
```

diagnose sys sip-proxy calls list

List active SIP calls.

```
diagnose sys sip-proxy calls list
```

diagnose sys sip-proxy config

Configuration details.

```
diagnose sys sip-proxy config
```

diagnose sys sip-proxy config list

Display SIP per-policy configurations.

```
diagnose sys sip-proxy config list
```

diagnose sys sip-proxy config profiles

Display SIP VoIP profiles.

```
diagnose sys sip-proxy config profiles
```

diagnose sys sip-proxy debug-console

Debug consoles.

```
diagnose sys sip-proxy debug-console
```

diagnose sys sip-proxy filter

Filter for listing meters and calls.

```
diagnose sys sip-proxy filter
```

diagnose sys sip-proxy filter clear

Erase the current filter.

```
diagnose sys sip-proxy filter clear
```

diagnose sys sip-proxy filter dst-addr4

Destination address range to filter by.

```
diagnose sys sip-proxy filter dst-addr4 <ipv4-address> <ipv4-address>
```

Parameter	Description	Type	Size
<ipv4-address>	Destination IPv4 address (from).	string	
<ipv4-address>	Destination IPv4 address (to).	string	

diagnose sys sip-proxy filter dst-addr6

IPv6 destination address range to filter by.

```
diagnose sys sip-proxy filter dst-addr6 <ipv6-address> <ipv6-address>
```

Parameter	Description	Type	Size
<ipv6-address>	Destination IPv6 address (from).	string	
<ipv6-address>	Destination IPv6 address (to).	string	

diagnose sys sip-proxy filter dst-port

Destination port to filter by.

```
diagnose sys sip-proxy filter dst-port <port>
```

Parameter	Description	Type	Size
<port>	Source port.	string	

diagnose sys sip-proxy filter list

Display the current filter.

```
diagnose sys sip-proxy filter list
```

diagnose sys sip-proxy filter negate

Negate the specified filter parameter.

```
diagnose sys sip-proxy filter negate
```

diagnose sys sip-proxy filter negate dst-addr4

Negate the dst-addr4 filter.

```
diagnose sys sip-proxy filter negate dst-addr4
```

diagnose sys sip-proxy filter negate dst-addr6

Negate the dst-addr6 filter.

```
diagnose sys sip-proxy filter negate dst-addr6
```

diagnose sys sip-proxy filter negate dst-port

Negate the dst-port filter.

```
diagnose sys sip-proxy filter negate dst-port
```

diagnose sys sip-proxy filter negate policy

Negate the policy filter.

```
diagnose sys sip-proxy filter negate policy
```

diagnose sys sip-proxy filter negate policy-type

Negate the policy-type filter.

```
diagnose sys sip-proxy filter negate policy-type
```

diagnose sys sip-proxy filter negate src-addr4

Negate the src-addr4 filter.

```
diagnose sys sip-proxy filter negate src-addr4
```

diagnose sys sip-proxy filter negate src-addr6

Negate the src-addr6 filter.

```
diagnose sys sip-proxy filter negate src-addr6
```

diagnose sys sip-proxy filter negate src-port

Negate the src-port filter.

```
diagnose sys sip-proxy filter negate src-port
```

diagnose sys sip-proxy filter negate vd

Negate the virtual domain filter.

```
diagnose sys sip-proxy filter negate vd
```

diagnose sys sip-proxy filter negate voip-profile

Negate the VoIP-profile filter.

```
diagnose sys sip-proxy filter negate voip-profile
```

diagnose sys sip-proxy filter policy

Policy to filter by.

```
diagnose sys sip-proxy filter policy <policy>
```

Parameter	Description	Type	Size
<policy>	policy	string	

diagnose sys sip-proxy filter policy-type

Policy-type to filter by.

```
diagnose sys sip-proxy filter policy-type
```

diagnose sys sip-proxy filter policy-type ipv4

Filter IPv4 policies.

```
diagnose sys sip-proxy filter policy-type ipv4
```

diagnose sys sip-proxy filter policy-type ipv6

Filter IPv6 policies.

```
diagnose sys sip-proxy filter policy-type ipv6
```

diagnose sys sip-proxy filter src-addr4

Source address range to filter by.

```
diagnose sys sip-proxy filter src-addr4 <ipv4-address> <ipv4-address>
```

Parameter	Description	Type	Size
<ipv4-address>	Source IPv4 address (from).	string	
<ipv4-address>	Source IPv4 address (to).	string	

diagnose sys sip-proxy filter src-addr6

IPv6 source address range to filter by.

```
diagnose sys sip-proxy filter src-addr6 <ipv6-address> <ipv6-address>
```

Parameter	Description	Type	Size
<ipv6-address>	Source IPv6 address (from).	string	
<ipv6-address>	Source IPv6 address (to).	string	

diagnose sys sip-proxy filter src-port

Source port to filter by.

```
diagnose sys sip-proxy filter src-port <port>
```

Parameter	Description	Type	Size
<port>	Source port.	string	

diagnose sys sip-proxy filter vd

Index of virtual domain. -1 matches all.

```
diagnose sys sip-proxy filter vd <index>
```

Parameter	Description	Type	Size
<index>	Index of virtual domain. -1 matches all.	string	

diagnose sys sip-proxy filter voip-profile

VoIP profile to filter by.

```
diagnose sys sip-proxy filter voip-profile <voip-profile>
```

Parameter	Description	Type	Size
<voip-profile>	voip-profile	string	

diagnose sys sip-proxy log-filter

SIP ALG debug log filter.

```
diagnose sys sip-proxy log-filter
```

diagnose sys sip-proxy log-filter clear

Clear the current filter.

```
diagnose sys sip-proxy log-filter clear
```

diagnose sys sip-proxy log-filter dst-addr4

IPv4 destination address range to filter by.

```
diagnose sys sip-proxy log-filter dst-addr4 <ip-address> <ip-address>
```

Parameter	Description	Type	Size
<ip-address>	Destination IPv4 address (from).	string	
<ip-address>	Destination IPv4 address (to).	string	

diagnose sys sip-proxy log-filter dst-addr6

IPv6 destination address range to filter by.

```
diagnose sys sip-proxy log-filter dst-addr6 <ipv6-address> <ipv6-address>
```

Parameter	Description	Type	Size
<ipv6-address>	Destination IPv6 address (from).	string	
<ipv6-address>	Destination IPv6 address (to).	string	

diagnose sys sip-proxy log-filter dst-port

Destination port to filter by.

```
diagnose sys sip-proxy log-filter dst-port <port>
```


Parameter	Description	Type	Size
<port>	Source port.	string	

diagnose sys sip-proxy log-filter list

Display the current filter.

```
diagnose sys sip-proxy log-filter list
```

diagnose sys sip-proxy log-filter negate

Negate the specified filter parameter.

```
diagnose sys sip-proxy log-filter negate
```

diagnose sys sip-proxy log-filter negate dst-addr4

Negate the dst-addr4 filter.

```
diagnose sys sip-proxy log-filter negate dst-addr4
```

diagnose sys sip-proxy log-filter negate dst-addr6

Negate the dst-addr6 filter.

```
diagnose sys sip-proxy log-filter negate dst-addr6
```

diagnose sys sip-proxy log-filter negate dst-port

Negate the dst-port filter.

```
diagnose sys sip-proxy log-filter negate dst-port
```

diagnose sys sip-proxy log-filter negate policy

Negate the policy filter.

```
diagnose sys sip-proxy log-filter negate policy
```

diagnose sys sip-proxy log-filter negate policy-type

Negate the policy-type filter.

```
diagnose sys sip-proxy log-filter negate policy-type
```

diagnose sys sip-proxy log-filter negate src-addr4

Negate the src-addr4 filter.

```
diagnose sys sip-proxy log-filter negate src-addr4
```

diagnose sys sip-proxy log-filter negate src-addr6

Negate the src-addr6 filter.

```
diagnose sys sip-proxy log-filter negate src-addr6
```

diagnose sys sip-proxy log-filter negate src-port

Negate the src-port filter.

```
diagnose sys sip-proxy log-filter negate src-port
```

diagnose sys sip-proxy log-filter negate vd

Negate the virtual domain filter.

```
diagnose sys sip-proxy log-filter negate vd
```

diagnose sys sip-proxy log-filter negate voip-profile

Negate the VoIP-profile filter.

```
diagnose sys sip-proxy log-filter negate voip-profile
```

diagnose sys sip-proxy log-filter policy

Policy to filter by.

```
diagnose sys sip-proxy log-filter policy <policy>
```

Parameter	Description	Type	Size
<policy>	policy	string	

diagnose sys sip-proxy log-filter policy-type

Policy-type to filter by.

```
diagnose sys sip-proxy log-filter policy-type
```

diagnose sys sip-proxy log-filter policy-type ipv4

Filter IPv4 policies.

```
diagnose sys sip-proxy log-filter policy-type ipv4
```

diagnose sys sip-proxy log-filter policy-type ipv6

Filter IPv6 policies.

```
diagnose sys sip-proxy log-filter policy-type ipv6
```

diagnose sys sip-proxy log-filter src-addr4

IPv4 source address range to filter by.

```
diagnose sys sip-proxy log-filter src-addr4 <ipv4-address> <ipv4-address>
```

Parameter	Description	Type	Size
<ipv4-address>	Source IPv4 address (from).	string	
<ipv4-address>	Source IPv4 address (to).	string	

diagnose sys sip-proxy log-filter src-addr6

IPv6 source address range to filter by.

```
diagnose sys sip-proxy log-filter src-addr6 <ipv6-address> <ipv6-address>
```

Parameter	Description	Type	Size
<ipv6-address>	Source IPv6 address (from).	string	
<ipv6-address>	Source IPv6 address (to).	string	

diagnose sys sip-proxy log-filter src-port

Source port to filter by.

```
diagnose sys sip-proxy log-filter src-port <port>
```

Parameter	Description	Type	Size
<port>	Source port.	string	

diagnose sys sip-proxy log-filter vd

Index of virtual domain. -1 matches all.

```
diagnose sys sip-proxy log-filter vd <index>
```

Parameter	Description	Type	Size
<index>	Index of virtual domain. -1 matches all.	string	

diagnose sys sip-proxy log-filter voip-profile

VoIP profile to filter by.

```
diagnose sys sip-proxy log-filter voip-profile <voip-profile>
```

Parameter	Description	Type	Size
<voip-profile>	voip-profile	string	

diagnose sys sip-proxy meters

Diagnostics for SIP rate limiting meters.

```
diagnose sys sip-proxy meters
```

diagnose sys sip-proxy meters list

List active SIP rate limiting meters.

```
diagnose sys sip-proxy meters list
```

diagnose sys sip-proxy redirect

Redirects

```
diagnose sys sip-proxy redirect
```

diagnose sys sip-proxy redirect list

List SIP redirects.

```
diagnose sys sip-proxy redirect list
```

diagnose sys sip-proxy restart

Restart SIP and SCCP.

```
diagnose sys sip-proxy restart
```

diagnose sys sip-proxy scheduler-times

Scheduler times.

```
diagnose sys sip-proxy scheduler-times
```

diagnose sys sip-proxy scheduler-times display

Display scheduler times.

```
diagnose sys sip-proxy scheduler-times display
```

diagnose sys sip-proxy scheduler-times start

Start measuring scheduler times.

```
diagnose sys sip-proxy scheduler-times start
```

diagnose sys sip-proxy scheduler-times stop

Stop measuring scheduler times.

```
diagnose sys sip-proxy scheduler-times stop
```

diagnose sys sip-proxy session

SIP sessions.

```
diagnose sys sip-proxy session
```

diagnose sys sip-proxy session list

List SIP sessions.

```
diagnose sys sip-proxy session list
```

diagnose sys sip-proxy ssl

SSL hardware support.

```
diagnose sys sip-proxy ssl
```

diagnose sys sip-proxy ssl hardware

Enable SSL hardware support (default) (will restart voip).

```
diagnose sys sip-proxy ssl hardware
```

diagnose sys sip-proxy ssl software

Disable SSL hardware support (will restart voip).

```
diagnose sys sip-proxy ssl software
```

diagnose sys sip-proxy stats

SIP proxy statistics.

```
diagnose sys sip-proxy stats
```

diagnose sys sip-proxy stats call

SIP proxy call statistics summary.

```
diagnose sys sip-proxy stats call
```

diagnose sys sip-proxy stats clear

Clear SIP proxy activity statistics.

```
diagnose sys sip-proxy stats clear
```

diagnose sys sip-proxy stats ha

SIP proxy HA statistics summary.

```
diagnose sys sip-proxy stats ha
```

diagnose sys sip-proxy stats list

SIP proxy activity statistics.

```
diagnose sys sip-proxy stats list
```

diagnose sys sip-proxy stats mem

Memory usage.

```
diagnose sys sip-proxy stats mem
```

diagnose sys sip-proxy stats mem full

Memory usage details.

```
diagnose sys sip-proxy stats mem full
```

diagnose sys sip-proxy stats mem summary

Memory usage summary.

```
diagnose sys sip-proxy stats mem summary
```

diagnose sys sip-proxy stats proto

SIP proxy general protocol statistics summary.

```
diagnose sys sip-proxy stats proto
```

diagnose sys sip-proxy stats ssl-auth

SIP proxy SSL authentication statistics.

```
diagnose sys sip-proxy stats ssl-auth
```


diagnose sys sip-proxy stats udp

SIP proxy UDP statistics summary.

```
diagnose sys sip-proxy stats udp
```

diagnose sys sip-proxy valgrind

Valgrind analysis.

```
diagnose sys sip-proxy valgrind
```

diagnose sys sip-proxy valgrind disable

Force daemon to restart.

```
diagnose sys sip-proxy valgrind disable
```

diagnose sys sip-proxy valgrind enable

Force daemon to restart.

```
diagnose sys sip-proxy valgrind enable
```

diagnose sys sip-proxy valgrind log

Valgrind logs.

```
diagnose sys sip-proxy valgrind log
```

diagnose sys sip-proxy valgrind log clear

Clear logs.

```
diagnose sys sip-proxy valgrind log clear
```

diagnose sys sip-proxy valgrind log show

Show logs.

```
diagnose sys sip-proxy valgrind log show
```

diagnose sys sip-proxy valgrind memcheck

Force daemon to restart.

```
diagnose sys sip-proxy valgrind memcheck
```

diagnose sys sip-proxy valgrind memcheck_less

Force daemon to restart.

```
diagnose sys sip-proxy valgrind memcheck_less
```

diagnose sys sip-proxy valgrind status

Show valgrind status.

```
diagnose sys sip-proxy valgrind status
```

diagnose sys sip-proxy vdom

Diagnostics for VDOM in VoIP Daemon.

```
diagnose sys sip-proxy vdom
```

diagnose sys sip-proxy vdom list

List active VDOMs in VoIP daemon.

```
diagnose sys sip-proxy vdom list
```

diagnose sys sip-proxy vip

VIPs

```
diagnose sys sip-proxy vip
```

diagnose sys sip-proxy vip real-server

Real server VIP list.

```
diagnose sys sip-proxy vip real-server
```

diagnose sys smc-ntp

SMC NTP daemon command.

```
diagnose sys smc-ntp
```

diagnose sys smc-ntp status

List SMC NTP setting.

```
diagnose sys smc-ntp status
```

diagnose sys stp

STP diagnostics.

```
diagnose sys stp
```

diagnose sys stp bridge

Display STP details for one or more bridges.

```
diagnose sys stp bridge
```

diagnose sys stp bridge filter

Filter bridge details.

```
diagnose sys stp bridge filter
```

diagnose sys stp bridge filter bridge

Bridge name to filter by.

```
diagnose sys stp bridge filter bridge <name>
```

Parameter	Description	Type	Size
<name>	Bridge name to filter by.	string	

diagnose sys stp bridge filter clear

Clear current filter.

```
diagnose sys stp bridge filter clear
```

diagnose sys stp bridge filter list

Display current filter.

```
diagnose sys stp bridge filter list
```

diagnose sys stp bridge filter port

Port name to filter by.

```
diagnose sys stp bridge filter port <name>
```

Parameter	Description	Type	Size
<name>	Port name to filter by.	string	

diagnose sys stp bridge filter vd

Virtual domain name to filter by.

```
diagnose sys stp bridge filter vd <name>
```

Parameter	Description	Type	Size
<name>	Virtual domain name to filter by.	string	

diagnose sys stp bridge info

Display STP dtails for a bridge.

```
diagnose sys stp bridge info
```

diagnose sys stp info

Display STP information.

```
diagnose sys stp info
```

diagnose sys stp log

Debug log.

```
diagnose sys stp log
```

diagnose sys stp log filter

Filter for debug log.

```
diagnose sys stp log filter
```

diagnose sys stp log filter bridge

Bridge name to filter by.

```
diagnose sys stp log filter bridge <name>
```

Parameter	Description	Type	Size
<name>	Bridge name to filter by.	string	

diagnose sys stp log filter clear

Clear current filter.

```
diagnose sys stp log filter clear
```

diagnose sys stp log filter list

Display current filter.

```
diagnose sys stp log filter list
```

diagnose sys stp log filter port

Port name to filter by.

```
diagnose sys stp log filter port <name>
```

Parameter	Description	Type	Size
<name>	Port name to filter by.	string	

diagnose sys stp log filter vd

Virtual domain name to filter by.

```
diagnose sys stp log filter vd <name>
```

Parameter	Description	Type	Size
<name>	Virtual domain name to filter by.	string	

diagnose sys stp log terminal

Debug log terminals.

```
diagnose sys stp log terminal
```

diagnose sys stp log terminal stats

Debug log terminal statistics.

```
diagnose sys stp log terminal stats
```

diagnose sys stp restart

Restart the STP process

```
diagnose sys stp restart
```

diagnose sys stp time

Measure STP times.

```
diagnose sys stp time
```

diagnose sys stp time disable

Disable measuring STP times.

```
diagnose sys stp time disable
```

diagnose sys stp time enable

Enable measuring STP times.

```
diagnose sys stp time enable
```

diagnose sys stp valgrind

Valgrind analysis.

```
diagnose sys stp valgrind
```

diagnose sys stp valgrind disable

Force daemon to restart.

```
diagnose sys stp valgrind disable
```

diagnose sys stp valgrind enable

Force daemon to restart.

```
diagnose sys stp valgrind enable
```

diagnose sys stp valgrind log

Valgrind logs.

```
diagnose sys stp valgrind log
```

diagnose sys stp valgrind log clear

Clear logs.

```
diagnose sys stp valgrind log clear
```

diagnose sys stp valgrind log show

Show logs.

```
diagnose sys stp valgrind log show
```

diagnose sys stp valgrind memcheck

Force daemon to restart.

```
diagnose sys stp valgrind memcheck
```


diagnose sys stp valgrind memcheck_less

Force daemon to restart.

```
diagnose sys stp valgrind memcheck_less
```

diagnose sys stp valgrind status

Show valgrind status.

```
diagnose sys stp valgrind status
```

diagnose sys swnet

sw device

```
diagnose sys swnet
```

diagnose sys swnet list

list sw device

```
diagnose sys swnet list <name>
```

Parameter	Description	Type	Size
<name>	sw device name	string	

diagnose sys tcp-option

Enable/disable TCP option.

```
diagnose sys tcp-option
```

diagnose sys tcp-option disable

disable

```
diagnose sys tcp-option disable
```

diagnose sys tcp-option enable

enable

```
diagnose sys tcp-option enable
```

diagnose sys tcpsock

TCP sock info.

```
diagnose sys tcpsock
```

diagnose sys tcpsock6

TCP sock6 info.

```
diagnose sys tcpsock6
```

diagnose sys top

Show top processes information.

```
diagnose sys top <value> <Integer> <value>
```

Parameter	Description	Type	Size
<value>	Delay in seconds (default 5).	string	
<Integer>	Maximum lines to display (default 20). Show all the running processes if larger than its total number.	string	
<value>	Iterations to run (default unlimited).	string	

diagnose sys top-all

Show top threads information.

```
diagnose sys top-all <value> <Integer> <value>
```

Parameter	Description	Type	Size
<value>	Delay in seconds (default 5).	string	

Parameter	Description	Type	Size
<Integer>	Maximum lines to display (default 20). Show all the running threads if larger than its total number.	string	
<value>	Iterations to run (default unlimited).	string	

diagnose sys top-fd

Display processes with the most active file descriptors (default 5 processes).

```
diagnose sys top-fd [process-count]
```

Parameter	Description	Type	Size
[process-count]	Number of processes to include info for (default 5).	string	

diagnose sys top-fd detail

Display per-process active fd info along with details (default 5 processes, 50 fds).

```
diagnose sys top-fd detail [process-count] [fd-count]
```

Parameter	Description	Type	Size
[process-count]	Number of processes to include info for (default 5).	string	
[fd-count]	Number of FDs to include (per process, default 50).	string	

diagnose sys top-mem

Display processes with the most used memory (default 5 processes).

```
diagnose sys top-mem [process-count]
```

Parameter	Description	Type	Size
[process-count]	Number of processes to include info for (default 5).	string	

diagnose sys top-mem detail

Display per-process memory info along with details (default 5 processes).

```
diagnose sys top-mem detail [process-count]
```

Parameter	Description	Type	Size
[process-count]	Number of processes to include info for (default 5).	string	

diagnose sys top-sockmem

Display processes with the most used socket memory (default 5 processes).

```
diagnose sys top-sockmem [process-count]
```

Parameter	Description	Type	Size
[process-count]	Number of processes to include info for (default 5).	string	

diagnose sys traffic

Traffic information

```
diagnose sys traffic
```

diagnose sys traffic app-stats

Traffic application statistics.

```
diagnose sys traffic app-stats
```

diagnose sys traffic app-stats add

Add traffic application statistics entry.

```
diagnose sys traffic app-stats add <app_id>
```

Parameter	Description	Type	Size
<app_id>	A decimal number.	string	

diagnose sys traffic app-stats del

Delete traffic application statistics entry.

```
diagnose sys traffic app-stats del <app_id>
```

Parameter	Description	Type	Size
<app_id>	A decimal number.	string	

diagnose sys traffic app-stats hash-stats

Traffic application hash statistics.

```
diagnose sys traffic app-stats hash-stats
```

diagnose sys traffic app-stats list

List traffic application statistics entry.

```
diagnose sys traffic app-stats list <app_id>
```

Parameter	Description	Type	Size
<app_id>	A decimal number.	string	

diagnose sys traffic statistics

Traffic statistics

```
diagnose sys traffic statistics
```

diagnose sys traffic statistics clear

Clear traffic stats.

```
diagnose sys traffic statistics clear
```

diagnose sys traffic statistics show

Show traffic stats.

```
diagnose sys traffic statistics show
```

diagnose sys traffic-priority

Traffic Priority (DSCP/TOS).

```
diagnose sys traffic-priority
```

diagnose sys traffic-priority list

List traffic priority settings.

```
diagnose sys traffic-priority list
```

diagnose sys udp-reserved-port

Reserved UDP ports.

```
diagnose sys udp-reserved-port
```

diagnose sys udp-reserved-port test

Test if port has been reserved.

```
diagnose sys udp-reserved-port test <port> [vdom]
```

Parameter	Description	Type	Size
<port>	UDP port that will be tested	string	
[vdom]	VDOM name. If not specified, global reserved UDP ports will be used to test	string	

diagnose sys udpsock

UDP sock info.

```
diagnose sys udpsock
```

diagnose sys udpsock6

UDP sock6 info.

```
diagnose sys udpsock6
```

diagnose sys uuid

UUID debug.

```
diagnose sys uuid
```

diagnose sys uuid allow-manual-set

Allow to set UUID manually.

```
diagnose sys uuid allow-manual-set
```

diagnose sys uuid allow-manual-set disable

Disable.

```
diagnose sys uuid allow-manual-set disable
```

diagnose sys uuid allow-manual-set enable

Enable.

```
diagnose sys uuid allow-manual-set enable
```

diagnose sys uuid generate

Generate a UUID.

```
diagnose sys uuid generate
```

diagnose sys var-zone

var-zone information.

```
diagnose sys var-zone
```

diagnose sys var-zone show

Show var-zone data.

```
diagnose sys var-zone show
```

diagnose sys vd

Virtual domain management.

```
diagnose sys vd
```

diagnose sys vd add

Add a Virtual System.

```
diagnose sys vd add <vdname>
```

Parameter	Description	Type	Size
<vdname>	Virtual Domain Name.	string	

diagnose sys vd delete

Delete a Virtual System.

```
diagnose sys vd delete <vdname>
```

Parameter	Description	Type	Size
<vdname>	Virtual Domain Name.	string	

diagnose sys vd list

List Virtual Domains.

```
diagnose sys vd list
```

diagnose sys vd set

Set current VDOM.

```
diagnose sys vd set <vdname>
```

Parameter	Description	Type	Size
<vdname>	Virtual Domain Name.	string	

diagnose sys vd stats

Show VDOM statistics.

```
diagnose sys vd stats
```

diagnose sys vdom-property

VDOM property information.

```
diagnose sys vdom-property
```

diagnose sys vlan

vlan

```
diagnose sys vlan
```

diagnose sys vlan list

List VLAN.

```
diagnose sys vlan list
```

diagnose sys vxlan

VXLAN diagnostics.

```
diagnose sys vxlan
```

diagnose sys vxlan fdb

VXLAN forwarding DB.

```
diagnose sys vxlan fdb
```

diagnose sys vxlan fdb list

Display VXLAN forwarding DB.

```
diagnose sys vxlan fdb list <string>
```

Parameter	Description	Type	Size
<string>	Interface name.	string	

diagnose sys vxlan fdb stat

Display VXLAN forwarding DB statistics.

```
diagnose sys vxlan fdb stat <string>
```

Parameter	Description	Type	Size
<string>	Interface name.	string	

diagnose sys waninfo

Get WAN Information through FortiGuard.

```
diagnose sys waninfo
```

diagnose sys waninfo ipify

Get public IP through <https://api.ipify.org>.

```
diagnose sys waninfo ipify <ddd.ddd.ddd.ddd> or <interface name> <vdom>
```

Parameter	Description	Type	Size
<ddd.ddd.ddd.ddd> or <interface name>	Specify the source IPv4 address or interface name.	string	
<vdom>	Specify the Virtual Domain name.	string	

diagnose sys wccp

wccp

```
diagnose sys wccp
```

diagnose sys wccp delete

Delete one wccp service.

```
diagnose sys wccp delete <xxx>
```

Parameter	Description	Type	Size
<xxx>	Service ID.	string	

diagnose sys wccp flush

Flush wccp services.

```
diagnose sys wccp flush
```

diagnose sys wccp list

List wccp services.

```
diagnose sys wccp list
```

diagnose sys wireless

wireless

```
diagnose sys wireless
```

diagnose sys wireless apdd

ap daemon debug, such as ap scan

```
diagnose sys wireless apdd <-c|-h> <value1> <value2> <value3>
```

Parameter	Description	Type	Size
<-c -h>	Control plane or help.	string	
<value1>	Value of command.	string	
<value2>	Value of command.	string	
<value3>	Value of command.	string	

diagnose sys wireless iwconfig

iwconfig

```
diagnose sys wireless iwconfig <name> <cmd> <value1> <value2> <value3>
```

Parameter	Description	Type	Size
<name>	Interface name of wireless.	string	
<cmd>	Command for wireless.	string	
<value1>	Value of command.	string	
<value2>	Value of command.	string	
<value3>	Value of command.	string	

diagnose sys wireless iwpriv

iwpriv

```
diagnose sys wireless iwpriv <name> <cmd> <value1> <value2> <value3>
```

Parameter	Description	Type	Size
<name>	Interface name of wireless.	string	
<cmd>	Command for wireless.	string	
<value1>	Value of command.	string	
<value2>	Value of command.	string	
<value3>	Value of command.	string	

diagnose sys wireless listchan

list channels

```
diagnose sys wireless listchan
```

diagnose sys wireless stats

stats

```
diagnose sys wireless stats <name>
```

Parameter	Description	Type	Size
<name>	Interface name of wireless.	string	

diagnose test analytics-pdf-report

Retrieve analytics PDF report from FortiSandbox.

This topic includes the following commands:

- [diagnose test analytics-pdf-report list on page 3006](#)
- [diagnose test analytics-pdf-report max on page 3007](#)
- [diagnose test analytics-pdf-report request on page 3007](#)
- [diagnose test analytics-pdf-report status on page 3007](#)

diagnose test analytics-pdf-report list

List the PDF report requested.

```
diagnose test analytics-pdf-report list
```

diagnose test analytics-pdf-report max

Maximum number of PDF reports to cache in this FortiGate (<1> - <100>, default = 10).

```
diagnose test analytics-pdf-report max
```

diagnose test analytics-pdf-report request

Send the checksum of file to download.

```
diagnose test analytics-pdf-report request
```

diagnose test analytics-pdf-report status

Send the checksum of file to query status.

```
diagnose test analytics-pdf-report status
```

diagnose test analytics-report

Retrieve analytics report from FortiSandbox.

This topic includes the following commands:

- [diagnose test analytics-report checksum on page 3007](#)

diagnose test analytics-report checksum

Checksum of file to query.

```
diagnose test analytics-report checksum
```

diagnose test application

application

This topic includes the following commands:

- [diagnose test application acd on page 3009](#)
- [diagnose test application acsd on page 3010](#)
- [diagnose test application autod on page 3010](#)
- [diagnose test application awsd on page 3010](#)
- [diagnose test application azd on page 3010](#)
- [diagnose test application bfd on page 3011](#)
- [diagnose test application chlbd on page 3011](#)
- [diagnose test application confsyncd on page 3011](#)
- [diagnose test application confsynchbd on page 3011](#)
- [diagnose test application csfd on page 3012](#)
- [diagnose test application ddnsd on page 3012](#)
- [diagnose test application dhcp6c on page 3012](#)
- [diagnose test application dhcp6r on page 3012](#)
- [diagnose test application dhcprelay on page 3012](#)
- [diagnose test application dlpfingerprint on page 3013](#)
- [diagnose test application dlpfpcache on page 3013](#)
- [diagnose test application dnsproxy on page 3013](#)
- [diagnose test application dsd on page 3013](#)
- [diagnose test application eap_supp on page 3014](#)
- [diagnose test application fas on page 3014](#)
- [diagnose test application fcnacd on page 3014](#)
- [diagnose test application fds_notify on page 3014](#)
- [diagnose test application fgtlogd on page 3015](#)
- [diagnose test application fnbamd on page 3015](#)
- [diagnose test application forticldd on page 3015](#)
- [diagnose test application forticron on page 3015](#)
- [diagnose test application fsd on page 3016](#)
- [diagnose test application fsvrd on page 3016](#)
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- [diagnose test application l2tpcd on page 3020](#)
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- [diagnose test application locallogd on page 3020](#)
- [diagnose test application lted on page 3020](#)
- [diagnose test application miglogd on page 3021](#)
- [diagnose test application mrd on page 3021](#)
- [diagnose test application netxd on page 3021](#)
- [diagnose test application nntp on page 3021](#)
- [diagnose test application ocid on page 3022](#)
- [diagnose test application openstackd on page 3022](#)
- [diagnose test application ovrd on page 3022](#)
- [diagnose test application pop3 on page 3022](#)
- [diagnose test application pptpcd on page 3022](#)
- [diagnose test application quarantined on page 3023](#)
- [diagnose test application radius-das on page 3023](#)
- [diagnose test application radiusd on page 3023](#)
- [diagnose test application radvd on page 3023](#)
- [diagnose test application reportd on page 3024](#)
- [diagnose test application sdncd on page 3024](#)
- [diagnose test application sdnd on page 3024](#)
- [diagnose test application sepmd on page 3024](#)
- [diagnose test application sessionsync on page 3025](#)
- [diagnose test application sflowd on page 3025](#)
- [diagnose test application sfupgraded on page 3025](#)
- [diagnose test application smtp on page 3025](#)
- [diagnose test application snmpd on page 3026](#)
- [diagnose test application syslogd on page 3026](#)
- [diagnose test application updated on page 3026](#)
- [diagnose test application uploadd on page 3026](#)
- [diagnose test application urlfilter on page 3027](#)
- [diagnose test application vned on page 3027](#)
- [diagnose test application waagent on page 3027](#)
- [diagnose test application wad on page 3027](#)
- [diagnose test application wccpd on page 3028](#)
- [diagnose test application wf_monitor on page 3028](#)
- [diagnose test application wiredapd on page 3028](#)
- [diagnose test application zebos_launcher on page 3028](#)

diagnose test application acd

Aggregate Controller.


```
diagnose test application acd <Integer>
```

Parameter	Description	Type	Size
<Integer>	Test level.	string	

diagnose test application acsd

Ali Cloud Service daemon.

```
diagnose test application acsd <Integer>
```

Parameter	Description	Type	Size
<Integer>	Test level.	string	

diagnose test application autod

Automation daemon.

```
diagnose test application autod <Integer>
```

Parameter	Description	Type	Size
<Integer>	Test level.	string	

diagnose test application awsd

Amazon Web Services (AWS) daemon.

```
diagnose test application awsd <Integer>
```

Parameter	Description	Type	Size
<Integer>	Test level.	string	

diagnose test application azd

Microsoft Azure daemon.

```
diagnose test application azd <Integer>
```

Parameter	Description	Type	Size
<Integer>	Test level.	string	

diagnose test application bfd

BFD daemon.

```
diagnose test application bfd <Integer>
```

Parameter	Description	Type	Size
<Integer>	Test level.	string	

diagnose test application chlbd

Chassis loadbalance daemon.

```
diagnose test application chlbd <Integer>
```

Parameter	Description	Type	Size
<Integer>	Test level.	string	

diagnose test application confsyncd

Configuration-sync daemon.

```
diagnose test application confsyncd <Integer>
```

Parameter	Description	Type	Size
<Integer>	Test level.	string	

diagnose test application confsynchbd

Configuration-sync heartbeat daemon.

```
diagnose test application confsynchbd <Integer>
```

Parameter	Description	Type	Size
<Integer>	Test level.	string	

diagnose test application csfd

Security Fabric daemon.

```
diagnose test application csfd <Integer>
```

Parameter	Description	Type	Size
<Integer>	Test level.	string	

diagnose test application ddnsd

DDNS client daemon.

```
diagnose test application ddnsd <Integer>
```

Parameter	Description	Type	Size
<Integer>	Test level.	string	

diagnose test application dhcp6c

DHCP6 client daemon.

```
diagnose test application dhcp6c <Integer>
```

Parameter	Description	Type	Size
<Integer>	Test level.	string	

diagnose test application dhcp6r

DHCP6 relay daemon.

```
diagnose test application dhcp6r <Integer>
```

Parameter	Description	Type	Size
<Integer>	Test level.	string	

diagnose test application dhcprelay

DHCP relay daemon.

```
diagnose test application dhcprelay <Integer>
```

Parameter	Description	Type	Size
<Integer>	Test level.	string	

diagnose test application dlpfingerprint

DLP fingerprint daemon.

```
diagnose test application dlpfingerprint <Integer>
```

Parameter	Description	Type	Size
<Integer>	Test level.	string	

diagnose test application dlpfpcache

DLP fingerprint cache daemon.

```
diagnose test application dlpfpcache <Integer>
```

Parameter	Description	Type	Size
<Integer>	Test level.	string	

diagnose test application dnsproxy

DNS proxy.

```
diagnose test application dnsproxy <Integer> <Integer>
```

Parameter	Description	Type	Size
<Integer>	Test level.	string	
<Integer>	Daemon index.	string	

diagnose test application dsd

DLP Statistics daemon.

```
diagnose test application dsd <Integer>
```

Parameter	Description	Type	Size
<Integer>	Test level.	string	

diagnose test application eap_supp

EAP Supplicant daemon.

```
diagnose test application eap_supp <Integer>
```

Parameter	Description	Type	Size
<Integer>	Test level.	string	

diagnose test application fas

FortiToken Cloud daemon.

```
diagnose test application fas <Integer>
```

Parameter	Description	Type	Size
<Integer>	Test level.	string	

diagnose test application fcnacd

FortiClient NAC daemon.

```
diagnose test application fcnacd <Integer>
```

Parameter	Description	Type	Size
<Integer>	Test level.	string	

diagnose test application fds_notify

Update Notification daemon.

```
diagnose test application fds_notify <Integer>
```

Parameter	Description	Type	Size
<Integer>	Test level.	string	

diagnose test application fgtlogd

Fgtlog daemon.

```
diagnose test application fgtlogd <Integer> <Integer>
```

Parameter	Description	Type	Size
<Integer>	Test level.	string	
<Integer>	Daemon index.	string	

diagnose test application fnbamd

FortiGate non-blocking auth daemon.

```
diagnose test application fnbamd <Integer>
```

Parameter	Description	Type	Size
<Integer>	Test level.	string	

diagnose test application forticldd

FortiCloud daemon.

```
diagnose test application forticldd <Integer>
```

Parameter	Description	Type	Size
<Integer>	Test level.	string	

diagnose test application forticron

Forticron daemon.

```
diagnose test application forticron <Integer>
```

Parameter	Description	Type	Size
<Integer>	Test level.	string	

diagnose test application fsd

FortiExplorer daemon.

```
diagnose test application fsd <Integer>
```

Parameter	Description	Type	Size
<Integer>	Test level.	string	

diagnose test application fsvrd

FortiService daemon.

```
diagnose test application fsvrd <Integer>
```

Parameter	Description	Type	Size
<Integer>	Test level.	string	

diagnose test application gcpd

Google Cloud Platform (GCP) daemon.

```
diagnose test application gcpd <Integer>
```

Parameter	Description	Type	Size
<Integer>	Test level.	string	

diagnose test application harelay

HA relay daemon.

```
diagnose test application harelay <Integer>
```

Parameter	Description	Type	Size
<Integer>	Test level.	string	

diagnose test application hasync

HA sync daemon.

```
diagnose test application hasync <Integer>
```

Parameter	Description	Type	Size
<Integer>	Test level.	string	

diagnose test application hatalk

HA talk daemon.

```
diagnose test application hatalk <Integer>
```

Parameter	Description	Type	Size
<Integer>	Test level.	string	

diagnose test application ibmd

IBM Cloud Infrastructure daemon.

```
diagnose test application ibmd <Integer>
```

Parameter	Description	Type	Size
<Integer>	Test level.	string	

diagnose test application imap

IMAP proxy.

```
diagnose test application imap <Integer>
```

Parameter	Description	Type	Size
<Integer>	Test level.	string	

diagnose test application init

init process.

```
diagnose test application init <Integer>
```


Parameter	Description	Type	Size
<Integer>	Test level.	string	

diagnose test application iotd

IoT device info daemon.

```
diagnose test application iotd <Integer>
```

Parameter	Description	Type	Size
<Integer>	Test level.	string	

diagnose test application ipamd

IP Address Management daemon.

```
diagnose test application ipamd <Integer>
```

Parameter	Description	Type	Size
<Integer>	Test level.	string	

diagnose test application ipamsd

IPAM server daemon.

```
diagnose test application ipamsd <Integer>
```

Parameter	Description	Type	Size
<Integer>	Test level.	string	

diagnose test application ipldbd

IP load balancing daemon.

```
diagnose test application ipldbd <Integer>
```

Parameter	Description	Type	Size
<Integer>	Test level.	string	

diagnose test application ipmc_sensord

Ipmc sensor daemon.

```
diagnose test application ipmc_sensord <Integer>
```

Parameter	Description	Type	Size
<Integer>	Test level.	string	

diagnose test application ipsengine

IPS sensor.

```
diagnose test application ipsengine <Integer>
```

Parameter	Description	Type	Size
<Integer>	Test level.	string	

diagnose test application ipsmonitor

IPS monitor.

```
diagnose test application ipsmonitor <Integer>
```

Parameter	Description	Type	Size
<Integer>	Test level.	string	

diagnose test application ipsufd

IPS urlfilter daemon.

```
diagnose test application ipsufd <Integer>
```

Parameter	Description	Type	Size
<Integer>	Test level.	string	

diagnose test application kubed

Kubernetes daemon.

```
diagnose test application kubed <Integer>
```

Parameter	Description	Type	Size
<Integer>	Test level.	string	

diagnose test application l2tpcd

L2TP client daemon.

```
diagnose test application l2tpcd <Integer>
```

Parameter	Description	Type	Size
<Integer>	Test level.	string	

diagnose test application lnkmttd

Link monitor daemon.

```
diagnose test application lnkmttd <Integer>
```

Parameter	Description	Type	Size
<Integer>	Test level.	string	

diagnose test application locallogd

Locallogd daemon.

```
diagnose test application locallogd <Integer> <Integer>
```

Parameter	Description	Type	Size
<Integer>	Test level.	string	
<Integer>	Daemon index.	string	

diagnose test application lted

USB LTE daemon.

```
diagnose test application lted
```

diagnose test application miglogd

Miglog logging daemon.

```
diagnose test application miglogd <Integer> <Integer> <Integer>
```

Parameter	Description	Type	Size
<Integer>	Test level.	string	
<Integer>	Daemon index.	string	
<Integer>	test level 26: 255 for all miglogds test level 31: 0 -- summary only, 1 -- each log summary, 2 -- log details test level 35: Replay log interval(default=100)	string	

diagnose test application mrd

Mobile router daemon.

```
diagnose test application mrd <Integer>
```

Parameter	Description	Type	Size
<Integer>	Test level.	string	

diagnose test application netxd

VMWare NetX service manager daemon.

```
diagnose test application netxd <Integer>
```

Parameter	Description	Type	Size
<Integer>	Test level.	string	

diagnose test application nntp

NNTP proxy.

```
diagnose test application nntp <Integer>
```

Parameter	Description	Type	Size
<Integer>	Test level.	string	

diagnose test application ocid

Oracle Cloud Infrastructure.

```
diagnose test application ocid <Integer>
```

Parameter	Description	Type	Size
<Integer>	Test level.	string	

diagnose test application openstackd

OpenStack SDN connector daemon.

```
diagnose test application openstackd <Integer>
```

Parameter	Description	Type	Size
<Integer>	Test level.	string	

diagnose test application ovrd

Override daemon.

```
diagnose test application ovrd <Integer>
```

Parameter	Description	Type	Size
<Integer>	Test level.	string	

diagnose test application pop3

POP3 proxy.

```
diagnose test application pop3 <Integer>
```

Parameter	Description	Type	Size
<Integer>	Test level.	string	

diagnose test application pptpcd

PPTP client.

```
diagnose test application pptpcd <Integer>
```

Parameter	Description	Type	Size
<Integer>	Test level.	string	

diagnose test application quarantined

Quarantine daemon.

```
diagnose test application quarantined <Integer> <Integer>
```

Parameter	Description	Type	Size
<Integer>	Test level.	string	
<Integer>	Daemon index.	string	

diagnose test application radius-das

Radius-das daemon.

```
diagnose test application radius-das <Integer>
```

Parameter	Description	Type	Size
<Integer>	Test level.	string	

diagnose test application radiusd

RADIUS daemon.

```
diagnose test application radiusd <Integer>
```

Parameter	Description	Type	Size
<Integer>	Test level.	string	

diagnose test application radvd

radvd daemon.

```
diagnose test application radvd <Integer>
```

Parameter	Description	Type	Size
<Integer>	Test level.	string	

diagnose test application reportd

Report daemon.

```
diagnose test application reportd <Integer>
```

Parameter	Description	Type	Size
<Integer>	Test level.	string	

diagnose test application sdncd

SDN connector daemon for handling aci and nuage types.

```
diagnose test application sdncd <Integer>
```

Parameter	Description	Type	Size
<Integer>	Test level.	string	

diagnose test application sdnd

SDN connector daemon for handling aci-direct, alicloud, nutanix, sap, and vmware types.

```
diagnose test application sdnd <Integer>
```

Parameter	Description	Type	Size
<Integer>	Test level.	string	

diagnose test application sepmd

Symantec Endpoint Protection Manager daemon.

```
diagnose test application sepmd <Integer>
```

Parameter	Description	Type	Size
<Integer>	Test level.	string	

diagnose test application sessionsync

Session sync daemon.

```
diagnose test application sessionsync <Integer>
```

Parameter	Description	Type	Size
<Integer>	Test level.	string	

diagnose test application sflowd

sFlow daemon.

```
diagnose test application sflowd <Integer> <Integer>
```

Parameter	Description	Type	Size
<Integer>	Test level.	string	
<Integer>	Daemon index.	string	

diagnose test application sfupgraded

Security Fabric Upgrade daemon.

```
diagnose test application sfupgraded <Integer>
```

Parameter	Description	Type	Size
<Integer>	Test level.	string	

diagnose test application smtp

SMTP proxy.

```
diagnose test application smtp <Integer>
```

Parameter	Description	Type	Size
<Integer>	Test level.	string	

diagnose test application snmpd

SNMP daemon.

```
diagnose test application snmpd <Integer>
```

Parameter	Description	Type	Size
<Integer>	Test level.	string	

diagnose test application syslogd

Syslog daemon.

```
diagnose test application syslogd <Integer> <Integer>
```

Parameter	Description	Type	Size
<Integer>	Test level.	string	
<Integer>	Daemon index.	string	

diagnose test application updated

Update daemon.

```
diagnose test application updated <Integer>
```

Parameter	Description	Type	Size
<Integer>	Test level.	string	

diagnose test application uploadd

Upload daemon.

```
diagnose test application uploadd <Integer>
```

Parameter	Description	Type	Size
<Integer>	Test level.	string	

diagnose test application urlfilter

URL filter daemon.

```
diagnose test application urlfilter <Integer> <Integer>
```

Parameter	Description	Type	Size
<Integer>	Test level.	string	
<Integer>	Daemon index.	string	

diagnose test application vned

Virtual network enabler daemon.

```
diagnose test application vned <Integer>
```

Parameter	Description	Type	Size
<Integer>	Test level.	string	

diagnose test application waagent

waagent daemon.

```
diagnose test application waagent <Integer>
```

Parameter	Description	Type	Size
<Integer>	Test level.	string	

diagnose test application wad

WAD related processes.

```
diagnose test application wad <Integer>
```

Parameter	Description	Type	Size
<Integer>	Test level.	string	

diagnose test application wccpd

WCCP daemon.

```
diagnose test application wccpd <Integer>
```

Parameter	Description	Type	Size
<Integer>	Test level.	string	

diagnose test application wf_monitor

WF monitor.

```
diagnose test application wf_monitor <Integer>
```

Parameter	Description	Type	Size
<Integer>	Test level.	string	

diagnose test application wiredapd

Wiredapd daemon.

```
diagnose test application wiredapd <Integer>
```

Parameter	Description	Type	Size
<Integer>	Test level.	string	

diagnose test application zebos_launcher

ZEBOS Launcher daemon.

```
diagnose test application zebos_launcher <Integer>
```

Parameter	Description	Type	Size
<Integer>	Test level.	string	

diagnose test authserver

Test authentication server.

This topic includes the following commands:

- [diagnose test authserver cert on page 3029](#)
- [diagnose test authserver ext-idp on page 3029](#)
- [diagnose test authserver ldap on page 3029](#)
- [diagnose test authserver ldap-digest on page 3030](#)
- [diagnose test authserver ldap-direct on page 3030](#)
- [diagnose test authserver ldap-search on page 3030](#)
- [diagnose test authserver local on page 3030](#)
- [diagnose test authserver pop3 on page 3030](#)
- [diagnose test authserver radius on page 3030](#)
- [diagnose test authserver radius-direct on page 3031](#)
- [diagnose test authserver tacacs+ on page 3031](#)
- [diagnose test authserver tacacs+-direct on page 3031](#)
- [diagnose test authserver user on page 3031](#)

diagnose test authserver cert

Test certificate authentication.

```
diagnose test authserver cert
```

diagnose test authserver ext-idp

Test external identity provider.

```
diagnose test authserver ext-idp
```

diagnose test authserver ldap

Test LDAP server.

```
diagnose test authserver ldap
```

diagnose test authserver ldap-digest

Test LDAP HA1 password query.

```
diagnose test authserver ldap-digest
```

diagnose test authserver ldap-direct

Test LDAP server directly.

```
diagnose test authserver ldap-direct
```

diagnose test authserver ldap-search

Search LDAP server.

```
diagnose test authserver ldap-search
```

diagnose test authserver local

Test local user.

```
diagnose test authserver local
```

diagnose test authserver pop3

Test POP3 server.

```
diagnose test authserver pop3
```

diagnose test authserver radius

Test RADIUS server.

```
diagnose test authserver radius
```

diagnose test authserver radius-direct

Test RADIUS server directly.

```
diagnose test authserver radius-direct
```

diagnose test authserver tacacs+

test TACACS+ server.

```
diagnose test authserver tacacs+
```

diagnose test authserver tacacs+-direct

Test TACACS+ server directly.

```
diagnose test authserver tacacs+-direct
```

diagnose test authserver user

Test user with group/user ID/name(s).

```
diagnose test authserver user
```

diagnose test guest

Guest user add/delete/list.

This topic includes the following commands:

- [diagnose test guest add on page 3031](#)
- [diagnose test guest del on page 3032](#)
- [diagnose test guest list on page 3032](#)

diagnose test guest add

Add a guest user.

```
diagnose test guest add
```

diagnose test guest del

Delete guest users.

```
diagnose test guest del
```

diagnose test guest list

List guest users.

```
diagnose test guest list
```

diagnose test security

System security test.

This topic includes the following commands:

- [diagnose test security mount-invalid-flag on page 3032](#)
- [diagnose test security status on page 3032](#)

diagnose test security mount-invalid-flag

Test mounting with invalid flags.

```
diagnose test security mount-invalid-flag
```

diagnose test security status

Check system security enforcement status.

```
diagnose test security status
```

diagnose test update

Update daemon test.

This topic includes the following commands:

- [diagnose test update info on page 3033](#)

diagnose test update info

Display debug info.

```
diagnose test update info
```

diagnose tpm

TPM chip diagnostic feature

This topic includes the following commands:

- [diagnose tpm SHA-1 on page 3033](#)
- [diagnose tpm SHA-256 on page 3033](#)
- [diagnose tpm generate-random-number on page 3034](#)
- [diagnose tpm get-property on page 3034](#)
- [diagnose tpm get-var-property on page 3034](#)
- [diagnose tpm read-clock on page 3034](#)
- [diagnose tpm selftest on page 3034](#)
- [diagnose tpm shutdown-prepare on page 3034](#)

diagnose tpm SHA-1

HASH a sequence of num with SHA-1 algo

```
diagnose tpm SHA-1 <Byte Sequence>
```

Parameter	Description	Type	Size
<Byte Sequence>	Enter a byte sequence like '0F56FE...' for {0x0f, 0x56, 0xfe, ...}	string	

diagnose tpm SHA-256

HASH a sequence of num with SHA-256 algo

```
diagnose tpm SHA-256 <Byte Sequence>
```


Parameter	Description	Type	Size
<Byte Sequence>	Enter a byte sequence like '0F56FE...' for {0x0f, 0x56, 0xfe, ...}	string	

diagnose tpm generate-random-number

Generate a 4-byte random number

```
diagnose tpm generate-random-number
```

diagnose tpm get-property

Get TPM properties.

```
diagnose tpm get-property
```

diagnose tpm get-var-property

Get TPM var properties.

```
diagnose tpm get-var-property
```

diagnose tpm read-clock

Read TPM internal clock.

```
diagnose tpm read-clock
```

diagnose tpm selftest

Perform self tests.

```
diagnose tpm selftest
```

diagnose tpm shutdown-prepare

Prepare for TPM power cycle.

```
diagnose tpm shutdown-prepare
```

diagnose traffictest

Offloading traffic test using internal TX/RX

This topic includes the following commands:

- [diagnose traffictest client-intf on page 3035](#)
- [diagnose traffictest port on page 3035](#)
- [diagnose traffictest proto on page 3035](#)
- [diagnose traffictest proto 0 on page 3036](#)
- [diagnose traffictest proto 1 on page 3036](#)
- [diagnose traffictest run on page 3036](#)
- [diagnose traffictest server-intf on page 3037](#)
- [diagnose traffictest show on page 3037](#)

diagnose traffictest client-intf

Client interface.

```
diagnose traffictest client-intf <string>
```

Parameter	Description	Type	Size
<string>	Interface name	string	

diagnose traffictest port

TCP or UDP port number (1 - 65535).

```
diagnose traffictest port <port>
```

Parameter	Description	Type	Size
<port>	Port number	string	

diagnose traffictest proto

0 for TCP or 1 for UDP (default = 0).

```
diagnose traffictest proto
```

diagnose traffictest proto 0

TCP

```
diagnose traffictest proto 0
```

diagnose traffictest proto 1

UDP

```
diagnose traffictest proto 1
```

diagnose traffictest run

Start traffic.

```
diagnose traffictest run [-h/arg] [arg] [arg] [arg] [arg] [arg] [arg] [arg] [arg] [arg] [arg] [arg] [arg] [arg] [arg] [arg] [arg] [arg]
```

Parameter	Description	Type	Size
[-h/arg]	Help/Multi-Arguments for client	string	
[arg]	Multi-Arguments for client	string	
[arg]	Multi-Arguments for client	string	
[arg]	Multi-Arguments for client	string	
[arg]	Multi-Arguments for client	string	
[arg]	Multi-Arguments for client	string	
[arg]	Multi-Arguments for client	string	
[arg]	Multi-Arguments for client	string	
[arg]	Multi-Arguments for client	string	
[arg]	Multi-Arguments for client	string	
[arg]	Multi-Arguments for client	string	
[arg]	Multi-Arguments for client	string	
[arg]	Multi-Arguments for client	string	
[arg]	Multi-Arguments for client	string	

Parameter	Description	Type	Size
[arg]	Multi-Arguments for client	string	
[arg]	Multi-Arguments for client	string	
[arg]	Multi-Arguments for client	string	
[arg]	Multi-Arguments for client	string	
[arg]	Multi-Arguments for client	string	
[arg]	Multi-Arguments for client	string	
[arg]	Multi-Arguments for client	string	

diagnose traffictest server-intf

Server interface.

```
diagnose traffictest server-intf <string>
```

Parameter	Description	Type	Size
<string>	Interface name	string	

diagnose traffictest show

Traffic settings show

```
diagnose traffictest show
```

diagnose user

User

This topic includes the following commands:

- [diagnose user banned-ip on page 3038](#)
- [diagnose user banned-ip add on page 3038](#)
- [diagnose user banned-ip add src4 on page 3039](#)
- [diagnose user banned-ip add src6 on page 3039](#)
- [diagnose user banned-ip clear on page 3039](#)
- [diagnose user banned-ip delete on page 3039](#)
- [diagnose user banned-ip delete src4 on page 3040](#)
- [diagnose user banned-ip delete src6 on page 3040](#)

- [diagnose user banned-ip list on page 3040](#)
- [diagnose user banned-ip list all on page 3040](#)
- [diagnose user banned-ip list src4 on page 3040](#)
- [diagnose user banned-ip list src6 on page 3041](#)
- [diagnose user banned-ip stat on page 3041](#)
- [diagnose user banned-ip stress-test on page 3041](#)
- [diagnose user device on page 3041](#)
- [diagnose user device clear on page 3041](#)
- [diagnose user device del on page 3042](#)
- [diagnose user device filter on page 3042](#)
- [diagnose user device filter addr on page 3042](#)
- [diagnose user device filter clear on page 3042](#)
- [diagnose user device filter clear addr on page 3042](#)
- [diagnose user device filter clear generation on page 3043](#)
- [diagnose user device filter clear index on page 3043](#)
- [diagnose user device filter clear joined on page 3043](#)
- [diagnose user device filter clear vd on page 3043](#)
- [diagnose user device filter generation on page 3043](#)
- [diagnose user device filter joined on page 3043](#)
- [diagnose user device filter list on page 3044](#)
- [diagnose user device filter negate on page 3044](#)
- [diagnose user device filter negate addr on page 3044](#)
- [diagnose user device filter negate generation on page 3044](#)
- [diagnose user device filter negate index on page 3044](#)
- [diagnose user device filter negate joined on page 3044](#)
- [diagnose user device filter negate vd on page 3045](#)
- [diagnose user device filter vd on page 3045](#)
- [diagnose user device get on page 3045](#)
- [diagnose user device list on page 3045](#)
- [diagnose user device stats on page 3045](#)

diagnose user banned-ip

Banned IP addresses.

```
diagnose user banned-ip
```

diagnose user banned-ip add

Add banned IP address.

```
diagnose user banned-ip add
```

diagnose user banned-ip add src4

IPv4 source ban.

```
diagnose user banned-ip add src4 <src-ipv4> <expiry> <ban-source> <creation-timestamp>
```

Parameter	Description	Type	Size
<src-ipv4>	Source IPv4 address.	string	
<expiry>	Expiry in seconds.	string	
<ban-source>	Ban source (admin/dlp/ips/av/dos/app).	string	
<creation-timestamp>	Optional, unix timestamp (seconds) for the creation date	string	

diagnose user banned-ip add src6

IPv6 source ban.

```
diagnose user banned-ip add src6 <src-ipv6> <expiry> <ban-source> <creation-timestamp>
```

Parameter	Description	Type	Size
<src-ipv6>	Source IPv6 address.	string	
<expiry>	Expiry in seconds.	string	
<ban-source>	Ban source (admin/dlp/ips/av/dos/app).	string	
<creation-timestamp>	Optional, unix timestamp (seconds) for the creation date	string	

diagnose user banned-ip clear

Clear all banned IP addresses.

```
diagnose user banned-ip clear
```

diagnose user banned-ip delete

Delete banned IP address.

```
diagnose user banned-ip delete
```

diagnose user banned-ip delete src4

IPv4 source ban.

```
diagnose user banned-ip delete src4 <src-ipv4>
```

Parameter	Description	Type	Size
<src-ipv4>	Source IPv4 address.	string	

diagnose user banned-ip delete src6

IPv6 source ban.

```
diagnose user banned-ip delete src6 <src-ipv6>
```

Parameter	Description	Type	Size
<src-ipv6>	Source IPv6 address.	string	

diagnose user banned-ip list

List banned IPs.

```
diagnose user banned-ip list
```

diagnose user banned-ip list all

List all bans.

```
diagnose user banned-ip list all
```

diagnose user banned-ip list src4

IPv4 source ban.

```
diagnose user banned-ip list src4
```

diagnose user banned-ip list src6

IPv6 source ban.

```
diagnose user banned-ip list src6
```

diagnose user banned-ip stat

stat

```
diagnose user banned-ip stat
```

diagnose user banned-ip stress-test

IPv4 stress test for SRC bans.

```
diagnose user banned-ip stress-test <ipv4> <expiry> <ban-counts> <ban-source>
```

Parameter	Description	Type	Size
<ipv4>	Starting IPv4 address.	string	
<expiry>	Expiry in seconds.	string	
<ban-counts>	Number of banned IP addresses.	string	
<ban-source>	Ban source (admin/dlp/ips/av/dos/app).	string	

diagnose user device

User devices.

```
diagnose user device
```

diagnose user device clear

Clear discovered hosts.

```
diagnose user device clear
```


diagnose user device del

Remove a specific host.

```
diagnose user device del <mac>
```

Parameter	Description	Type	Size
<mac>	MAC address (xx:xx:xx:xx:xx:xx).	string	

diagnose user device filter

Filter for various src-vis diagnostics.

```
diagnose user device filter
```

diagnose user device filter addr

IPv4 address range.

```
diagnose user device filter addr <from> <to>
```

Parameter	Description	Type	Size
<from>	IPv4 address range.	string	
<to>	IPv4 address range.	string	

diagnose user device filter clear

Clear the filter or parameter.

```
diagnose user device filter clear
```

diagnose user device filter clear addr

Clear parameter.

```
diagnose user device filter clear addr
```

diagnose user device filter clear generation

Clear parameter.

```
diagnose user device filter clear generation
```

diagnose user device filter clear index

Clear parameter.

```
diagnose user device filter clear index
```

diagnose user device filter clear joined

Clear parameter.

```
diagnose user device filter clear joined
```

diagnose user device filter clear vd

Clear parameter.

```
diagnose user device filter clear vd
```

diagnose user device filter generation

Device generation.

```
diagnose user device filter generation <from> <to>
```

Parameter	Description	Type	Size
<from>	<from>	string	
<to>	<to>	string	

diagnose user device filter joined

Device is joined to another.

```
diagnose user device filter joined <value>
```

Parameter	Description	Type	Size
<value>	<value>	string	

diagnose user device filter list

Display the current filter.

```
diagnose user device filter list
```

diagnose user device filter negate

Negate the specified filter parameter.

```
diagnose user device filter negate
```

diagnose user device filter negate addr

Negate parameter.

```
diagnose user device filter negate addr
```

diagnose user device filter negate generation

Negate parameter.

```
diagnose user device filter negate generation
```

diagnose user device filter negate index

Negate parameter.

```
diagnose user device filter negate index
```

diagnose user device filter negate joined

Negate parameter.

```
diagnose user device filter negate joined
```

diagnose user device filter negate vd

Negate parameter.

```
diagnose user device filter negate vd
```

diagnose user device filter vd

Index of virtual domain.

```
diagnose user device filter vd <index>
```

Parameter	Description	Type	Size
<index>	Index of virtual domain.	string	

diagnose user device get

List a specific host.

```
diagnose user device get <mac>
```

Parameter	Description	Type	Size
<mac>	MAC address (xx:xx:xx:xx:xx:xx).	string	

diagnose user device list

List known hosts.

```
diagnose user device list
```

diagnose user device stats

User device stats.

```
diagnose user device stats
```

diagnose user-device-store

User device store diagnostics.

This topic includes the following commands:

- [diagnose user-device-store device on page 3047](#)
- [diagnose user-device-store device disk on page 3047](#)
- [diagnose user-device-store device disk clear on page 3047](#)
- [diagnose user-device-store device disk list on page 3047](#)
- [diagnose user-device-store device disk query on page 3048](#)
- [diagnose user-device-store device memory on page 3048](#)
- [diagnose user-device-store device memory list on page 3048](#)
- [diagnose user-device-store device memory ot-purdue-set on page 3048](#)
- [diagnose user-device-store device memory query on page 3048](#)
- [diagnose user-device-store device memory uid on page 3048](#)
- [diagnose user-device-store device memory uid add on page 3049](#)
- [diagnose user-device-store device memory uid delete on page 3049](#)
- [diagnose user-device-store device memory uid update on page 3049](#)
- [diagnose user-device-store device memory vulnerability-fetch on page 3049](#)
- [diagnose user-device-store iot-vuln on page 3049](#)
- [diagnose user-device-store iot-vuln list on page 3049](#)
- [diagnose user-device-store iot-vuln query on page 3050](#)
- [diagnose user-device-store unified on page 3050](#)
- [diagnose user-device-store unified clear on page 3050](#)
- [diagnose user-device-store unified debug on page 3050](#)
- [diagnose user-device-store unified debug disable on page 3050](#)
- [diagnose user-device-store unified debug enable on page 3050](#)
- [diagnose user-device-store unified delete on page 3051](#)
- [diagnose user-device-store unified device-memory-query on page 3051](#)
- [diagnose user-device-store unified device-memory-query filters-and on page 3051](#)
- [diagnose user-device-store unified device-memory-query filters-or on page 3051](#)
- [diagnose user-device-store unified device-query on page 3051](#)
- [diagnose user-device-store unified device-query filters-and on page 3051](#)
- [diagnose user-device-store unified device-query filters-or on page 3052](#)
- [diagnose user-device-store unified dump on page 3052](#)
- [diagnose user-device-store unified list on page 3052](#)
- [diagnose user-device-store unified re-query on page 3052](#)
- [diagnose user-device-store unified stats on page 3052](#)
- [diagnose user-device-store unified user-memory-query on page 3052](#)
- [diagnose user-device-store unified user-memory-query filters-and on page 3053](#)
- [diagnose user-device-store unified user-memory-query filters-or on page 3053](#)
- [diagnose user-device-store unified user-query on page 3053](#)

- [diagnose user-device-store unified user-query filters-and on page 3053](#)
- [diagnose user-device-store unified user-query filters-or on page 3053](#)
- [diagnose user-device-store user on page 3054](#)
- [diagnose user-device-store user disk on page 3054](#)
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- [diagnose user-device-store user disk list on page 3054](#)
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- [diagnose user-device-store user memory list on page 3055](#)
- [diagnose user-device-store user memory query on page 3055](#)
- [diagnose user-device-store user-count on page 3055](#)
- [diagnose user-device-store user-count list on page 3055](#)
- [diagnose user-device-store user-count query on page 3055](#)
- [diagnose user-device-store user-stats on page 3055](#)
- [diagnose user-device-store user-stats query on page 3056](#)

diagnose user-device-store device

Device sessions info.

```
diagnose user-device-store device
```

diagnose user-device-store device disk

On disk session info.

```
diagnose user-device-store device disk
```

diagnose user-device-store device disk clear

Clear all records.

```
diagnose user-device-store device disk clear
```

diagnose user-device-store device disk list

List all records.

```
diagnose user-device-store device disk list
```

diagnose user-device-store device disk query

Query by SQL WHERE clause.

```
diagnose user-device-store device disk query
```

diagnose user-device-store device memory

In memory sessions info.

```
diagnose user-device-store device memory
```

diagnose user-device-store device memory list

List all records.

```
diagnose user-device-store device memory list
```

diagnose user-device-store device memory ot-purdue-set

OT purdue level set.

```
diagnose user-device-store device memory ot-purdue-set
```

diagnose user-device-store device memory query

Query by <type> <op> <value1|value2|...

```
diagnose user-device-store device memory query
```

diagnose user-device-store device memory uid

In memory devices info with UID present.

```
diagnose user-device-store device memory uid
```

diagnose user-device-store device memory uid add

Test add UID devices by <count>.

```
diagnose user-device-store device memory uid add
```

diagnose user-device-store device memory uid delete

Test delete UID device by <uid> <mac> <ip>.

```
diagnose user-device-store device memory uid delete
```

diagnose user-device-store device memory uid update

Test update UID device by <uid> <tags-value-delimited-by-;>.

```
diagnose user-device-store device memory uid update
```

diagnose user-device-store device memory vulnerability-fetch

Vulnerability info fetch.

```
diagnose user-device-store device memory vulnerability-fetch
```

diagnose user-device-store iot-vuln

IoT Vulnerabilities.

```
diagnose user-device-store iot-vuln
```

diagnose user-device-store iot-vuln list

List all records.

```
diagnose user-device-store iot-vuln list
```


diagnose user-device-store iot-vuln query

Query by <type> <op> <value1|value2|...

```
diagnose user-device-store iot-vuln query
```

diagnose user-device-store unified

Unified queries info.

```
diagnose user-device-store unified
```

diagnose user-device-store unified clear

Delete all unified queries.

```
diagnose user-device-store unified clear
```

diagnose user-device-store unified debug

Enable/Disable debug logs for unified queries.

```
diagnose user-device-store unified debug
```

diagnose user-device-store unified debug disable

Disable debug logs for unified queries.

```
diagnose user-device-store unified debug disable
```

diagnose user-device-store unified debug enable

Enable debug logs for unified queries.

```
diagnose user-device-store unified debug enable
```

diagnose user-device-store unified delete

Delete unified query by <query-id>.

```
diagnose user-device-store unified delete
```

diagnose user-device-store unified device-memory-query

Get Device records along with associated User records from memory.

```
diagnose user-device-store unified device-memory-query
```

diagnose user-device-store unified device-memory-query filters-and

Query by <iteration-count> <type1;op1;values1-delimited-by-|;type2;op2;values2-delimited-by-|...>

```
diagnose user-device-store unified device-memory-query filters-and
```

diagnose user-device-store unified device-memory-query filters-or

Query by <iteration-count> <type1;op1;values1-delimited-by-|;type2;op2;values2-delimited-by-|...>

```
diagnose user-device-store unified device-memory-query filters-or
```

diagnose user-device-store unified device-query

Get Device records along with associated User records from memory and disk.

```
diagnose user-device-store unified device-query
```

diagnose user-device-store unified device-query filters-and

Query by <iteration-count> <start-time> <end-time> <type1;op1;values1-delimited-by-|;type2;op2;values2-delimited-by-|...>

```
diagnose user-device-store unified device-query filters-and
```

diagnose user-device-store unified device-query filters-or

Query by <iteration-count> <start-time> <end-time> <type1;op1;values1-delimited-by-|;type2;op2;values2-delimited-by-|...>

```
diagnose user-device-store unified device-query filters-or
```

diagnose user-device-store unified dump

Dump unified query stats by <query-id>.

```
diagnose user-device-store unified dump
```

diagnose user-device-store unified list

List unified queries.

```
diagnose user-device-store unified list
```

diagnose user-device-store unified re-query

Retrieve Query by <query-id> <iteration-start> <iteration-count>

```
diagnose user-device-store unified re-query
```

diagnose user-device-store unified stats

Get Stats for unified queries.

```
diagnose user-device-store unified stats
```

diagnose user-device-store unified user-memory-query

Get User records along with associated Device records from memory.

```
diagnose user-device-store unified user-memory-query
```

diagnose user-device-store unified user-memory-query filters-and

Query by <iteration-count> <type1;op1;values1-delimited-by-|;type2;op2;values2-delimited-by-|...>

```
diagnose user-device-store unified user-memory-query filters-and
```

diagnose user-device-store unified user-memory-query filters-or

Query by <iteration-count> <type1;op1;values1-delimited-by-|;type2;op2;values2-delimited-by-|...>

```
diagnose user-device-store unified user-memory-query filters-or
```

diagnose user-device-store unified user-query

Get User records along with associated Device records from memory and disk.

```
diagnose user-device-store unified user-query
```

diagnose user-device-store unified user-query filters-and

Query by <iteration-count> <start-time> <end-time> <type1;op1;values1-delimited-by-|;type2;op2;values2-delimited-by-|...>

```
diagnose user-device-store unified user-query filters-and
```

diagnose user-device-store unified user-query filters-or

Query by <iteration-count> <start-time> <end-time> <type1;op1;values1-delimited-by-|;type2;op2;values2-delimited-by-|...>

```
diagnose user-device-store unified user-query filters-or
```

diagnose user-device-store user

User sessions info.

```
diagnose user-device-store user
```

diagnose user-device-store user disk

On disk session info.

```
diagnose user-device-store user disk
```

diagnose user-device-store user disk clear

Clear all records.

```
diagnose user-device-store user disk clear
```

diagnose user-device-store user disk list

List all records.

```
diagnose user-device-store user disk list
```

diagnose user-device-store user disk query

Query by SQL WHERE clause.

```
diagnose user-device-store user disk query
```

diagnose user-device-store user memory

In memory sessions info.

```
diagnose user-device-store user memory
```

diagnose user-device-store user memory list

List all records.

```
diagnose user-device-store user memory list
```

diagnose user-device-store user memory query

Query by <type> <op> <value1|value2|...>.

```
diagnose user-device-store user memory query
```

diagnose user-device-store user-count

User count info.

```
diagnose user-device-store user-count
```

diagnose user-device-store user-count list

List all group user count records.

```
diagnose user-device-store user-count list
```

diagnose user-device-store user-count query

Query by groupname <value>.

```
diagnose user-device-store user-count query
```

diagnose user-device-store user-stats

User stats.

```
diagnose user-device-store user-stats
```

diagnose user-device-store user-stats query

Query by <yyyy-mm-dd> <time-range days>

```
diagnose user-device-store user-stats query
```

diagnose vendor-mac

Vendor MAC Database.

This topic includes the following commands:

- [diagnose vendor-mac id on page 3056](#)
- [diagnose vendor-mac id-summary on page 3056](#)
- [diagnose vendor-mac info on page 3056](#)
- [diagnose vendor-mac match on page 3057](#)

diagnose vendor-mac id

Vendor MAC ID.

```
diagnose vendor-mac id <id>
```

Parameter	Description	Type	Size
<id>	Vendor MAC ID (a nonzero integer).	string	

diagnose vendor-mac id-summary

Vendor MAC ID summary.

```
diagnose vendor-mac id-summary <id>
```

Parameter	Description	Type	Size
<id>	Vendor MAC ID (a nonzero integer).	string	

diagnose vendor-mac info

MAC Address information.

```
diagnose vendor-mac info <xx:xx:xx:xx:xx:xx>
```

Parameter	Description	Type	Size
<xx:xx:xx:xx:xx:xx>	Service MAC address.	string	

diagnose vendor-mac match

Find Vendor MAC for a specific MAC address and mask.

```
diagnose vendor-mac match <xx:xx:xx:xx:xx:xx> <mask>
```

Parameter	Description	Type	Size
<xx:xx:xx:xx:xx:xx>	MAC address.	string	
<mask>	mask (0 - 48).	string	

diagnose vmware

VMWare platform diagnose commands.

This topic includes the following commands:

- [diagnose vmware ovfenv on page 3057](#)

diagnose vmware ovfenv

Display OVF environment information.

```
diagnose vmware ovfenv
```

diagnose vpn ike

IKE

This topic includes the following commands:

- [diagnose vpn ike config on page 3060](#)
- [diagnose vpn ike config list on page 3060](#)
- [diagnose vpn ike config list summary on page 3061](#)
- [diagnose vpn ike counts on page 3061](#)

- [diagnose vpn ike crypto on page 3061](#)
- [diagnose vpn ike crypto stats on page 3061](#)
- [diagnose vpn ike errors on page 3061](#)
- [diagnose vpn ike filter on page 3061](#)
- [diagnose vpn ike filter clear on page 3062](#)
- [diagnose vpn ike filter dst-addr4 on page 3062](#)
- [diagnose vpn ike filter dst-addr6 on page 3062](#)
- [diagnose vpn ike filter dst-port on page 3062](#)
- [diagnose vpn ike filter interface on page 3063](#)
- [diagnose vpn ike filter list on page 3063](#)
- [diagnose vpn ike filter name on page 3063](#)
- [diagnose vpn ike filter negate on page 3063](#)
- [diagnose vpn ike filter negate dst-addr4 on page 3063](#)
- [diagnose vpn ike filter negate dst-addr6 on page 3064](#)
- [diagnose vpn ike filter negate dst-port on page 3064](#)
- [diagnose vpn ike filter negate interface on page 3064](#)
- [diagnose vpn ike filter negate name on page 3064](#)
- [diagnose vpn ike filter negate src-addr4 on page 3064](#)
- [diagnose vpn ike filter negate src-addr6 on page 3064](#)
- [diagnose vpn ike filter negate src-port on page 3065](#)
- [diagnose vpn ike filter negate vd on page 3065](#)
- [diagnose vpn ike filter src-addr4 on page 3065](#)
- [diagnose vpn ike filter src-addr6 on page 3065](#)
- [diagnose vpn ike filter src-port on page 3065](#)
- [diagnose vpn ike filter vd on page 3066](#)
- [diagnose vpn ike fragmentation-override on page 3066](#)
- [diagnose vpn ike gateway on page 3066](#)
- [diagnose vpn ike gateway clear on page 3066](#)
- [diagnose vpn ike gateway clear name on page 3067](#)
- [diagnose vpn ike gateway flush on page 3067](#)
- [diagnose vpn ike gateway flush name on page 3067](#)
- [diagnose vpn ike gateway list on page 3067](#)
- [diagnose vpn ike gateway list name on page 3067](#)
- [diagnose vpn ike ikev2-cookie-enforce on page 3068](#)
- [diagnose vpn ike log on page 3068](#)
- [diagnose vpn ike log filter on page 3068](#)
- [diagnose vpn ike log filter clear on page 3068](#)
- [diagnose vpn ike log filter dst-addr4 on page 3068](#)
- [diagnose vpn ike log filter dst-addr6 on page 3069](#)
- [diagnose vpn ike log filter dst-port on page 3069](#)
- [diagnose vpn ike log filter interface on page 3069](#)
- [diagnose vpn ike log filter list on page 3069](#)
- [diagnose vpn ike log filter mdst-addr4 on page 3069](#)

- [diagnose vpn ike log filter mdst-addr6 on page 3070](#)
- [diagnose vpn ike log filter msrc-addr4 on page 3071](#)
- [diagnose vpn ike log filter msrc-addr6 on page 3071](#)
- [diagnose vpn ike log filter name on page 3072](#)
- [diagnose vpn ike log filter negate on page 3072](#)
- [diagnose vpn ike log filter negate dst-addr4 on page 3072](#)
- [diagnose vpn ike log filter negate dst-addr6 on page 3072](#)
- [diagnose vpn ike log filter negate dst-port on page 3072](#)
- [diagnose vpn ike log filter negate interface on page 3072](#)
- [diagnose vpn ike log filter negate mdst-addr4 on page 3073](#)
- [diagnose vpn ike log filter negate mdst-addr6 on page 3073](#)
- [diagnose vpn ike log filter negate msrc-addr4 on page 3073](#)
- [diagnose vpn ike log filter negate msrc-addr6 on page 3073](#)
- [diagnose vpn ike log filter negate name on page 3073](#)
- [diagnose vpn ike log filter negate src-addr4 on page 3073](#)
- [diagnose vpn ike log filter negate src-addr6 on page 3074](#)
- [diagnose vpn ike log filter negate src-port on page 3074](#)
- [diagnose vpn ike log filter negate vd on page 3074](#)
- [diagnose vpn ike log filter src-addr4 on page 3074](#)
- [diagnose vpn ike log filter src-addr6 on page 3074](#)
- [diagnose vpn ike log filter src-port on page 3075](#)
- [diagnose vpn ike log filter vd on page 3075](#)
- [diagnose vpn ike log terminal on page 3075](#)
- [diagnose vpn ike log terminal clear on page 3075](#)
- [diagnose vpn ike log terminal reset on page 3076](#)
- [diagnose vpn ike log terminal stats on page 3076](#)
- [diagnose vpn ike log-filter on page 3076](#)
- [diagnose vpn ike log-filter clear on page 3076](#)
- [diagnose vpn ike log-filter dst-addr4 on page 3076](#)
- [diagnose vpn ike log-filter dst-addr6 on page 3076](#)
- [diagnose vpn ike log-filter dst-port on page 3077](#)
- [diagnose vpn ike log-filter interface on page 3077](#)
- [diagnose vpn ike log-filter list on page 3077](#)
- [diagnose vpn ike log-filter mdst-addr4 on page 3077](#)
- [diagnose vpn ike log-filter mdst-addr6 on page 3078](#)
- [diagnose vpn ike log-filter msrc-addr4 on page 3078](#)
- [diagnose vpn ike log-filter msrc-addr6 on page 3079](#)
- [diagnose vpn ike log-filter name on page 3080](#)
- [diagnose vpn ike log-filter negate on page 3080](#)
- [diagnose vpn ike log-filter negate dst-addr4 on page 3080](#)
- [diagnose vpn ike log-filter negate dst-addr6 on page 3080](#)
- [diagnose vpn ike log-filter negate dst-port on page 3080](#)
- [diagnose vpn ike log-filter negate interface on page 3080](#)

- [diagnose vpn ike log-filter negate mdst-addr4 on page 3081](#)
- [diagnose vpn ike log-filter negate mdst-addr6 on page 3081](#)
- [diagnose vpn ike log-filter negate msrc-addr4 on page 3081](#)
- [diagnose vpn ike log-filter negate msrc-addr6 on page 3081](#)
- [diagnose vpn ike log-filter negate name on page 3081](#)
- [diagnose vpn ike log-filter negate src-addr4 on page 3081](#)
- [diagnose vpn ike log-filter negate src-addr6 on page 3082](#)
- [diagnose vpn ike log-filter negate src-port on page 3082](#)
- [diagnose vpn ike log-filter negate vd on page 3082](#)
- [diagnose vpn ike log-filter src-addr4 on page 3082](#)
- [diagnose vpn ike log-filter src-addr6 on page 3082](#)
- [diagnose vpn ike log-filter src-port on page 3083](#)
- [diagnose vpn ike log-filter vd on page 3083](#)
- [diagnose vpn ike restart on page 3083](#)
- [diagnose vpn ike routes on page 3083](#)
- [diagnose vpn ike routes list on page 3084](#)
- [diagnose vpn ike stats on page 3084](#)
- [diagnose vpn ike status on page 3084](#)
- [diagnose vpn ike status detailed on page 3084](#)
- [diagnose vpn ike status summary on page 3084](#)
- [diagnose vpn ike valgrind on page 3084](#)
- [diagnose vpn ike valgrind disable on page 3085](#)
- [diagnose vpn ike valgrind enable on page 3085](#)
- [diagnose vpn ike valgrind log on page 3085](#)
- [diagnose vpn ike valgrind log clear on page 3085](#)
- [diagnose vpn ike valgrind log show on page 3085](#)
- [diagnose vpn ike valgrind memcheck on page 3085](#)
- [diagnose vpn ike valgrind memcheck_less on page 3086](#)
- [diagnose vpn ike valgrind status on page 3086](#)

diagnose vpn ike config

IKE configuration.

```
diagnose vpn ike config
```

diagnose vpn ike config list

List IKE configuration.

```
diagnose vpn ike config list
```

diagnose vpn ike config list summary

List IKE configuration summary.

```
diagnose vpn ike config list summary
```

diagnose vpn ike counts

IKE object counts.

```
diagnose vpn ike counts
```

diagnose vpn ike crypto

IKE crypto diagnostics.

```
diagnose vpn ike crypto
```

diagnose vpn ike crypto stats

IKE crypto statistics.

```
diagnose vpn ike crypto stats
```

diagnose vpn ike errors

IKE statistics.

```
diagnose vpn ike errors
```

diagnose vpn ike filter

IKE filter.

```
diagnose vpn ike filter
```

diagnose vpn ike filter clear

Erase the current filter.

```
diagnose vpn ike filter clear
```

diagnose vpn ike filter dst-addr4

IPv4 destination address range to filter by.

```
diagnose vpn ike filter dst-addr4 <ipv4-address> <ipv4-address>
```

Parameter	Description	Type	Size
<ipv4-address>	Destination IPv4 address (from).	string	
<ipv4-address>	Destination IPv4 address (to).	string	

diagnose vpn ike filter dst-addr6

IPv6 destination address range to filter by.

```
diagnose vpn ike filter dst-addr6 <ipv6-address> <ipv6-address>
```

Parameter	Description	Type	Size
<ipv6-address>	Destination IPv6 address (from).	string	
<ipv6-address>	Destination IPv6 address (to).	string	

diagnose vpn ike filter dst-port

Destination port range to filter by.

```
diagnose vpn ike filter dst-port <port>
```

Parameter	Description	Type	Size
<port>	Destination port.	string	

diagnose vpn ike filter interface

Interface that IKE connection is negotiated over.

```
diagnose vpn ike filter interface <index>
```

Parameter	Description	Type	Size
<index>	Interface index, 0 matches all.	string	

diagnose vpn ike filter list

Display the current filter.

```
diagnose vpn ike filter list
```

diagnose vpn ike filter name

Phase1 name to filter by.

```
diagnose vpn ike filter name <name>
```

Parameter	Description	Type	Size
<name>	Name to filter by.	string	

diagnose vpn ike filter negate

Negate the specified filter parameter.

```
diagnose vpn ike filter negate
```

diagnose vpn ike filter negate dst-addr4

Negate IPv4 destination address.

```
diagnose vpn ike filter negate dst-addr4
```

diagnose vpn ike filter negate dst-addr6

Negate IPv6 destination address.

```
diagnose vpn ike filter negate dst-addr6
```

diagnose vpn ike filter negate dst-port

Negate destination port.

```
diagnose vpn ike filter negate dst-port
```

diagnose vpn ike filter negate interface

Negate interface.

```
diagnose vpn ike filter negate interface
```

diagnose vpn ike filter negate name

Negate name.

```
diagnose vpn ike filter negate name
```

diagnose vpn ike filter negate src-addr4

Negate IPv4 source address.

```
diagnose vpn ike filter negate src-addr4
```

diagnose vpn ike filter negate src-addr6

Negate IPv6 source address.

```
diagnose vpn ike filter negate src-addr6
```

diagnose vpn ike filter negate src-port

Negate source port.

```
diagnose vpn ike filter negate src-port
```

diagnose vpn ike filter negate vd

Negate virtual domain.

```
diagnose vpn ike filter negate vd
```

diagnose vpn ike filter src-addr4

IPv4 source address range to filter by.

```
diagnose vpn ike filter src-addr4 <ipv4-address> <ipv4-address>
```

Parameter	Description	Type	Size
<ipv4-address>	Source IPv4 address (from).	string	
<ipv4-address>	Source IPv4 address (to).	string	

diagnose vpn ike filter src-addr6

IPv6 source address range to filter by.

```
diagnose vpn ike filter src-addr6 <ipv6-address> <ipv4-address>
```

Parameter	Description	Type	Size
<ipv6-address>	Source IPv6 address (from).	string	
<ipv4-address>	Source IPv6 address (to).	string	

diagnose vpn ike filter src-port

Source port range to filter by.


```
diagnose vpn ike filter src-port <port> <port>
```

Parameter	Description	Type	Size
<port>	Source port (from).	string	
<port>	Source port (to).	string	

diagnose vpn ike filter vd

Index of virtual domain. -1 matches all.

```
diagnose vpn ike filter vd <index>
```

Parameter	Description	Type	Size
<index>	Index of virtual domain. -1 matches all.	string	

diagnose vpn ike fragmentation-override

Override IKE fragmentation.

```
diagnose vpn ike fragmentation-override <flags>
```

Parameter	Description	Type	Size
<flags>	Bitmask of fragmentation override flags.	string	

diagnose vpn ike gateway

IKE gateways.

```
diagnose vpn ike gateway
```

diagnose vpn ike gateway clear

Clear IKE gateways.

```
diagnose vpn ike gateway clear
```

diagnose vpn ike gateway clear name

Clear gateway by name.

```
diagnose vpn ike gateway clear name <name>
```

Parameter	Description	Type	Size
<name>	Name of IKE gateway to clear.	string	

diagnose vpn ike gateway flush

Synonym for clear.

```
diagnose vpn ike gateway flush
```

diagnose vpn ike gateway flush name

Clear gateway by name.

```
diagnose vpn ike gateway flush name <name>
```

Parameter	Description	Type	Size
<name>	Name of IKE gateway to clear.	string	

diagnose vpn ike gateway list

list

```
diagnose vpn ike gateway list
```

diagnose vpn ike gateway list name

List gateway by name.

```
diagnose vpn ike gateway list name <name>
```

Parameter	Description	Type	Size
<name>	Name of IKE gateway to list.	string	

diagnose vpn ike ikev2-cookie-enforce

Set IKEv2 SA_INIT cookie enforcement.

```
diagnose vpn ike ikev2-cookie-enforce <enforce>
```

Parameter	Description	Type	Size
<enforce>	Enable/Disable responder IKEv2 cookie.	string	

diagnose vpn ike log

IKE debug log.

```
diagnose vpn ike log
```

diagnose vpn ike log filter

IKE debug log filter.

```
diagnose vpn ike log filter
```

diagnose vpn ike log filter clear

Erase the current filter.

```
diagnose vpn ike log filter clear
```

diagnose vpn ike log filter dst-addr4

IPv4 destination address range to filter by.

```
diagnose vpn ike log filter dst-addr4 <ipv4-address> <ipv4-address>
```

Parameter	Description	Type	Size
<ipv4-address>	Destination IPv4 address (from).	string	
<ipv4-address>	Destination IPv4 address (to).	string	

diagnose vpn ike log filter dst-addr6

IPv6 destination address range to filter by.

```
diagnose vpn ike log filter dst-addr6 <ipv6-address> <ipv6-address>
```

Parameter	Description	Type	Size
<ipv6-address>	Destination IPv6 address (from).	string	
<ipv6-address>	Destination IPv6 address (to).	string	

diagnose vpn ike log filter dst-port

Destination port range to filter by.

```
diagnose vpn ike log filter dst-port <port>
```

Parameter	Description	Type	Size
<port>	Destination port.	string	

diagnose vpn ike log filter interface

Interface that IKE connection is negotiated over.

```
diagnose vpn ike log filter interface <index>
```

Parameter	Description	Type	Size
<index>	Interface index, 0 matches all.	string	

diagnose vpn ike log filter list

Display the current filter.

```
diagnose vpn ike log filter list
```

diagnose vpn ike log filter mdst-addr4

multiple IPv4 destination address to filter by.

```
diagnose vpn ike log filter mdst-addr4 <ipv4-address> <ipv4-address> <ipv4-address> <ipv4-address>  
<ipv4-address> <ipv4-address>
```

Parameter	Description	Type	Size
<ipv4-address>	Destination IPv4 address 1, up to 6 IP addresses	string	
<ipv4-address>	Destination IPv4 address 2, up to 6 IP addresses	string	
<ipv4-address>	Destination IPv4 address 3, up to 6 IP addresses	string	
<ipv4-address>	Destination IPv4 address 4, up to 6 IP addresses	string	
<ipv4-address>	Destination IPv4 address 5, up to 6 IP addresses	string	
<ipv4-address>	Destination IPv4 address 6, up to 6 IP addresses	string	

diagnose vpn ike log filter mdst-addr6

multiple IPv6 destination addresses to filter by.

```
diagnose vpn ike log filter mdst-addr6 <ipv6-address> <ipv6-address> <ipv6-address> <ipv6-address>  
<ipv6-address> <ipv6-address>
```

Parameter	Description	Type	Size
<ipv6-address>	Destination IPv6 address 1, up to 6 IP addresses	string	
<ipv6-address>	Destination IPv6 address 2, up to 6 IP addresses	string	
<ipv6-address>	Destination IPv6 address 3, up to 6 IP addresses	string	
<ipv6-address>	Destination IPv6 address 4, up to 6 IP addresses	string	
<ipv6-address>	Destination IPv6 address 5, up to 6 IP addresses	string	
<ipv6-address>	Destination IPv6 address 6, up to 6 IP addresses	string	

diagnose vpn ike log filter msrc-addr4

multiple IPv4 source address to filter by.

```
diagnose vpn ike log filter msrc-addr4 <ipv4-address> <ipv4-address> <ipv4-address> <ipv4-address>  
<ipv4-address> <ipv4-address>
```

Parameter	Description	Type	Size
<ipv4-address>	Source IPv4 address 1, up to 6 IP addresses	string	
<ipv4-address>	Source IPv4 address 2, up to 6 IP addresses	string	
<ipv4-address>	Source IPv4 address 3, up to 6 IP addresses	string	
<ipv4-address>	Source IPv4 address 4, up to 6 IP addresses	string	
<ipv4-address>	Source IPv4 address 5, up to 6 IP addresses	string	
<ipv4-address>	Source IPv4 address 6, up to 6 IP addresses	string	

diagnose vpn ike log filter msrc-addr6

multiple IPv6 source address to filter by.

```
diagnose vpn ike log filter msrc-addr6 <ipv6-address> <ipv6-address> <ipv6-address> <ipv6-address>  
<ipv6-address> <ipv6-address>
```

Parameter	Description	Type	Size
<ipv6-address>	Source IPv6 address 1, up to 6 IP addresses	string	
<ipv6-address>	Source IPv6 address 2, up to 6 IP addresses	string	
<ipv6-address>	Source IPv6 address 3, up to 6 IP addresses	string	
<ipv6-address>	Source IPv6 address 4, up to 6 IP addresses	string	
<ipv6-address>	Source IPv6 address 5, up to 6 IP addresses	string	
<ipv6-address>	Source IPv6 address 6, up to 6 IP addresses	string	

diagnose vpn ike log filter name

Phase1 name to filter by.

```
diagnose vpn ike log filter name <name>
```

Parameter	Description	Type	Size
<name>	Name to filter by.	string	

diagnose vpn ike log filter negate

Negate the specified filter parameter.

```
diagnose vpn ike log filter negate
```

diagnose vpn ike log filter negate dst-addr4

Negate IPv4 destination address.

```
diagnose vpn ike log filter negate dst-addr4
```

diagnose vpn ike log filter negate dst-addr6

Negate IPv6 destination address.

```
diagnose vpn ike log filter negate dst-addr6
```

diagnose vpn ike log filter negate dst-port

Negate destination port.

```
diagnose vpn ike log filter negate dst-port
```

diagnose vpn ike log filter negate interface

Negate interface.

```
diagnose vpn ike log filter negate interface
```

diagnose vpn ike log filter negate mdst-addr4

Negate multiple IPv4 destination addresses.

```
diagnose vpn ike log filter negate mdst-addr4
```

diagnose vpn ike log filter negate mdst-addr6

Negate multiple IPv6 destination address.

```
diagnose vpn ike log filter negate mdst-addr6
```

diagnose vpn ike log filter negate msrc-addr4

Negate multiple IPv4 source addresses.

```
diagnose vpn ike log filter negate msrc-addr4
```

diagnose vpn ike log filter negate msrc-addr6

Negate multiple IPv6 source addresses.

```
diagnose vpn ike log filter negate msrc-addr6
```

diagnose vpn ike log filter negate name

Negate name.

```
diagnose vpn ike log filter negate name
```

diagnose vpn ike log filter negate src-addr4

Negate IPv4 source address.

```
diagnose vpn ike log filter negate src-addr4
```


diagnose vpn ike log filter negate src-addr6

Negate IPv6 source address.

```
diagnose vpn ike log filter negate src-addr6
```

diagnose vpn ike log filter negate src-port

Negate source port.

```
diagnose vpn ike log filter negate src-port
```

diagnose vpn ike log filter negate vd

Negate virtual domain.

```
diagnose vpn ike log filter negate vd
```

diagnose vpn ike log filter src-addr4

IPv4 source address range to filter by.

```
diagnose vpn ike log filter src-addr4 <ipv4-address> <ipv4-address>
```

Parameter	Description	Type	Size
<ipv4-address>	Source IPv4 address (from).	string	
<ipv4-address>	Source IPv4 address (to).	string	

diagnose vpn ike log filter src-addr6

IPv6 source address range to filter by.

```
diagnose vpn ike log filter src-addr6 <ipv6-address> <ipv4-address>
```

Parameter	Description	Type	Size
<ipv6-address>	Source IPv6 address (from).	string	
<ipv4-address>	Source IPv6 address (to).	string	

diagnose vpn ike log filter src-port

Source port range to filter by.

```
diagnose vpn ike log filter src-port <port> <port>
```

Parameter	Description	Type	Size
<port>	Source port (from).	string	
<port>	Source port (to).	string	

diagnose vpn ike log filter vd

Index of virtual domain. -1 matches all.

```
diagnose vpn ike log filter vd <index>
```

Parameter	Description	Type	Size
<index>	Index of virtual domain. -1 matches all.	string	

diagnose vpn ike log terminal

IKE debug log terminal statistics.

```
diagnose vpn ike log terminal
```

diagnose vpn ike log terminal clear

Clear IKE debug log terminals.

```
diagnose vpn ike log terminal clear
```

diagnose vpn ike log terminal reset

Reset IKE debug log terminals.

```
diagnose vpn ike log terminal reset
```

diagnose vpn ike log terminal stats

Show IKE debug log terminal statistics.

```
diagnose vpn ike log terminal stats
```

diagnose vpn ike log-filter

Alias for log filter.

```
diagnose vpn ike log-filter
```

diagnose vpn ike log-filter clear

Erase the current filter.

```
diagnose vpn ike log-filter clear
```

diagnose vpn ike log-filter dst-addr4

IPv4 destination address range to filter by.

```
diagnose vpn ike log-filter dst-addr4 <ipv4-address> <ipv4-address>
```

Parameter	Description	Type	Size
<ipv4-address>	Destination IPv4 address (from).	string	
<ipv4-address>	Destination IPv4 address (to).	string	

diagnose vpn ike log-filter dst-addr6

IPv6 destination address range to filter by.

```
diagnose vpn ike log-filter dst-addr6 <ipv6-address> <ipv6-address>
```

Parameter	Description	Type	Size
<ipv6-address>	Destination IPv6 address (from).	string	
<ipv6-address>	Destination IPv6 address (to).	string	

diagnose vpn ike log-filter dst-port

Destination port range to filter by.

```
diagnose vpn ike log-filter dst-port <port>
```

Parameter	Description	Type	Size
<port>	Destination port.	string	

diagnose vpn ike log-filter interface

Interface that IKE connection is negotiated over.

```
diagnose vpn ike log-filter interface <index>
```

Parameter	Description	Type	Size
<index>	Interface index, 0 matches all.	string	

diagnose vpn ike log-filter list

Display the current filter.

```
diagnose vpn ike log-filter list
```

diagnose vpn ike log-filter mdst-addr4

multiple IPv4 destination address to filter by.

```
diagnose vpn ike log-filter mdst-addr4 <ipv4-address> <ipv4-address> <ipv4-address> <ipv4-address>  
<ipv4-address> <ipv4-address>
```

Parameter	Description	Type	Size
<ipv4-address>	Destination IPv4 address 1, up to 6 IP addresses	string	
<ipv4-address>	Destination IPv4 address 2, up to 6 IP addresses	string	
<ipv4-address>	Destination IPv4 address 3, up to 6 IP addresses	string	
<ipv4-address>	Destination IPv4 address 4, up to 6 IP addresses	string	
<ipv4-address>	Destination IPv4 address 5, up to 6 IP addresses	string	
<ipv4-address>	Destination IPv4 address 6, up to 6 IP addresses	string	

diagnose vpn ike log-filter mdst-addr6

multiple IPv6 destination addresses to filter by.

```
diagnose vpn ike log-filter mdst-addr6 <ipv6-address> <ipv6-address> <ipv6-address> <ipv6-address>  
<ipv6-address> <ipv6-address>
```

Parameter	Description	Type	Size
<ipv6-address>	Destination IPv6 address 1, up to 6 IP addresses	string	
<ipv6-address>	Destination IPv6 address 2, up to 6 IP addresses	string	
<ipv6-address>	Destination IPv6 address 3, up to 6 IP addresses	string	
<ipv6-address>	Destination IPv6 address 4, up to 6 IP addresses	string	
<ipv6-address>	Destination IPv6 address 5, up to 6 IP addresses	string	
<ipv6-address>	Destination IPv6 address 6, up to 6 IP addresses	string	

diagnose vpn ike log-filter msrc-addr4

multiple IPv4 source address to filter by.

```
diagnose vpn ike log-filter msrc-addr4 <ipv4-address> <ipv4-address> <ipv4-address> <ipv4-address>  
<ipv4-address> <ipv4-address>
```

Parameter	Description	Type	Size
<ipv4-address>	Source IPv4 address 1, up to 6 IP addresses	string	
<ipv4-address>	Source IPv4 address 2, up to 6 IP addresses	string	
<ipv4-address>	Source IPv4 address 3, up to 6 IP addresses	string	
<ipv4-address>	Source IPv4 address 4, up to 6 IP addresses	string	
<ipv4-address>	Source IPv4 address 5, up to 6 IP addresses	string	
<ipv4-address>	Source IPv4 address 6, up to 6 IP addresses	string	

diagnose vpn ike log-filter msrc-addr6

multiple IPv6 source address to filter by.

```
diagnose vpn ike log-filter msrc-addr6 <ipv6-address> <ipv6-address> <ipv6-address> <ipv6-address>  
<ipv6-address> <ipv6-address>
```

Parameter	Description	Type	Size
<ipv6-address>	Source IPv6 address 1, up to 6 IP addresses	string	
<ipv6-address>	Source IPv6 address 2, up to 6 IP addresses	string	
<ipv6-address>	Source IPv6 address 3, up to 6 IP addresses	string	
<ipv6-address>	Source IPv6 address 4, up to 6 IP addresses	string	
<ipv6-address>	Source IPv6 address 5, up to 6 IP addresses	string	
<ipv6-address>	Source IPv6 address 6, up to 6 IP addresses	string	

diagnose vpn ike log-filter name

Phase1 name to filter by.

```
diagnose vpn ike log-filter name <name>
```

Parameter	Description	Type	Size
<name>	Name to filter by.	string	

diagnose vpn ike log-filter negate

Negate the specified filter parameter.

```
diagnose vpn ike log-filter negate
```

diagnose vpn ike log-filter negate dst-addr4

Negate IPv4 destination address.

```
diagnose vpn ike log-filter negate dst-addr4
```

diagnose vpn ike log-filter negate dst-addr6

Negate IPv6 destination address.

```
diagnose vpn ike log-filter negate dst-addr6
```

diagnose vpn ike log-filter negate dst-port

Negate destination port.

```
diagnose vpn ike log-filter negate dst-port
```

diagnose vpn ike log-filter negate interface

Negate interface.

```
diagnose vpn ike log-filter negate interface
```

diagnose vpn ike log-filter negate mdst-addr4

Negate multiple IPv4 destination addresses.

```
diagnose vpn ike log-filter negate mdst-addr4
```

diagnose vpn ike log-filter negate mdst-addr6

Negate multiple IPv6 destination address.

```
diagnose vpn ike log-filter negate mdst-addr6
```

diagnose vpn ike log-filter negate msrc-addr4

Negate multiple IPv4 source addresses.

```
diagnose vpn ike log-filter negate msrc-addr4
```

diagnose vpn ike log-filter negate msrc-addr6

Negate multiple IPv6 source addresses.

```
diagnose vpn ike log-filter negate msrc-addr6
```

diagnose vpn ike log-filter negate name

Negate name.

```
diagnose vpn ike log-filter negate name
```

diagnose vpn ike log-filter negate src-addr4

Negate IPv4 source address.

```
diagnose vpn ike log-filter negate src-addr4
```


diagnose vpn ike log-filter negate src-addr6

Negate IPv6 source address.

```
diagnose vpn ike log-filter negate src-addr6
```

diagnose vpn ike log-filter negate src-port

Negate source port.

```
diagnose vpn ike log-filter negate src-port
```

diagnose vpn ike log-filter negate vd

Negate virtual domain.

```
diagnose vpn ike log-filter negate vd
```

diagnose vpn ike log-filter src-addr4

IPv4 source address range to filter by.

```
diagnose vpn ike log-filter src-addr4 <ipv4-address> <ipv4-address>
```

Parameter	Description	Type	Size
<ipv4-address>	Source IPv4 address (from).	string	
<ipv4-address>	Source IPv4 address (to).	string	

diagnose vpn ike log-filter src-addr6

IPv6 source address range to filter by.

```
diagnose vpn ike log-filter src-addr6 <ipv6-address> <ipv4-address>
```

Parameter	Description	Type	Size
<ipv6-address>	Source IPv6 address (from).	string	
<ipv4-address>	Source IPv6 address (to).	string	

diagnose vpn ike log-filter src-port

Source port range to filter by.

```
diagnose vpn ike log-filter src-port <port> <port>
```

Parameter	Description	Type	Size
<port>	Source port (from).	string	
<port>	Source port (to).	string	

diagnose vpn ike log-filter vd

Index of virtual domain. -1 matches all.

```
diagnose vpn ike log-filter vd <index>
```

Parameter	Description	Type	Size
<index>	Index of virtual domain. -1 matches all.	string	

diagnose vpn ike restart

Restart IKE.

```
diagnose vpn ike restart
```

diagnose vpn ike routes

IKE routes.

```
diagnose vpn ike routes
```

diagnose vpn ike routes list

List IKE routes.

```
diagnose vpn ike routes list
```

diagnose vpn ike stats

IKE statistics.

```
diagnose vpn ike stats
```

diagnose vpn ike status

IKE status.

```
diagnose vpn ike status
```

diagnose vpn ike status detailed

Detailed status.

```
diagnose vpn ike status detailed
```

diagnose vpn ike status summary

Status summary.

```
diagnose vpn ike status summary
```

diagnose vpn ike valgrind

Valgrind analysis.

```
diagnose vpn ike valgrind
```

diagnose vpn ike valgrind disable

Force daemon to restart.

```
diagnose vpn ike valgrind disable
```

diagnose vpn ike valgrind enable

Force daemon to restart.

```
diagnose vpn ike valgrind enable
```

diagnose vpn ike valgrind log

Valgrind logs.

```
diagnose vpn ike valgrind log
```

diagnose vpn ike valgrind log clear

Clear logs.

```
diagnose vpn ike valgrind log clear
```

diagnose vpn ike valgrind log show

Show logs.

```
diagnose vpn ike valgrind log show
```

diagnose vpn ike valgrind memcheck

Force daemon to restart.

```
diagnose vpn ike valgrind memcheck
```

diagnose vpn ike valgrind memcheck_less

Force daemon to restart.

```
diagnose vpn ike valgrind memcheck_less
```

diagnose vpn ike valgrind status

Show valgrind status.

```
diagnose vpn ike valgrind status
```

diagnose vpn ikecrypt

Multiprocess IKE crypto daemon diagnostics.

This topic includes the following commands:

- [diagnose vpn ikecrypt info on page 3086](#)
- [diagnose vpn ikecrypt restart on page 3086](#)
- [diagnose vpn ikecrypt valgrind on page 3087](#)
- [diagnose vpn ikecrypt valgrind disable on page 3087](#)
- [diagnose vpn ikecrypt valgrind enable on page 3087](#)
- [diagnose vpn ikecrypt valgrind log on page 3087](#)
- [diagnose vpn ikecrypt valgrind log clear on page 3087](#)
- [diagnose vpn ikecrypt valgrind log show on page 3087](#)
- [diagnose vpn ikecrypt valgrind memcheck on page 3088](#)
- [diagnose vpn ikecrypt valgrind memcheck_less on page 3088](#)
- [diagnose vpn ikecrypt valgrind status on page 3088](#)

diagnose vpn ikecrypt info

Display ikecrypt daemon information.

```
diagnose vpn ikecrypt info
```

diagnose vpn ikecrypt restart

Restart the ikecrypt daemon.

```
diagnose vpn ikecrypt restart
```

diagnose vpn ikecrypt valgrind

Valgrind analysis.

```
diagnose vpn ikecrypt valgrind
```

diagnose vpn ikecrypt valgrind disable

Force daemon to restart.

```
diagnose vpn ikecrypt valgrind disable
```

diagnose vpn ikecrypt valgrind enable

Force daemon to restart.

```
diagnose vpn ikecrypt valgrind enable
```

diagnose vpn ikecrypt valgrind log

Valgrind logs.

```
diagnose vpn ikecrypt valgrind log
```

diagnose vpn ikecrypt valgrind log clear

Clear logs.

```
diagnose vpn ikecrypt valgrind log clear
```

diagnose vpn ikecrypt valgrind log show

Show logs.

```
diagnose vpn ikecrypt valgrind log show
```

diagnose vpn ikecrypt valgrind memcheck

Force daemon to restart.

```
diagnose vpn ikecrypt valgrind memcheck
```

diagnose vpn ikecrypt valgrind memcheck_less

Force daemon to restart.

```
diagnose vpn ikecrypt valgrind memcheck_less
```

diagnose vpn ikecrypt valgrind status

Show valgrind status.

```
diagnose vpn ikecrypt valgrind status
```

diagnose vpn ipsec

General IPsec.

This topic includes the following commands:

- [diagnose vpn ipsec cpu on page 3088](#)
- [diagnose vpn ipsec cpu clear on page 3089](#)
- [diagnose vpn ipsec driver on page 3089](#)
- [diagnose vpn ipsec driver clear on page 3089](#)
- [diagnose vpn ipsec qat on page 3089](#)
- [diagnose vpn ipsec status on page 3089](#)

diagnose vpn ipsec cpu

Actions for software crypto CPU distributions.

```
diagnose vpn ipsec cpu
```

diagnose vpn ipsec cpu clear

Clear the stats.

```
diagnose vpn ipsec cpu clear
```

diagnose vpn ipsec driver

Actions for crypto drivers.

```
diagnose vpn ipsec driver
```

diagnose vpn ipsec driver clear

Clear the stats.

```
diagnose vpn ipsec driver clear
```

diagnose vpn ipsec qat

Show QAT device information.

```
diagnose vpn ipsec qat
```

diagnose vpn ipsec status

Show status of IPsec.

```
diagnose vpn ipsec status
```

diagnose vpn l2tp

VPN L2TP.

This topic includes the following commands:

- [diagnose vpn l2tp status on page 3090](#)
- [diagnose vpn l2tp tunnel on page 3090](#)

diagnose vpn l2tp status

Display L2TP status.

```
diagnose vpn l2tp status
```

diagnose vpn l2tp tunnel

List L2TP tunnels.

```
diagnose vpn l2tp tunnel <ipv4-address>
```

Parameter	Description	Type	Size
<ipv4-address>	IPv4 address of the client (all if don't specify)	string	

diagnose vpn mr

Multicast routing.

This topic includes the following commands:

- [diagnose vpn mr add on page 3090](#)
- [diagnose vpn mr del on page 3091](#)
- [diagnose vpn mr list-addr on page 3091](#)
- [diagnose vpn mr list-dev on page 3091](#)
- [diagnose vpn mr list-tun on page 3091](#)

diagnose vpn mr add

Add a multicast route.

```
diagnose vpn mr add <device> <tunnel-id> <mgrp>
```

Parameter	Description	Type	Size
<device>	Name of IPsec device.	string	
<tunnel-id>	IPsec tunnel id.	string	
<mgrp>	Multicast IP.	string	

diagnose vpn mr del

Delete multicast routes.

```
diagnose vpn mr del <device> <tunnel-id> <mgrp>
```

Parameter	Description	Type	Size
<device>	Name of IPsec device.	string	
<tunnel-id>	IPsec tunnel id.	string	
<mgrp>	Multicast IP.	string	

diagnose vpn mr list-addr

List by multicast address.

```
diagnose vpn mr list-addr <device> <address>
```

Parameter	Description	Type	Size
<device>	Name of IPsec device.	string	
<address>	Multicast address.	string	

diagnose vpn mr list-dev

List by device.

```
diagnose vpn mr list-dev <device>
```

Parameter	Description	Type	Size
<device>	Name of IPsec device.	string	

diagnose vpn mr list-tun

List by tunnel.

```
diagnose vpn mr list-tun <tunnel>
```

Parameter	Description	Type	Size
<tunnel>	Name of IPsec tunnel.	string	

diagnose vpn mr6

IPv6 multicast routing.

This topic includes the following commands:

- [diagnose vpn mr6 add on page 3092](#)
- [diagnose vpn mr6 del on page 3092](#)
- [diagnose vpn mr6 list-addr on page 3092](#)
- [diagnose vpn mr6 list-dev on page 3093](#)
- [diagnose vpn mr6 list-tun on page 3093](#)

diagnose vpn mr6 add

Add a multicast route.

```
diagnose vpn mr6 add <device> <tunnel-id> <mgrp>
```

Parameter	Description	Type	Size
<device>	Name of IPsec device.	string	
<tunnel-id>	IPsec tunnel id.	string	
<mgrp>	Multicast IP.	string	

diagnose vpn mr6 del

Delete multicast routes.

```
diagnose vpn mr6 del <device> <tunnel-id> <mgrp>
```

Parameter	Description	Type	Size
<device>	Name of IPsec device.	string	
<tunnel-id>	IPsec tunnel id.	string	
<mgrp>	Multicast IP.	string	

diagnose vpn mr6 list-addr

List by multicast address.

```
diagnose vpn mr6 list-addr <device> <address>
```

Parameter	Description	Type	Size
<device>	Name of IPsec device.	string	
<address>	Multicast address.	string	

diagnose vpn mr6 list-dev

List by device.

```
diagnose vpn mr6 list-dev <device>
```

Parameter	Description	Type	Size
<device>	Name of IPsec device.	string	

diagnose vpn mr6 list-tun

List by tunnel.

```
diagnose vpn mr6 list-tun <tunnel>
```

Parameter	Description	Type	Size
<tunnel>	Name of IPsec tunnel.	string	

diagnose vpn ocvpn

OCVPN diagnostic tools.

This topic includes the following commands:

- [diagnose vpn ocvpn clear-cached-members on page 3094](#)
- [diagnose vpn ocvpn device-state on page 3094](#)
- [diagnose vpn ocvpn log on page 3094](#)
- [diagnose vpn ocvpn show-members on page 3094](#)
- [diagnose vpn ocvpn show-meta on page 3094](#)
- [diagnose vpn ocvpn show-objects on page 3094](#)
- [diagnose vpn ocvpn show-overlays on page 3095](#)
- [diagnose vpn ocvpn status on page 3095](#)

diagnose vpn ocvpn clear-cached-members

Clear cached OCVPN members.

```
diagnose vpn ocvpn clear-cached-members
```

diagnose vpn ocvpn device-state

Print OCVPN device state data.

```
diagnose vpn ocvpn device-state
```

diagnose vpn ocvpn log

Print OCVPN logging information.

```
diagnose vpn ocvpn log
```

diagnose vpn ocvpn show-members

Show OCVPN members.

```
diagnose vpn ocvpn show-members
```

diagnose vpn ocvpn show-meta

Show OCVPN meta information.

```
diagnose vpn ocvpn show-meta
```

diagnose vpn ocvpn show-objects

Print OCVPN object list.

```
diagnose vpn ocvpn show-objects
```

diagnose vpn ocvpn show-overlays

Show OCVPN overlays.

```
diagnose vpn ocvpn show-overlays
```

diagnose vpn ocvpn status

Print OCVPN status information.

```
diagnose vpn ocvpn status
```

diagnose vpn pptp

VPN PPTP.

This topic includes the following commands:

- [diagnose vpn pptp status on page 3095](#)

diagnose vpn pptp status

Display PPTP status.

```
diagnose vpn pptp status
```

diagnose vpn ssl

SSL-VPN.

This topic includes the following commands:

- [diagnose vpn ssl app-session on page 3096](#)
- [diagnose vpn ssl blocklist on page 3097](#)
- [diagnose vpn ssl blocklist count on page 3097](#)
- [diagnose vpn ssl blocklist del on page 3097](#)
- [diagnose vpn ssl blocklist list on page 3097](#)
- [diagnose vpn ssl client on page 3098](#)
- [diagnose vpn ssl client config on page 3098](#)
- [diagnose vpn ssl client config clear on page 3098](#)

- [diagnose vpn ssl client config list on page 3098](#)
- [diagnose vpn ssl client config load on page 3098](#)
- [diagnose vpn ssl client peer on page 3098](#)
- [diagnose vpn ssl client peer clear on page 3099](#)
- [diagnose vpn ssl client peer list on page 3099](#)
- [diagnose vpn ssl client restart on page 3099](#)
- [diagnose vpn ssl client stats on page 3099](#)
- [diagnose vpn ssl client time on page 3099](#)
- [diagnose vpn ssl client time disable on page 3099](#)
- [diagnose vpn ssl client time enable on page 3100](#)
- [diagnose vpn ssl client valgrind on page 3100](#)
- [diagnose vpn ssl client valgrind disable on page 3100](#)
- [diagnose vpn ssl client valgrind enable on page 3100](#)
- [diagnose vpn ssl client valgrind log on page 3100](#)
- [diagnose vpn ssl client valgrind log clear on page 3100](#)
- [diagnose vpn ssl client valgrind log show on page 3101](#)
- [diagnose vpn ssl client valgrind memcheck on page 3101](#)
- [diagnose vpn ssl client valgrind memcheck_less on page 3101](#)
- [diagnose vpn ssl client valgrind status on page 3101](#)
- [diagnose vpn ssl debug-filter on page 3101](#)
- [diagnose vpn ssl debug-filter clear on page 3101](#)
- [diagnose vpn ssl debug-filter list on page 3102](#)
- [diagnose vpn ssl debug-filter negate on page 3102](#)
- [diagnose vpn ssl debug-filter negate src-addr4 on page 3102](#)
- [diagnose vpn ssl debug-filter negate src-addr6 on page 3102](#)
- [diagnose vpn ssl debug-filter negate vd on page 3102](#)
- [diagnose vpn ssl debug-filter src-addr4 on page 3102](#)
- [diagnose vpn ssl debug-filter src-addr6 on page 3103](#)
- [diagnose vpn ssl debug-filter vd on page 3103](#)
- [diagnose vpn ssl info on page 3103](#)
- [diagnose vpn ssl list on page 3104](#)
- [diagnose vpn ssl mux on page 3104](#)
- [diagnose vpn ssl mux-stat on page 3104](#)
- [diagnose vpn ssl saml-metadata on page 3104](#)
- [diagnose vpn ssl statistics on page 3104](#)
- [diagnose vpn ssl tunnel-test on page 3105](#)
- [diagnose vpn ssl user-session on page 3105](#)
- [diagnose vpn ssl web-mode-test on page 3105](#)

diagnose vpn ssl app-session

List all app session in db.

```
diagnose vpn ssl app-session <all|vdom-name|vfid>
```

Parameter	Description	Type	Size
<all vdom-name vfid>	Display all app session for all VDOMs or given VDOM name or VDOM ID. Without argument, app session for current VDOM is shown.	string	

diagnose vpn ssl blocklist

SSL-VPN blocklist information

```
diagnose vpn ssl blocklist
```

diagnose vpn ssl blocklist count

Print counts of SSL-VPN blocklist

```
diagnose vpn ssl blocklist count <all|vdom-name|vfid>
```

Parameter	Description	Type	Size
<all vdom-name vfid>	Display SSL-VPN blocklist entries count for all VDOMs, given VDOM name or VDOM ID. Without argument, count for current VDOM is shown.	string	

diagnose vpn ssl blocklist del

Del SSL-VPN blocklist

```
diagnose vpn ssl blocklist del <all|vfid|addr>
```

Parameter	Description	Type	Size
<all vfid addr>	Delete block list entries for all VDOMs, given VDOM ID or address.	string	

diagnose vpn ssl blocklist list

List SSL-VPN blocklist

```
diagnose vpn ssl blocklist list <all|vdom-name|vfid>
```


Parameter	Description	Type	Size
<all vdom-name vfid>	Display SSL-VPN blocklist information for all VDOMs, given VDOM name or VDOM ID. Without argument, information for current VDOM is shown.	string	

diagnose vpn ssl client

SSL-VPN Client diagnostics.

```
diagnose vpn ssl client
```

diagnose vpn ssl client config

SSL-VPN Client configuration.

```
diagnose vpn ssl client config
```

diagnose vpn ssl client config clear

Clear any cached configuration and re-load the configuration.

```
diagnose vpn ssl client config clear
```

diagnose vpn ssl client config list

Display SSL-VPN Client configuration.

```
diagnose vpn ssl client config list
```

diagnose vpn ssl client config load

Re-load the configuration.

```
diagnose vpn ssl client config load
```

diagnose vpn ssl client peer

SSL-VPN Client peer related commands.

```
diagnose vpn ssl client peer
```

diagnose vpn ssl client peer clear

Terminate SSL-VPN Clients.

```
diagnose vpn ssl client peer clear
```

diagnose vpn ssl client peer list

Display the status of SSL-VPN Clients.

```
diagnose vpn ssl client peer list
```

diagnose vpn ssl client restart

Restart the SSL-VPN Client manager process.

```
diagnose vpn ssl client restart
```

diagnose vpn ssl client stats

Display SSL-VPN Client statistics.

```
diagnose vpn ssl client stats
```

diagnose vpn ssl client time

Measure SSL-VPN Client times.

```
diagnose vpn ssl client time
```

diagnose vpn ssl client time disable

Disable measuring SSL-VPN Client times.

```
diagnose vpn ssl client time disable
```

diagnose vpn ssl client time enable

Enable measuring SSL-VPN Client times.

```
diagnose vpn ssl client time enable
```

diagnose vpn ssl client valgrind

Valgrind analysis.

```
diagnose vpn ssl client valgrind
```

diagnose vpn ssl client valgrind disable

Force daemon to restart.

```
diagnose vpn ssl client valgrind disable
```

diagnose vpn ssl client valgrind enable

Force daemon to restart.

```
diagnose vpn ssl client valgrind enable
```

diagnose vpn ssl client valgrind log

Valgrind logs.

```
diagnose vpn ssl client valgrind log
```

diagnose vpn ssl client valgrind log clear

Clear logs.

```
diagnose vpn ssl client valgrind log clear
```

diagnose vpn ssl client valgrind log show

Show logs.

```
diagnose vpn ssl client valgrind log show
```

diagnose vpn ssl client valgrind memcheck

Force daemon to restart.

```
diagnose vpn ssl client valgrind memcheck
```

diagnose vpn ssl client valgrind memcheck_less

Force daemon to restart.

```
diagnose vpn ssl client valgrind memcheck_less
```

diagnose vpn ssl client valgrind status

Show valgrind status.

```
diagnose vpn ssl client valgrind status
```

diagnose vpn ssl debug-filter

SSL-VPN debug message filter.

```
diagnose vpn ssl debug-filter
```

diagnose vpn ssl debug-filter clear

Erase the current filter.

```
diagnose vpn ssl debug-filter clear
```

diagnose vpn ssl debug-filter list

Display the current filter.

```
diagnose vpn ssl debug-filter list
```

diagnose vpn ssl debug-filter negate

Negate the specified filter parameter.

```
diagnose vpn ssl debug-filter negate
```

diagnose vpn ssl debug-filter negate src-addr4

IPv4 source address.

```
diagnose vpn ssl debug-filter negate src-addr4
```

diagnose vpn ssl debug-filter negate src-addr6

IPv6 source address.

```
diagnose vpn ssl debug-filter negate src-addr6
```

diagnose vpn ssl debug-filter negate vd

Virtual domain.

```
diagnose vpn ssl debug-filter negate vd
```

diagnose vpn ssl debug-filter src-addr4

IPv4 source address range.

```
diagnose vpn ssl debug-filter src-addr4 <ipv4-address> <ipv4-address>
```

Parameter	Description	Type	Size
<ipv4-address>	source IPv4 address (from)	string	
<ipv4-address>	source IPv4 address (to)	string	

diagnose vpn ssl debug-filter src-addr6

IPv6 source address range.

```
diagnose vpn ssl debug-filter src-addr6 <ipv6-address> <ipv6-address>
```

Parameter	Description	Type	Size
<ipv6-address>	source IPv6 address (from)	string	
<ipv6-address>	source IPv6 address (to)	string	

diagnose vpn ssl debug-filter vd

Name of virtual domain.

```
diagnose vpn ssl debug-filter vd <vdom name>
```

Parameter	Description	Type	Size
<vdom name>	Name of virtual domain.	string	

diagnose vpn ssl info

SSL-VPN information

```
diagnose vpn ssl info <all|vdom-name|vfid>
```

Parameter	Description	Type	Size
<all vdom-name vfid>	Display SSL-VPN information for all VDOMs, given VDOM name or VDOM ID. Without argument, information for current VDOM is shown.	string	

diagnose vpn ssl list

List current connections.

```
diagnose vpn ssl list
```

diagnose vpn ssl mux

Show mux information.

```
diagnose vpn ssl mux
```

diagnose vpn ssl mux-stat

Show mux statistics.

```
diagnose vpn ssl mux-stat <all|vdom-name|vfid>
```

Parameter	Description	Type	Size
<all vdom-name vfid>	Display SSL-VPN interface statistics for all VDOMs or given VDOM name or VDOM ID. Without argument, statistics for current VDOM is shown.	string	

diagnose vpn ssl saml-metadata

Display SSL-VPN SAML SP metadata for given SAML name.

```
diagnose vpn ssl saml-metadata <SAML name>
```

Parameter	Description	Type	Size
<SAML name>	Name of SAML user.	string	

diagnose vpn ssl statistics

SSL-VPN statistics

```
diagnose vpn ssl statistics <all|vdom-name|vfid>
```

Parameter	Description	Type	Size
<all vdom-name vfid>	Display SSL-VPN statistics for all VDOMs or given VDOM name or VDOM ID. Without argument, statistics for current VDOM is shown.	string	

diagnose vpn ssl tunnel-test

Enable/disable SSL-VPN old tunnel mode IP allocation method.

```
diagnose vpn ssl tunnel-test <enable>
```

Parameter	Description	Type	Size
<enable>	Enable SSL-VPN old tunnel mode IP allocation method. disable Disable SSL-VPN old tunnel mode IP allocation method.	string	

diagnose vpn ssl user-session

List all user session in db.

```
diagnose vpn ssl user-session <all|vdom-name|vfid>
```

Parameter	Description	Type	Size
<all vdom-name vfid>	Display all user session for all VDOMs or given VDOM name or VDOM ID. Without argument, user session for current VDOM is shown.	string	

diagnose vpn ssl web-mode-test

Enable/disable random session ID in proxy URL for testing.

```
diagnose vpn ssl web-mode-test <enable>
```

Parameter	Description	Type	Size
<enable>	Enable random session ID in proxy URL for testing. Disable Disable random session ID in proxy URL for testing.	string	

diagnose vpn tunnel

IPsec tunnel.

This topic includes the following commands:

- [diagnose vpn tunnel bundle-list on page 3106](#)
- [diagnose vpn tunnel bundle-list name on page 3106](#)
- [diagnose vpn tunnel bundle-list vdom on page 3106](#)
- [diagnose vpn tunnel delinbsa on page 3107](#)
- [diagnose vpn tunnel deloutbsa on page 3107](#)
- [diagnose vpn tunnel dialup-list on page 3108](#)
- [diagnose vpn tunnel down on page 3108](#)
- [diagnose vpn tunnel fec on page 3108](#)
- [diagnose vpn tunnel flush on page 3108](#)
- [diagnose vpn tunnel key-life-time on page 3108](#)
- [diagnose vpn tunnel list on page 3109](#)
- [diagnose vpn tunnel list name on page 3109](#)
- [diagnose vpn tunnel list number on page 3109](#)
- [diagnose vpn tunnel route4-priority on page 3109](#)
- [diagnose vpn tunnel route6-priority on page 3110](#)
- [diagnose vpn tunnel stat on page 3110](#)
- [diagnose vpn tunnel stat flush on page 3110](#)
- [diagnose vpn tunnel up on page 3110](#)

diagnose vpn tunnel bundle-list

List all bundles.

```
diagnose vpn tunnel bundle-list
```

diagnose vpn tunnel bundle-list name

List bundle by interface.

```
diagnose vpn tunnel bundle-list name
```

diagnose vpn tunnel bundle-list vdom

List bundle by VDOM.

```
diagnose vpn tunnel bundle-list vdom
```

diagnose vpn tunnel delinbsa

Remove tunnel sa.

```
diagnose vpn tunnel delinbsa <name> <spi> <spi> <spi> <spi> <spi> <spi> <spi> <spi>
```

Parameter	Description	Type	Size
<name>	Name of tunnel.	string	
<spi>	SA SPI.	string	
<spi>	SA SPI.	string	
<spi>	SA SPI.	string	
<spi>	SA SPI.	string	
<spi>	SA SPI.	string	
<spi>	SA SPI.	string	
<spi>	SA SPI.	string	
<spi>	SA SPI.	string	

diagnose vpn tunnel deloutbsa

Remove tunnel sa.

```
diagnose vpn tunnel deloutbsa <name> <spi> <spi> <spi> <spi> <spi> <spi> <spi> <spi>
```

Parameter	Description	Type	Size
<name>	Name of tunnel.	string	
<spi>	SA SPI.	string	
<spi>	SA SPI.	string	
<spi>	SA SPI.	string	
<spi>	SA SPI.	string	
<spi>	SA SPI.	string	
<spi>	SA SPI.	string	
<spi>	SA SPI.	string	
<spi>	SA SPI.	string	

diagnose vpn tunnel dialup-list

List dialup tunnel.

```
diagnose vpn tunnel dialup-list
```

diagnose vpn tunnel down

Shut down tunnel.

```
diagnose vpn tunnel down <phase2> <phase1> <serial>
```

Parameter	Description	Type	Size
<phase2>	Name of phase2.	string	
<phase1>	Name of phase1.	string	
<serial>	Phase2 serial number.	string	

diagnose vpn tunnel fec

FEC statistics.

```
diagnose vpn tunnel fec <phase1> <1>
```

Parameter	Description	Type	Size
<phase1>	Name of phase1.	string	
<1>	Clean the statistic.	string	

diagnose vpn tunnel flush

Flush tunnel SAs.

```
diagnose vpn tunnel flush
```

diagnose vpn tunnel key-life-time

Override configured IPsec SA lifetime with specified value.

```
diagnose vpn tunnel key-life-time <life-time>
```

Parameter	Description	Type	Size
<life-time>	Life-time in seconds.	string	

diagnose vpn tunnel list

List all tunnel.

```
diagnose vpn tunnel list
```

diagnose vpn tunnel list name

List tunnel by name.

```
diagnose vpn tunnel list name
```

diagnose vpn tunnel list number

List tunnel by number.

```
diagnose vpn tunnel list number <begin-index> <end-index>
```

Parameter	Description	Type	Size
<begin-index>	First index of tunnel.	string	
<end-index>	Last index of tunnel.	string	

diagnose vpn tunnel route4-priority

Update tunnel IPv4 route priority.

```
diagnose vpn tunnel route4-priority <name> <priority>
```

Parameter	Description	Type	Size
<name>	Name of tunnel.	string	
<priority>	Priority of IPv4 route.	string	

diagnose vpn tunnel route6-priority

Update tunnel IPv6 route priority.

```
diagnose vpn tunnel route6-priority <name> <priority>
```

Parameter	Description	Type	Size
<name>	Name of tunnel.	string	
<priority>	Priority of IPv6 route.	string	

diagnose vpn tunnel stat

Tunnel statistic info.

```
diagnose vpn tunnel stat
```

diagnose vpn tunnel stat flush

Flush tunnel stats by name.

```
diagnose vpn tunnel stat flush
```

diagnose vpn tunnel up

Activate tunnel.

```
diagnose vpn tunnel up <phase2> <phase1> <serial>
```

Parameter	Description	Type	Size
<phase2>	Name of phase2.	string	
<phase1>	Name of phase1.	string	
<serial>	Phase2 serial number.	string	

diagnose wacs

Web cache DB daemon.

This topic includes the following commands:

- [diagnose wacs clear on page 3111](#)
- [diagnose wacs restart on page 3111](#)
- [diagnose wacs stats on page 3111](#)

diagnose wacs clear

Remove all entries from the database.

```
diagnose wacs clear
```

diagnose wacs restart

Restart the daemon and reset the statistical parameters.

```
diagnose wacs restart
```

diagnose wacs stats

Show statistics.

```
diagnose wacs stats
```

diagnose wad

WAD diagnostics.

This topic includes the following commands:

- [diagnose wad access-proxy on page 3120](#)
- [diagnose wad access-proxy health-check on page 3120](#)
- [diagnose wad access-proxy health-check status on page 3120](#)
- [diagnose wad console-log on page 3120](#)
- [diagnose wad console-log disable on page 3121](#)
- [diagnose wad console-log enable on page 3121](#)
- [diagnose wad csvc on page 3121](#)
- [diagnose wad csvc bytcache on page 3121](#)
- [diagnose wad csvc bytcache clear on page 3121](#)
- [diagnose wad csvc bytcache flush on page 3121](#)
- [diagnose wad csvc bytcache lists on page 3122](#)
- [diagnose wad csvc bytcache stats on page 3122](#)

- [diagnose wad csvc bytcache toggle on page 3122](#)
- [diagnose wad csvc bytcache toggle all on page 3122](#)
- [diagnose wad csvc bytcache toggle create on page 3123](#)
- [diagnose wad csvc bytcache toggle read on page 3123](#)
- [diagnose wad csvc memcache on page 3123](#)
- [diagnose wad csvc memcache clear on page 3123](#)
- [diagnose wad csvc memcache flush on page 3123](#)
- [diagnose wad csvc memcache lists on page 3124](#)
- [diagnose wad csvc memcache stats on page 3124](#)
- [diagnose wad csvc restart on page 3124](#)
- [diagnose wad csvc webcache on page 3124](#)
- [diagnose wad csvc webcache clear on page 3125](#)
- [diagnose wad csvc webcache flush on page 3125](#)
- [diagnose wad csvc webcache lists on page 3125](#)
- [diagnose wad csvc webcache stats on page 3125](#)
- [diagnose wad csvc webcache toggle on page 3125](#)
- [diagnose wad csvc webcache toggle abort on page 3126](#)
- [diagnose wad csvc webcache toggle add_ref on page 3126](#)
- [diagnose wad csvc webcache toggle all on page 3126](#)
- [diagnose wad csvc webcache toggle append on page 3126](#)
- [diagnose wad csvc webcache toggle create on page 3127](#)
- [diagnose wad csvc webcache toggle read on page 3127](#)
- [diagnose wad csvc webcache toggle remove on page 3127](#)
- [diagnose wad csvc webcache toggle resolve on page 3127](#)
- [diagnose wad csvc webcache toggle update on page 3127](#)
- [diagnose wad debug on page 3128](#)
- [diagnose wad debug clear on page 3128](#)
- [diagnose wad debug crash on page 3128](#)
- [diagnose wad debug crash clear on page 3128](#)
- [diagnose wad debug crash disable on page 3128](#)
- [diagnose wad debug crash enable on page 3128](#)
- [diagnose wad debug crash list on page 3129](#)
- [diagnose wad debug crash max on page 3129](#)
- [diagnose wad debug crash read on page 3129](#)
- [diagnose wad debug disable on page 3129](#)
- [diagnose wad debug disable category on page 3129](#)
- [diagnose wad debug disable category antiphish on page 3130](#)
- [diagnose wad debug disable category auth on page 3130](#)
- [diagnose wad debug disable category autotest on page 3130](#)
- [diagnose wad debug disable category bytcache on page 3130](#)
- [diagnose wad debug disable category cifs on page 3130](#)
- [diagnose wad debug disable category config on page 3130](#)
- [diagnose wad debug disable category csvc on page 3131](#)

- [diagnose wad debug disable category detail on page 3131](#)
- [diagnose wad debug disable category devuln on page 3131](#)
- [diagnose wad debug disable category dispatcher on page 3131](#)
- [diagnose wad debug disable category dns on page 3131](#)
- [diagnose wad debug disable category dskd on page 3131](#)
- [diagnose wad debug disable category ftp on page 3132](#)
- [diagnose wad debug disable category http on page 3132](#)
- [diagnose wad debug disable category http2 on page 3132](#)
- [diagnose wad debug disable category icap on page 3132](#)
- [diagnose wad debug disable category icbsvc on page 3132](#)
- [diagnose wad debug disable category info on page 3132](#)
- [diagnose wad debug disable category mapi on page 3133](#)
- [diagnose wad debug disable category memblk on page 3133](#)
- [diagnose wad debug disable category monitor on page 3133](#)
- [diagnose wad debug disable category packet on page 3133](#)
- [diagnose wad debug disable category policy on page 3133](#)
- [diagnose wad debug disable category proc on page 3133](#)
- [diagnose wad debug disable category rpc on page 3134](#)
- [diagnose wad debug disable category scan on page 3134](#)
- [diagnose wad debug disable category scp on page 3134](#)
- [diagnose wad debug disable category session on page 3134](#)
- [diagnose wad debug disable category sftp on page 3134](#)
- [diagnose wad debug disable category socks on page 3134](#)
- [diagnose wad debug disable category ssh on page 3135](#)
- [diagnose wad debug disable category ssl on page 3135](#)
- [diagnose wad debug disable category sys on page 3135](#)
- [diagnose wad debug disable category tls_fingerprint on page 3135](#)
- [diagnose wad debug disable category tunnel on page 3135](#)
- [diagnose wad debug disable category uih on page 3135](#)
- [diagnose wad debug disable category video on page 3136](#)
- [diagnose wad debug disable category vs on page 3136](#)
- [diagnose wad debug disable category webcache on page 3136](#)
- [diagnose wad debug display on page 3136](#)
- [diagnose wad debug display pid on page 3136](#)
- [diagnose wad debug display pid disable on page 3136](#)
- [diagnose wad debug display pid enable on page 3137](#)
- [diagnose wad debug enable on page 3137](#)
- [diagnose wad debug enable all on page 3137](#)
- [diagnose wad debug enable category on page 3137](#)
- [diagnose wad debug enable category all on page 3137](#)
- [diagnose wad debug enable category antiphish on page 3137](#)
- [diagnose wad debug enable category auth on page 3138](#)
- [diagnose wad debug enable category autotest on page 3138](#)

- [diagnose wad debug enable category bytcache on page 3138](#)
- [diagnose wad debug enable category cifs on page 3138](#)
- [diagnose wad debug enable category config on page 3138](#)
- [diagnose wad debug enable category csvc on page 3138](#)
- [diagnose wad debug enable category detail on page 3139](#)
- [diagnose wad debug enable category devuln on page 3139](#)
- [diagnose wad debug enable category dispatcher on page 3139](#)
- [diagnose wad debug enable category dns on page 3139](#)
- [diagnose wad debug enable category dskd on page 3139](#)
- [diagnose wad debug enable category ftp on page 3139](#)
- [diagnose wad debug enable category http on page 3140](#)
- [diagnose wad debug enable category http2 on page 3140](#)
- [diagnose wad debug enable category icap on page 3140](#)
- [diagnose wad debug enable category icbsvc on page 3140](#)
- [diagnose wad debug enable category info on page 3140](#)
- [diagnose wad debug enable category mapi on page 3140](#)
- [diagnose wad debug enable category memblk on page 3141](#)
- [diagnose wad debug enable category monitor on page 3141](#)
- [diagnose wad debug enable category packet on page 3141](#)
- [diagnose wad debug enable category policy on page 3141](#)
- [diagnose wad debug enable category proc on page 3141](#)
- [diagnose wad debug enable category rpc on page 3141](#)
- [diagnose wad debug enable category scan on page 3142](#)
- [diagnose wad debug enable category scp on page 3142](#)
- [diagnose wad debug enable category session on page 3142](#)
- [diagnose wad debug enable category sftp on page 3142](#)
- [diagnose wad debug enable category socks on page 3142](#)
- [diagnose wad debug enable category ssh on page 3142](#)
- [diagnose wad debug enable category ssl on page 3143](#)
- [diagnose wad debug enable category sys on page 3143](#)
- [diagnose wad debug enable category tls_fingerprint on page 3143](#)
- [diagnose wad debug enable category tunnel on page 3143](#)
- [diagnose wad debug enable category uih on page 3143](#)
- [diagnose wad debug enable category video on page 3143](#)
- [diagnose wad debug enable category vs on page 3144](#)
- [diagnose wad debug enable category webcache on page 3144](#)
- [diagnose wad debug enable level on page 3144](#)
- [diagnose wad debug enable level error on page 3144](#)
- [diagnose wad debug enable level info on page 3144](#)
- [diagnose wad debug enable level verbose on page 3144](#)
- [diagnose wad debug enable level warn on page 3145](#)
- [diagnose wad debug save-http-req-crash on page 3145](#)
- [diagnose wad debug save-http-req-crash disable on page 3145](#)

- [diagnose wad debug save-http-req-crash enable on page 3145](#)
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diagnose wad access-proxy

Show connectivity status with the real server.

```
diagnose wad access-proxy
```

diagnose wad access-proxy health-check

Show connectivity status with the real server.

```
diagnose wad access-proxy health-check
```

diagnose wad access-proxy health-check status

Show connectivity status with the real server.

```
diagnose wad access-proxy health-check status
```

diagnose wad console-log

Send WAD log messages to the console.

```
diagnose wad console-log
```

diagnose wad console-log disable

Disable logging.

```
diagnose wad console-log disable
```

diagnose wad console-log enable

Enable logging.

```
diagnose wad console-log enable
```

diagnose wad csvc

Cache service diagnostics.

```
diagnose wad csvc
```

diagnose wad csvc bytecache

Bytecache diagnostics.

```
diagnose wad csvc bytecache
```

diagnose wad csvc bytecache clear

Purge all entries.

```
diagnose wad csvc bytecache clear [<index>]
```

Parameter	Description	Type	Size
[<index>]	CSVC index or all cache services if not set.	string	

diagnose wad csvc bytecache flush

Reset statistics.

```
diagnose wad csvc bytecache flush [<index>]
```


Parameter	Description	Type	Size
[<index>]	CSVC index or all cache services if not set.	string	

diagnose wad csvc bytecache lists

Show entry lists.

```
diagnose wad csvc bytecache lists [<index>]
```

Parameter	Description	Type	Size
[<index>]	CSVC index or all cache services if not set.	string	

diagnose wad csvc bytecache stats

Show statistics.

```
diagnose wad csvc bytecache stats [<index>]
```

Parameter	Description	Type	Size
[<index>]	CSVC index or all cache services if not set.	string	

diagnose wad csvc bytecache toggle

Toggle operations to storage.

```
diagnose wad csvc bytecache toggle
```

diagnose wad csvc bytecache toggle all

Set/unset all operations as busy.

```
diagnose wad csvc bytecache toggle all [<index>]
```

Parameter	Description	Type	Size
[<index>]	CSVC index or all cache services if not set.	string	

diagnose wad csvc bytecache toggle create

Toggle create as busy.

```
diagnose wad csvc bytecache toggle create [<index>]
```

Parameter	Description	Type	Size
[<index>]	CSVC index or all cache services if not set.	string	

diagnose wad csvc bytecache toggle read

Toggle read as busy.

```
diagnose wad csvc bytecache toggle read [<index>]
```

Parameter	Description	Type	Size
[<index>]	CSVC index or all cache services if not set.	string	

diagnose wad csvc memcache

Memcache diagnostics.

```
diagnose wad csvc memcache
```

diagnose wad csvc memcache clear

Purge all entries.

```
diagnose wad csvc memcache clear [<index>]
```

Parameter	Description	Type	Size
[<index>]	CSVC index or all cache services if not set.	string	

diagnose wad csvc memcache flush

Reset statistics.

```
diagnose wad csvc memcache flush [<index>]
```

Parameter	Description	Type	Size
[<index>]	CSVC index or all cache services if not set.	string	

diagnose wad csvc memcache lists

Show entry lists.

```
diagnose wad csvc memcache lists [<index>]
```

Parameter	Description	Type	Size
[<index>]	CSVC index or all cache services if not set.	string	

diagnose wad csvc memcache stats

Show statistics.

```
diagnose wad csvc memcache stats [<index>]
```

Parameter	Description	Type	Size
[<index>]	CSVC index or all cache services if not set.	string	

diagnose wad csvc restart

Restart cache service.

```
diagnose wad csvc restart [<type>] [<index>]
```

Parameter	Description	Type	Size
[<type>]	CSVC type {0:web_cache, 1:byte_and_mem_cache} or all if not set.	string	
[<index>]	CSVC index or all cache services if not set.	string	

diagnose wad csvc webcache

Webcache diagnostics.

```
diagnose wad csvc webcache
```

diagnose wad csvc webcache clear

Purge all entries.

```
diagnose wad csvc webcache clear [<index>]
```

Parameter	Description	Type	Size
[<index>]	CSVC index or all cache services if not set.	string	

diagnose wad csvc webcache flush

Reset statistics.

```
diagnose wad csvc webcache flush [<index>]
```

Parameter	Description	Type	Size
[<index>]	CSVC index or all cache services if not set.	string	

diagnose wad csvc webcache lists

Show entry lists.

```
diagnose wad csvc webcache lists [<index>]
```

Parameter	Description	Type	Size
[<index>]	CSVC index or all cache services if not set.	string	

diagnose wad csvc webcache stats

Show statistics.

```
diagnose wad csvc webcache stats [<index>]
```

Parameter	Description	Type	Size
[<index>]	CSVC index or all cache services if not set.	string	

diagnose wad csvc webcache toggle

Toggle operations to storage.

```
diagnose wad csvc webcache toggle
```

diagnose wad csvc webcache toggle abort

Toggle abort as busy.

```
diagnose wad csvc webcache toggle abort [<index>]
```

Parameter	Description	Type	Size
[<index>]	CSVC index or all cache services if not set.	string	

diagnose wad csvc webcache toggle add_ref

Toggle add_ref as busy.

```
diagnose wad csvc webcache toggle add_ref [<index>]
```

Parameter	Description	Type	Size
[<index>]	CSVC index or all cache services if not set.	string	

diagnose wad csvc webcache toggle all

Set/unset all operations as busy.

```
diagnose wad csvc webcache toggle all [<index>]
```

Parameter	Description	Type	Size
[<index>]	CSVC index or all cache services if not set.	string	

diagnose wad csvc webcache toggle append

Toggle append as busy.

```
diagnose wad csvc webcache toggle append [<index>]
```

Parameter	Description	Type	Size
[<index>]	CSVC index or all cache services if not set.	string	

diagnose wad csvc webcache toggle create

Toggle create as busy.

```
diagnose wad csvc webcache toggle create [<index>]
```

Parameter	Description	Type	Size
[<index>]	CSVC index or all cache services if not set.	string	

diagnose wad csvc webcache toggle read

Toggle read as busy.

```
diagnose wad csvc webcache toggle read [<index>]
```

Parameter	Description	Type	Size
[<index>]	CSVC index or all cache services if not set.	string	

diagnose wad csvc webcache toggle remove

Toggle remove as busy.

```
diagnose wad csvc webcache toggle remove [<index>]
```

Parameter	Description	Type	Size
[<index>]	CSVC index or all cache services if not set.	string	

diagnose wad csvc webcache toggle resolve

Toggle resolve as busy.

```
diagnose wad csvc webcache toggle resolve [<index>]
```

Parameter	Description	Type	Size
[<index>]	CSVC index or all cache services if not set.	string	

diagnose wad csvc webcache toggle update

Toggle update as busy.

```
diagnose wad csvc webcache toggle update [<index>]
```

Parameter	Description	Type	Size
[<index>]	CSVC index or all cache services if not set.	string	

diagnose wad debug

Debug setting.

```
diagnose wad debug
```

diagnose wad debug clear

Clear debug setting.

```
diagnose wad debug clear
```

diagnose wad debug crash

Saved debug message.

```
diagnose wad debug crash
```

diagnose wad debug crash clear

Clear saved debug log.

```
diagnose wad debug crash clear
```

diagnose wad debug crash disable

Disable saving debug messages when process crashes.

```
diagnose wad debug crash disable
```

diagnose wad debug crash enable

Enable saving debug messages when process crashes.

```
diagnose wad debug crash enable
```

diagnose wad debug crash list

List a summary of crash logs.

```
diagnose wad debug crash list
```

diagnose wad debug crash max

Max save size. 1-10 (MB)

```
diagnose wad debug crash max <size>
```

Parameter	Description	Type	Size
<size>	1-10 (MB).	string	

diagnose wad debug crash read

Display saved debug log.

```
diagnose wad debug crash read <proc_type> <id>
```

Parameter	Description	Type	Size
<proc_type>	Please input proc_type number.	string	
<id>	Please input crash id.	string	

diagnose wad debug disable

Disable debug setting.

```
diagnose wad debug disable
```

diagnose wad debug disable category

Category debug setting.

```
diagnose wad debug disable category
```


diagnose wad debug disable category antiphish

Anti-Phishing

```
diagnose wad debug disable category antiphish
```

diagnose wad debug disable category auth

authentication

```
diagnose wad debug disable category auth
```

diagnose wad debug disable category autotest

auto test

```
diagnose wad debug disable category autotest
```

diagnose wad debug disable category bytecache

byte cache

```
diagnose wad debug disable category bytecache
```

diagnose wad debug disable category cifs

cifs

```
diagnose wad debug disable category cifs
```

diagnose wad debug disable category config

learn config

```
diagnose wad debug disable category config
```

diagnose wad debug disable category csvc

cache service

```
diagnose wad debug disable category csvc
```

diagnose wad debug disable category detail

troubleshoot detail

```
diagnose wad debug disable category detail
```

diagnose wad debug disable category devuln

device vulnerability

```
diagnose wad debug disable category devuln
```

diagnose wad debug disable category dispatcher

dispatcher

```
diagnose wad debug disable category dispatcher
```

diagnose wad debug disable category dns

DNS proxy

```
diagnose wad debug disable category dns
```

diagnose wad debug disable category dskd

cache disks

```
diagnose wad debug disable category dskd
```

diagnose wad debug disable category ftp

ftp

```
diagnose wad debug disable category ftp
```

diagnose wad debug disable category http

http

```
diagnose wad debug disable category http
```

diagnose wad debug disable category http2

http2

```
diagnose wad debug disable category http2
```

diagnose wad debug disable category icap

icap

```
diagnose wad debug disable category icap
```

diagnose wad debug disable category icbsvc

icb service

```
diagnose wad debug disable category icbsvc
```

diagnose wad debug disable category info

user device info

```
diagnose wad debug disable category info
```

diagnose wad debug disable category mapi

mapi

```
diagnose wad debug disable category mapi
```

diagnose wad debug disable category memblk

memory block

```
diagnose wad debug disable category memblk
```

diagnose wad debug disable category monitor

worker health monitor

```
diagnose wad debug disable category monitor
```

diagnose wad debug disable category packet

packet

```
diagnose wad debug disable category packet
```

diagnose wad debug disable category policy

policy matching

```
diagnose wad debug disable category policy
```

diagnose wad debug disable category proc

process management

```
diagnose wad debug disable category proc
```

diagnose wad debug disable category rpc

rpc

```
diagnose wad debug disable category rpc
```

diagnose wad debug disable category scan

UTM scan

```
diagnose wad debug disable category scan
```

diagnose wad debug disable category scp

scp

```
diagnose wad debug disable category scp
```

diagnose wad debug disable category session

session

```
diagnose wad debug disable category session
```

diagnose wad debug disable category sftp

sftp

```
diagnose wad debug disable category sftp
```

diagnose wad debug disable category socks

socks

```
diagnose wad debug disable category socks
```

diagnose wad debug disable category ssh

ssh

```
diagnose wad debug disable category ssh
```

diagnose wad debug disable category ssl

ssl

```
diagnose wad debug disable category ssl
```

diagnose wad debug disable category sys

sys

```
diagnose wad debug disable category sys
```

diagnose wad debug disable category tls_fingerprint

tls fingerprint

```
diagnose wad debug disable category tls_fingerprint
```

diagnose wad debug disable category tunnel

wanopt tunnel

```
diagnose wad debug disable category tunnel
```

diagnose wad debug disable category uih

uih

```
diagnose wad debug disable category uih
```

diagnose wad debug disable category video

cache video

```
diagnose wad debug disable category video
```

diagnose wad debug disable category vs

virtual server

```
diagnose wad debug disable category vs
```

diagnose wad debug disable category webcache

webcache

```
diagnose wad debug disable category webcache
```

diagnose wad debug display

Display setting.

```
diagnose wad debug display
```

diagnose wad debug display pid

Pid display in the trace.

```
diagnose wad debug display pid
```

diagnose wad debug display pid disable

Disable pid display.

```
diagnose wad debug display pid disable
```

diagnose wad debug display pid enable

Enable pid display.

```
diagnose wad debug display pid enable
```

diagnose wad debug enable

Enable debug setting.

```
diagnose wad debug enable
```

diagnose wad debug enable all

Enable all debug categories and set to the maximum level.

```
diagnose wad debug enable all
```

diagnose wad debug enable category

Category debug setting.

```
diagnose wad debug enable category
```

diagnose wad debug enable category all

all category

```
diagnose wad debug enable category all
```

diagnose wad debug enable category antiphish

Anti-Phishing

```
diagnose wad debug enable category antiphish
```


diagnose wad debug enable category auth

authentication

```
diagnose wad debug enable category auth
```

diagnose wad debug enable category autotest

auto test

```
diagnose wad debug enable category autotest
```

diagnose wad debug enable category bytecache

byte cache

```
diagnose wad debug enable category bytecache
```

diagnose wad debug enable category cifs

cifs

```
diagnose wad debug enable category cifs
```

diagnose wad debug enable category config

learn config

```
diagnose wad debug enable category config
```

diagnose wad debug enable category csvc

cache service

```
diagnose wad debug enable category csvc
```

diagnose wad debug enable category detail

troubleshoot detail

```
diagnose wad debug enable category detail
```

diagnose wad debug enable category devuln

device vulnerability

```
diagnose wad debug enable category devuln
```

diagnose wad debug enable category dispatcher

dispatcher

```
diagnose wad debug enable category dispatcher
```

diagnose wad debug enable category dns

DNS proxy

```
diagnose wad debug enable category dns
```

diagnose wad debug enable category dskd

cache disks

```
diagnose wad debug enable category dskd
```

diagnose wad debug enable category ftp

ftp

```
diagnose wad debug enable category ftp
```

diagnose wad debug enable category http

http

```
diagnose wad debug enable category http
```

diagnose wad debug enable category http2

http2

```
diagnose wad debug enable category http2
```

diagnose wad debug enable category icap

icap

```
diagnose wad debug enable category icap
```

diagnose wad debug enable category icbsvc

icb service

```
diagnose wad debug enable category icbsvc
```

diagnose wad debug enable category info

user device info

```
diagnose wad debug enable category info
```

diagnose wad debug enable category mapi

mapi

```
diagnose wad debug enable category mapi
```

diagnose wad debug enable category memblk

memory block

```
diagnose wad debug enable category memblk
```

diagnose wad debug enable category monitor

worker health monitor

```
diagnose wad debug enable category monitor
```

diagnose wad debug enable category packet

packet

```
diagnose wad debug enable category packet
```

diagnose wad debug enable category policy

policy matching

```
diagnose wad debug enable category policy
```

diagnose wad debug enable category proc

process management

```
diagnose wad debug enable category proc
```

diagnose wad debug enable category rpc

rpc

```
diagnose wad debug enable category rpc
```

diagnose wad debug enable category scan

UTM scan

```
diagnose wad debug enable category scan
```

diagnose wad debug enable category scp

scp

```
diagnose wad debug enable category scp
```

diagnose wad debug enable category session

session

```
diagnose wad debug enable category session
```

diagnose wad debug enable category sftp

sftp

```
diagnose wad debug enable category sftp
```

diagnose wad debug enable category socks

socks

```
diagnose wad debug enable category socks
```

diagnose wad debug enable category ssh

ssh

```
diagnose wad debug enable category ssh
```

diagnose wad debug enable category ssl

ssl

```
diagnose wad debug enable category ssl
```

diagnose wad debug enable category sys

sys

```
diagnose wad debug enable category sys
```

diagnose wad debug enable category tls_fingerprint

tls fingerprint

```
diagnose wad debug enable category tls_fingerprint
```

diagnose wad debug enable category tunnel

wanopt tunnel

```
diagnose wad debug enable category tunnel
```

diagnose wad debug enable category uih

uih

```
diagnose wad debug enable category uih
```

diagnose wad debug enable category video

cache video

```
diagnose wad debug enable category video
```

diagnose wad debug enable category vs

virtual server

```
diagnose wad debug enable category vs
```

diagnose wad debug enable category webcache

webcache

```
diagnose wad debug enable category webcache
```

diagnose wad debug enable level

Level debug setting.

```
diagnose wad debug enable level
```

diagnose wad debug enable level error

error

```
diagnose wad debug enable level error
```

diagnose wad debug enable level info

information

```
diagnose wad debug enable level info
```

diagnose wad debug enable level verbose

verbose

```
diagnose wad debug enable level verbose
```

diagnose wad debug enable level warn

warning

```
diagnose wad debug enable level warn
```

diagnose wad debug save-http-req-crash

Save HTTP request when WAD worker crashes.

```
diagnose wad debug save-http-req-crash
```

diagnose wad debug save-http-req-crash disable

Disable saving HTTP request when WAD worker crashes.

```
diagnose wad debug save-http-req-crash disable
```

diagnose wad debug save-http-req-crash enable

Enable saving HTTP request when WAD worker crashes.

```
diagnose wad debug save-http-req-crash enable
```

diagnose wad debug show

Show debug setting.

```
diagnose wad debug show
```

diagnose wad dev

Dev. diagnostics.

```
diagnose wad dev
```


diagnose wad dev fcnacd

Emulate fcnacd messages.

```
diagnose wad dev fcnacd
```

diagnose wad dev fcnacd delete

Delete a device by uid, sn, and tenant id. (EC_LLS_ZTNA_CMD_DEV_DELETE)

```
diagnose wad dev fcnacd delete
```

diagnose wad dev fcnacd ip-err

Generate an EMS IP address error response. (EC_LLS_ZTNA_CMD_FIND_BY_IPVD_ER_CODE)

```
diagnose wad dev fcnacd ip-err
```

diagnose wad dev fcnacd uid-err

Generate an EMS UID error response. (EC_LLS_ZTNA_CMD_FIND_BY_UID)

```
diagnose wad dev fcnacd uid-err
```

diagnose wad dev fcnacd update

Insert a dummy device. (EC_LLS_ZTNA_CMD_DEV_UPDATE)

```
diagnose wad dev fcnacd update
```

diagnose wad dev query-by

Query a device.

```
diagnose wad dev query-by
```

diagnose wad dev query-by ipv4

Query by IPv4 address.

```
diagnose wad dev query-by ipv4
```

diagnose wad dev query-by ipv6

Query by IPv6 address.

```
diagnose wad dev query-by ipv6
```

diagnose wad dev query-by uid

Query by UID.

```
diagnose wad dev query-by uid
```

diagnose wad dev-vuln

Device vulnerability diagnostics.

```
diagnose wad dev-vuln
```

diagnose wad dev-vuln query

Query dev-vuln by vendor=<xxx>&version=<xxx>&product=<xxx>&model=<xxx>

```
diagnose wad dev-vuln query
```

diagnose wad dev-vuln query-by-id

Query dev-vuln by vulnerability id=<xxx>.

```
diagnose wad dev-vuln query-by-id
```

diagnose wad dev-vuln query-ftgd

Query dev-vuln by vendor=<xxx>&version=<xxx>&product=<xxx>&model=<xxx>

```
diagnose wad dev-vuln query-ftgd
```

diagnose wad filter

Filter for listing sessions or tunnels.

```
diagnose wad filter
```

diagnose wad filter clear

Erase current filter settings.

```
diagnose wad filter clear
```

diagnose wad filter dport

Destination port range to filter by.

```
diagnose wad filter dport <port> <port>
```

Parameter	Description	Type	Size
<port>	Destination port (from).	string	
<port>	Destination port (to).	string	

diagnose wad filter drop-unknown-session

Enable drop message unknown sessions.

```
diagnose wad filter drop-unknown-session <Drop unknown sessions>
```

Parameter	Description	Type	Size
<Drop unknown sessions>	(1 = enable, 0 = do not drop).	string	

diagnose wad filter dst

Destination address range to filter by.

```
diagnose wad filter dst <ip-address> <ip-address>
```

Parameter	Description	Type	Size
<ip-address>	Destination IP address (from).	string	
<ip-address>	Destination IP address (to).	string	

diagnose wad filter dst6

Destination address6 range to filter by.

```
diagnose wad filter dst6 <ip-address6> <ip-address6>
```

Parameter	Description	Type	Size
<ip-address6>	Destination IPv6 address (from).	string	
<ip-address6>	Destination IPv6 address (to).	string	

diagnose wad filter explicit-policy

Index of explicit-policy. -1 matches all.

```
diagnose wad filter explicit-policy <index>
```

Parameter	Description	Type	Size
<index>	Index of explicit-policy. -1 matches all.	string	

diagnose wad filter firewall-policy

Index of firewall-policy. -1 matches all.

```
diagnose wad filter firewall-policy <index>
```

Parameter	Description	Type	Size
<index>	Index of firewall-policy. -1 matches all.	string	

diagnose wad filter list

Display current filter.

```
diagnose wad filter list
```

diagnose wad filter negate

Negate the specified filter parameter.

```
diagnose wad filter negate <parm>
```

Parameter	Description	Type	Size
<parm>	Filter parameter to negate.	string	

diagnose wad filter process-id

Select process ID to filter by.

```
diagnose wad filter process-id <Process ID>
```

Parameter	Description	Type	Size
<Process ID>	Process ID to filter (0 = disable).	string	

diagnose wad filter process-type

Select process type to filter by.

```
diagnose wad filter process-type <Process types (0 = disable):>
```

Parameter	Description	Type	Size
<Process types (0 = disable):>	1. manager 2. dispatcher 3. worker 4. algo 5. informer 6. user-info 7. cache-service-cs 8. cache-service-db 9. cert-inspection 10. youtube-filter-cache-service 11. user-info-history 12. debug 13. config-notify 14. object-cache 15. byte-cache 16. traffic aggregator 17. preload daemon	string	

diagnose wad filter protocol

Select protocols to filter by.

```
diagnose wad filter protocol <http> <mapi> <cifs> <ftp> <tcp>
```

Parameter	Description	Type	Size
<http>	To match (1), otherwise (0).	string	
<mapi>	To match (1), otherwise (0).	string	
<cifs>	To match (1), otherwise (0).	string	
<ftp>	To match (1), otherwise (0).	string	
<tcp>	To match (1), otherwise (0).	string	

diagnose wad filter proxy-policy-list-increment

Increment in steps per proxy policy list call.

```
diagnose wad filter proxy-policy-list-increment <increment steps>
```

Parameter	Description	Type	Size
<increment steps>	Incremental steps per proxy policy call (10 - 100, default = 20)	string	

diagnose wad filter sport

Source port range to filter by.

```
diagnose wad filter sport <port> <port>
```

Parameter	Description	Type	Size
<port>	Source port (from).	string	
<port>	Source port (to).	string	

diagnose wad filter src

Source address range to filter by.

```
diagnose wad filter src <ip-address> <ip-address>
```

Parameter	Description	Type	Size
<ip-address>	Source IP address (from).	string	
<ip-address>	Source IP address (to).	string	

diagnose wad filter src6

Source address6 range to filter by.

```
diagnose wad filter src6 <ip-address6> <ip-address6>
```

Parameter	Description	Type	Size
<ip-address6>	Source IPv6 address (from).	string	
<ip-address6>	Source IPv6 address (to).	string	

diagnose wad filter vd

Virtual Domain Name.

```
diagnose wad filter vd <vdom>
```

Parameter	Description	Type	Size
<vdom>	Virtual Domain Name. ALL all vdoms	string	

diagnose wad history

Statistics history.

```
diagnose wad history
```

diagnose wad history clear

Clear statistics history.

```
diagnose wad history clear
```

diagnose wad history list

List statistics history.

```
diagnose wad history list <proto> <period>
```

Parameter	Description	Type	Size
<proto>	All HTTP FTP CIFS MAPI TCP.	string	
<period>	10min hour day 30days.	string	

diagnose wad kxp

SSL KXP diagnostics.

```
diagnose wad kxp
```

diagnose wad kxp clear

Clear all KXP queue stats.

```
diagnose wad kxp clear
```

diagnose wad kxp list

List KXP queue size.

```
diagnose wad kxp list
```

diagnose wad memory

WAD memory diagnostics.

```
diagnose wad memory
```

diagnose wad memory monitor

Monitor wad memory usage.

```
diagnose wad memory monitor
```


diagnose wad memory monitor interval

Set the time interval (in min) for memory monitoring.

```
diagnose wad memory monitor interval <Integer>
```

Parameter	Description	Type	Size
<Integer>	Please enter an integer from <5> to <60>.	string	

diagnose wad memory monitor list

List wad memory monitor parameters.

```
diagnose wad memory monitor list
```

diagnose wad memory monitor max-report-files

Max number of report files to save.

```
diagnose wad memory monitor max-report-files <Integer>
```

Parameter	Description	Type	Size
<Integer>	Please enter an integer from <1> to <10>.	string	

diagnose wad memory monitor mem-threshold-red

Set threshold at which wad workers' total memory usage triggers saving memory report in a disk file.

```
diagnose wad memory monitor mem-threshold-red <Integer>
```

Parameter	Description	Type	Size
<Integer>	Please enter an integer from <0> to <100>.	string	

diagnose wad memory overused

List suspiciously overused WAD memory buckets.

```
diagnose wad memory overused <Integer>
```

Parameter	Description	Type	Size
<Integer>	Overused threshold filter value.	string	

diagnose wad memory report

List a report of wad memory usage.

```
diagnose wad memory report
```

diagnose wad memory sum

Sum all WAD process memory modules stats.

```
diagnose wad memory sum
```

diagnose wad memory track

Track cmem alloc.

```
diagnose wad memory track <Integer>
```

Parameter	Description	Type	Size
<Integer>	Id for cmem stats.	string	

diagnose wad memory workers

List WAD worker memory modules.

```
diagnose wad memory workers
```

diagnose wad process

Wad process diagnostics.

```
diagnose wad process
```

diagnose wad process YouTube-filter-cache-service

Diagnose YouTube-filter-cache-service process.

```
diagnose wad process YouTube-filter-cache-service <index> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd>
<cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd>
<cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd>
```

Parameter	Description	Type	Size
<index>	Process index to send command to. (0 for the 1st process; -1 for all)	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
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Parameter	Description	Type	Size
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
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<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	

diagnose wad process algo

Diagnose algo process.

```
diagnose wad process algo <index> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd>
<cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd>
<cmd> <cmd> <cmd> <cmd> <cmd> <cmd>
```

Parameter	Description	Type	Size
<index>	Process index to send command to. (0 for the 1st process; -1 for all)	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
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<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
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<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	

diagnose wad process byte-cache

Diagnose byte-cache process.

```
diagnose wad process byte-cache <index> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd>
<cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd>
<cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd>
```

Parameter	Description	Type	Size
<index>	Process index to send command to. (0 for the 1st process; -1 for all)	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
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Parameter	Description	Type	Size
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
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<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	

diagnose wad process cache-service-cs

Diagnose cache-service-cs process.

```
diagnose wad process cache-service-cs <index> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd>
<cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd>
<cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd>
```

Parameter	Description	Type	Size
<index>	Process index to send command to. (0 for the 1st process; -1 for all)	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
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Parameter	Description	Type	Size
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
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<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	

diagnose wad process cache-service-db

Diagnose cache-service-db process.

```
diagnose wad process cache-service-db <index> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd>
<cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd>
<cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd>
```

Parameter	Description	Type	Size
<index>	Process index to send command to. (0 for the 1st process; -1 for all)	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	

Parameter	Description	Type	Size
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	

diagnose wad process cert-inspection

Diagnose cert-inspection process.

```
diagnose wad process cert-inspection <index> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd>
<cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd>
<cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd>
```

Parameter	Description	Type	Size
<index>	Process index to send command to. (0 for the 1st process; -1 for all)	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	

Parameter	Description	Type	Size
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	

diagnose wad process config-notify

Diagnose config-notify process.

```
diagnose wad process config-notify <index> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd>
<cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd>
<cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd>
```

Parameter	Description	Type	Size
<index>	Process index to send command to. (0 for the 1st process; -1 for all)	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	

Parameter	Description	Type	Size
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	

diagnose wad process debug

Diagnose debug process.

```
diagnose wad process debug <index> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd>
<cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd>
<cmd> <cmd> <cmd> <cmd> <cmd> <cmd>
```

Parameter	Description	Type	Size
<index>	Process index to send command to. (0 for the 1st process; -1 for all)	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	

Parameter	Description	Type	Size
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	

diagnose wad process dev-vuln

Diagnose dev-vuln process.

```
diagnose wad process dev-vuln <index> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd>
<cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd>
<cmd> <cmd> <cmd> <cmd> <cmd> <cmd>
```

Parameter	Description	Type	Size
<index>	Process index to send command to. (0 for the 1st process; -1 for all)	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	

Parameter	Description	Type	Size
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	

diagnose wad process dispatcher

Diagnose dispatcher process.

```
diagnose wad process dispatcher <index> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd>
<cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd>
<cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd>
```

Parameter	Description	Type	Size
<index>	Process index to send command to. (0 for the 1st process; -1 for all)	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	

Parameter	Description	Type	Size
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	

diagnose wad process informer

Diagnose informer process.

```
diagnose wad process informer <index> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd>
<cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd>
<cmd> <cmd> <cmd> <cmd> <cmd> <cmd>
```

Parameter	Description	Type	Size
<index>	Process index to send command to. (0 for the 1st process; -1 for all)	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
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<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	

Parameter	Description	Type	Size
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
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<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	

diagnose wad process manager

Diagnose manager process.

```
diagnose wad process manager <index> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd>
<cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd>
<cmd> <cmd> <cmd> <cmd> <cmd> <cmd>
```

Parameter	Description	Type	Size
<index>	Process index to send command to. (0 for the 1st process; -1 for all)	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	

Parameter	Description	Type	Size
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	

diagnose wad process object-cache

Diagnose object-cache process.

```
diagnose wad process object-cache <index> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd>
<cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd>
<cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd>
```

Parameter	Description	Type	Size
<index>	Process index to send command to. (0 for the 1st process; -1 for all)	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	

Parameter	Description	Type	Size
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
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<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	

diagnose wad process staled-worker

Diagnose staled-worker process.

```
diagnose wad process staled-worker <index> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd>
<cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd>
<cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd>
```

Parameter	Description	Type	Size
<index>	Process index to send command to. (0 for the 1st process; -1 for all)	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
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<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	

diagnose wad process user-info

Diagnose user-info process.

```
diagnose wad process user-info <index> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd>
<cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd>
<cmd> <cmd> <cmd> <cmd> <cmd> <cmd>
```

Parameter	Description	Type	Size
<index>	Process index to send command to. (0 for the 1st process; -1 for all)	string	
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<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	

diagnose wad process user-info-history

Diagnose user-info-history process.

```
diagnose wad process user-info-history <index> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd>
<cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd>
<cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd>
```

Parameter	Description	Type	Size
<index>	Process index to send command to. (0 for the 1st process; -1 for all)	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
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<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	

Parameter	Description	Type	Size
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
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<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
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<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	

diagnose wad process worker

Diagnose worker process.

```
diagnose wad process worker <index> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd>
<cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd> <cmd>
<cmd> <cmd> <cmd> <cmd> <cmd> <cmd>
```

Parameter	Description	Type	Size
<index>	Process index to send command to. (0 for the 1st process; -1 for all)	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
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Parameter	Description	Type	Size
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<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	
<cmd>	Diagnostic command (0 for help). Support up to 32 commands.	string	

diagnose wad report

A consolidated report and shorthand access to various 'diag test app xxx' commands.

```
diagnose wad report
```

diagnose wad report policy

Wad policy related diagnostics.

```
diagnose wad report policy
```

diagnose wad report session

Wad TCP, HTTP, and FTP session related diagnostics.

```
diagnose wad report session
```

diagnose wad report user

Wad user and auth related diagnostics.

```
diagnose wad report user
```

diagnose wad restore

Restore configuration defaults.

```
diagnose wad restore
```

diagnose wad restore cdn-rules

Restore default cdn rules.

```
diagnose wad restore cdn-rules
```

diagnose wad restore cdn-rules all

Restore default cdn rules.

```
diagnose wad restore cdn-rules all
```

diagnose wad session

Session diagnostics.

```
diagnose wad session
```

diagnose wad session clear

Clear all active sessions.

```
diagnose wad session clear
```

diagnose wad session list

List active sessions.

```
diagnose wad session list
```

diagnose wad stats

Statistics.

```
diagnose wad stats <action>
```

Parameter	Description	Type	Size
<action>	show(default) clear history.	string	

diagnose wad stats algo

Show proc_algo statistics.

```
diagnose wad stats algo <action>
```

Parameter	Description	Type	Size
<action>	show(default) clear.	string	

diagnose wad stats algo.antiphish

Show antiphish statistics.

```
diagnose wad stats algo.antiphish <action>
```

Parameter	Description	Type	Size
<action>	show(default) clear.	string	

diagnose wad stats algo.fw_policy

Show fw_policy statistics.

```
diagnose wad stats algo.fw_policy <action>
```

Parameter	Description	Type	Size
<action>	show(default) clear.	string	

diagnose wad stats algo.icap_client

Show icap_client statistics.

```
diagnose wad stats algo.icap_client <action>
```

Parameter	Description	Type	Size
<action>	show(default) clear.	string	

diagnose wad stats algo.ips

Show caps_ips statistics.

```
diagnose wad stats algo.ips <action>
```

Parameter	Description	Type	Size
<action>	show(default) clear.	string	

diagnose wad stats algo.proc_common

Show proc_common statistics.

```
diagnose wad stats algo.proc_common <action>
```

Parameter	Description	Type	Size
<action>	show(default) clear.	string	

diagnose wad stats algo.ssl

Show ssl statistics.

```
diagnose wad stats algo.ssl <action>
```

Parameter	Description	Type	Size
<action>	show(default) clear.	string	

diagnose wad stats algo.url_filter

Show url_filter statistics.

```
diagnose wad stats algo.url_filter <action>
```

Parameter	Description	Type	Size
<action>	show(default) clear.	string	

diagnose wad stats cache_service

Show proc_cache_service statistics.

```
diagnose wad stats cache_service <action>
```

Parameter	Description	Type	Size
<action>	show(default) clear.	string	

diagnose wad stats cache_service.proc_common

Show proc_common statistics.


```
diagnose wad stats cache_service.proc_common <action>
```

Parameter	Description	Type	Size
<action>	show(default) clear.	string	

diagnose wad stats cache_service.tcp

Show tcp statistics.

```
diagnose wad stats cache_service.tcp <action>
```

Parameter	Description	Type	Size
<action>	show(default) clear.	string	

diagnose wad stats cic

Show proc_cic statistics.

```
diagnose wad stats cic <action>
```

Parameter	Description	Type	Size
<action>	show(default) clear.	string	

diagnose wad stats cic.proc_common

Show proc_common statistics.

```
diagnose wad stats cic.proc_common <action>
```

Parameter	Description	Type	Size
<action>	show(default) clear.	string	

diagnose wad stats common

Show proc statistics.

```
diagnose wad stats common <action>
```

Parameter	Description	Type	Size
<action>	show(default) clear.	string	

diagnose wad stats common.dc_ad_dns

Show dc_ad_dns statistics.

```
diagnose wad stats common.dc_ad_dns <action>
```

Parameter	Description	Type	Size
<action>	show(default) clear.	string	

diagnose wad stats common.sched

Show sched statistics.

```
diagnose wad stats common.sched <action>
```

Parameter	Description	Type	Size
<action>	show(default) clear.	string	

diagnose wad stats common.ses_stats

Show session statistics.

```
diagnose wad stats common.ses_stats <action>
```

Parameter	Description	Type	Size
<action>	show(default) clear.	string	

diagnose wad stats config

Show proc_config statistics.

```
diagnose wad stats config <action>
```

Parameter	Description	Type	Size
<action>	show(default) clear.	string	

diagnose wad stats config.proc_common

Show proc_common statistics.

```
diagnose wad stats config.proc_common <action>
```

Parameter	Description	Type	Size
<action>	show(default) clear.	string	

diagnose wad stats debug

Show proc_debug statistics.

```
diagnose wad stats debug <action>
```

Parameter	Description	Type	Size
<action>	show(default) clear.	string	

diagnose wad stats debug.proc_common

Show proc_common statistics.

```
diagnose wad stats debug.proc_common <action>
```

Parameter	Description	Type	Size
<action>	show(default) clear.	string	

diagnose wad stats dispatcher

Show proc_dispatcher statistics.

```
diagnose wad stats dispatcher <action>
```

Parameter	Description	Type	Size
<action>	show(default) clear.	string	

diagnose wad stats dispatcher.cifs

Show cifs statistics.

```
diagnose wad stats dispatcher.cifs <action>
```

Parameter	Description	Type	Size
<action>	show(default) clear.	string	

diagnose wad stats dispatcher.dns_proxy

Show dns_proxy statistics.

```
diagnose wad stats dispatcher.dns_proxy <action>
```

Parameter	Description	Type	Size
<action>	show(default) clear.	string	

diagnose wad stats dispatcher.proc_common

Show proc_common statistics.

```
diagnose wad stats dispatcher.proc_common <action>
```

Parameter	Description	Type	Size
<action>	show(default) clear.	string	

diagnose wad stats dispatcher.ssh

Show ssh statistics.

```
diagnose wad stats dispatcher.ssh <action>
```

Parameter	Description	Type	Size
<action>	show(default) clear.	string	

diagnose wad stats dispatcher.tcp

Show tcp statistics.

```
diagnose wad stats dispatcher.tcp <action>
```

Parameter	Description	Type	Size
<action>	show(default) clear.	string	

diagnose wad stats dispatcher.tunnel

Show tunnel statistics.

```
diagnose wad stats dispatcher.tunnel <action>
```

Parameter	Description	Type	Size
<action>	show(default) clear.	string	

diagnose wad stats informer

Show proc_informer statistics.

```
diagnose wad stats informer <action>
```

Parameter	Description	Type	Size
<action>	show(default) clear.	string	

diagnose wad stats informer.proc_common

Show proc_common statistics.

```
diagnose wad stats informer.proc_common <action>
```

Parameter	Description	Type	Size
<action>	show(default) clear.	string	

diagnose wad stats informer.usr_info_common

Show usr_info_common statistics.

```
diagnose wad stats informer.usr_info_common <action>
```

Parameter	Description	Type	Size
<action>	show(default) clear.	string	

diagnose wad stats mgr

Show proc_mgr statistics.

```
diagnose wad stats mgr <action>
```

Parameter	Description	Type	Size
<action>	show(default) clear.	string	

diagnose wad stats mgr.proc_common

Show proc_common statistics.

```
diagnose wad stats mgr.proc_common <action>
```

Parameter	Description	Type	Size
<action>	show(default) clear.	string	

diagnose wad stats usr_info

Show proc_usr_info statistics.

```
diagnose wad stats usr_info <action>
```

Parameter	Description	Type	Size
<action>	show(default) clear.	string	

diagnose wad stats usr_info.dns_req

Show dns_req statistics.

```
diagnose wad stats usr_info.dns_req <action>
```

Parameter	Description	Type	Size
<action>	show(default) clear.	string	

diagnose wad stats usr_info.proc_common

Show proc_common statistics.

```
diagnose wad stats usr_info.proc_common <action>
```

Parameter	Description	Type	Size
<action>	show(default) clear.	string	

diagnose wad stats usr_info.ssl

Show ssl statistics.

```
diagnose wad stats usr_info.ssl <action>
```

Parameter	Description	Type	Size
<action>	show(default) clear.	string	

diagnose wad stats usr_info.tcp

Show tcp statistics.

```
diagnose wad stats usr_info.tcp <action>
```

Parameter	Description	Type	Size
<action>	show(default) clear.	string	

diagnose wad stats usr_info.usr_info_common

Show usr_info_common statistics.

```
diagnose wad stats usr_info.usr_info_common <action>
```

Parameter	Description	Type	Size
<action>	show(default) clear.	string	

diagnose wad stats vfcs

Show proc_vfcs statistics.

```
diagnose wad stats vfcs <action>
```

Parameter	Description	Type	Size
<action>	show(default) clear.	string	

diagnose wad stats vfcs.proc_common

Show proc_common statistics.

```
diagnose wad stats vfcs.proc_common <action>
```

Parameter	Description	Type	Size
<action>	show(default) clear.	string	

diagnose wad stats worker

Show proc_worker statistics.

```
diagnose wad stats worker <action>
```

Parameter	Description	Type	Size
<action>	show(default) clear.	string	

diagnose wad stats worker.antiphish

Show antiphish statistics.

```
diagnose wad stats worker.antiphish <action>
```

Parameter	Description	Type	Size
<action>	show(default) clear.	string	

diagnose wad stats worker.cifs

Show cifs statistics.

```
diagnose wad stats worker.cifs <action>
```

Parameter	Description	Type	Size
<action>	show(default) clear.	string	

diagnose wad stats worker.config_delta

Show config_delta statistics.

```
diagnose wad stats worker.config_delta <action>
```

Parameter	Description	Type	Size
<action>	show(default) clear.	string	

diagnose wad stats worker.conn_pool

Show conn_pool statistics.

```
diagnose wad stats worker.conn_pool <action>
```

Parameter	Description	Type	Size
<action>	show(default) clear.	string	

diagnose wad stats worker.dns_proxy

Show dns_proxy statistics.

```
diagnose wad stats worker.dns_proxy <action>
```

Parameter	Description	Type	Size
<action>	show(default) clear.	string	

diagnose wad stats worker.dns_req

Show dns_req statistics.

```
diagnose wad stats worker.dns_req <action>
```

Parameter	Description	Type	Size
<action>	show(default) clear.	string	

diagnose wad stats worker.fw_policy

Show fw_policy statistics.

```
diagnose wad stats worker.fw_policy <action>
```

Parameter	Description	Type	Size
<action>	show(default) clear.	string	

diagnose wad stats worker.http_engine

Show http_engine statistics.

```
diagnose wad stats worker.http_engine <action>
```

Parameter	Description	Type	Size
<action>	show(default) clear.	string	

diagnose wad stats worker.http_scan

Show http_scan statistics.

```
diagnose wad stats worker.http_scan <action>
```

Parameter	Description	Type	Size
<action>	show(default) clear.	string	

diagnose wad stats worker.http_srv_selector

Show http_srv_selector statistics.

```
diagnose wad stats worker.http_srv_selector <action>
```

Parameter	Description	Type	Size
<action>	show(default) clear.	string	

diagnose wad stats worker.icap_client

Show icap_client statistics.

```
diagnose wad stats worker.icap_client <action>
```

Parameter	Description	Type	Size
<action>	show(default) clear.	string	

diagnose wad stats worker.icap_parser

Show icap_parser statistics.

```
diagnose wad stats worker.icap_parser <action>
```

Parameter	Description	Type	Size
<action>	show(default) clear.	string	

diagnose wad stats worker.icap_remote_server

Show icap_remote_server statistics.

```
diagnose wad stats worker.icap_remote_server <action>
```

Parameter	Description	Type	Size
<action>	show(default) clear.	string	

diagnose wad stats worker.infection_cache

Show infection_cache statistics.

```
diagnose wad stats worker.infection_cache <action>
```

Parameter	Description	Type	Size
<action>	show(default) clear.	string	

diagnose wad stats worker.policy_profile

Show policy_profile statistics.

```
diagnose wad stats worker.policy_profile <action>
```

Parameter	Description	Type	Size
<action>	show(default) clear.	string	

diagnose wad stats worker.proc_common

Show proc_common statistics.

```
diagnose wad stats worker.proc_common <action>
```

Parameter	Description	Type	Size
<action>	show(default) clear.	string	

diagnose wad stats worker.protos

Show protos statistics.

```
diagnose wad stats worker.protos <action>
```

Parameter	Description	Type	Size
<action>	show(default) clear.	string	

diagnose wad stats worker.saml

Show saml statistics.

```
diagnose wad stats worker.saml <action>
```

Parameter	Description	Type	Size
<action>	show(default) clear.	string	

diagnose wad stats worker.ssh

Show ssh statistics.

```
diagnose wad stats worker.ssh <action>
```

Parameter	Description	Type	Size
<action>	show(default) clear.	string	

diagnose wad stats worker.ssl

Show ssl statistics.

```
diagnose wad stats worker.ssl <action>
```

Parameter	Description	Type	Size
<action>	show(default) clear.	string	

diagnose wad stats worker.systemem

Show systemem statistics.

```
diagnose wad stats worker.systemem <action>
```

Parameter	Description	Type	Size
<action>	show(default) clear.	string	

diagnose wad stats worker.tcp

Show tcp statistics.

```
diagnose wad stats worker.tcp <action>
```

Parameter	Description	Type	Size
<action>	show(default) clear.	string	

diagnose wad stats worker.traffic_mirror

Show traffic_mirror statistics.

```
diagnose wad stats worker.traffic_mirror <action>
```

Parameter	Description	Type	Size
<action>	show(default) clear.	string	

diagnose wad stats worker.tunnel

Show tunnel statistics.

```
diagnose wad stats worker.tunnel <action>
```

Parameter	Description	Type	Size
<action>	show(default) clear.	string	

diagnose wad stats worker.url_filter

Show url_filter statistics.

```
diagnose wad stats worker.url_filter <action>
```

Parameter	Description	Type	Size
<action>	show(default) clear.	string	

diagnose wad stats worker.usr_info_common

Show usr_info_common statistics.

```
diagnose wad stats worker.usr_info_common <action>
```

Parameter	Description	Type	Size
<action>	show(default) clear.	string	

diagnose wad stats worker.vs_cert_cache

Show hash_cache statistics.

```
diagnose wad stats worker.vs_cert_cache <action>
```

Parameter	Description	Type	Size
<action>	show(default) clear.	string	

diagnose wad stream-scan

Stream scan diagnostics.

```
diagnose wad stream-scan
```

diagnose wad stream-scan av-intf

Enable/disable AV interface.

```
diagnose wad stream-scan av-intf
```

diagnose wad stream-scan av-intf disable

Disable stream scan AV interface and restart workers.

```
diagnose wad stream-scan av-intf disable
```

diagnose wad stream-scan av-intf enable

Enable stream scan AV interface and restart workers.

```
diagnose wad stream-scan av-intf enable
```

diagnose wad stream-scan av-test

AV Engine diagnostics.

```
diagnose wad stream-scan av-test <command> <worker-id>
```

Parameter	Description	Type	Size
<command>	Command to pass into AV engine. Please double quote the command.	string	
<worker-id>	Optional worker index.	string	

diagnose wad toggle

Toggle diagnose method(direct/debug proc).

```
diagnose wad toggle
```

diagnose wad tunnel

Tunnel diagnostics.

```
diagnose wad tunnel
```

diagnose wad tunnel clear

Clear all active tunnels.

```
diagnose wad tunnel clear
```

diagnose wad tunnel list

List active tunnels.

```
diagnose wad tunnel list <id>
```

Parameter	Description	Type	Size
<id>	Optional tunnel ID.	string	

diagnose wad user

User diagnostics.

```
diagnose wad user
```

diagnose wad user clear

Clear all users or clear a particular user using: `diagnose wad user clear <ID> <IP|IPv6> <VDOM>`.

```
diagnose wad user clear <ID> <IP> <VDOM>
```

Parameter	Description	Type	Size
<ID>	Please input user ID.	string	
<IP>	Please input user IP.	string	
<VDOM>	Please input VDOM name the user belongs to.	string	

diagnose wad user device

Get device info.


```
diagnose wad user device
```

diagnose wad user domain-controller

Test connectivity with domain-controller.

```
diagnose wad user domain-controller
```

diagnose wad user domain-controller dns

Test DNS resolve function.

```
diagnose wad user domain-controller dns
```

diagnose wad user domain-controller dns list

Show DNS discover status on all configured user domain-controller.

```
diagnose wad user domain-controller dns list
```

diagnose wad user domain-controller dns test

Test if DNS discover function works for all configured user domain-controller.

```
diagnose wad user domain-controller dns test
```

diagnose wad user exchange

Test connectivity with user-exchange.

```
diagnose wad user exchange
```

diagnose wad user exchange get-matches

Test exact match search for Administrator.

```
diagnose wad user exchange get-matches
```

diagnose wad user exchange query-rows

Show address-book database up to 50 entries.

```
diagnose wad user exchange query-rows
```

diagnose wad user exchange reset

Close all connections related to user-exchange.

```
diagnose wad user exchange reset
```

diagnose wad user exchange resolve-names

Test pattern match search for Administrator.

```
diagnose wad user exchange resolve-names
```

diagnose wad user exchange test-auto-discover

Test if automatic discovery can work on all configured user-exchanges.

```
diagnose wad user exchange test-auto-discover
```

diagnose wad user list

List proxy users.

```
diagnose wad user list [verbose]
```

Parameter	Description	Type	Size
[verbose]	Verbose mode.	string	

diagnose wad webcache

Web cache statistics.

```
diagnose wad webcache
```

diagnose wad webcache clear

Clear web cache statistics.

```
diagnose wad webcache clear
```

diagnose wad webcache list

List web cache statistics.

```
diagnose wad webcache list <period>
```

Parameter	Description	Type	Size
<period>	10min hour day 30days.	string	

diagnose wad worker

Worker diagnostics.

```
diagnose wad worker
```

diagnose wad worker avscan

Scan results statistics.

```
diagnose wad worker avscan
```

diagnose wad worker avscan clear

Clear scan results statistics.

```
diagnose wad worker avscan clear
```

diagnose wad worker avscan list

List scan results statistics.

```
diagnose wad worker avscan list
```

diagnose wad worker bytcache

Bytcache diagnostics.

```
diagnose wad worker bytcache
```

diagnose wad worker bytcache clear

Purge all entries.

```
diagnose wad worker bytcache clear [<index>]
```

Parameter	Description	Type	Size
[<index>]	Worker index or all workers if not set.	string	

diagnose wad worker bytcache flush

Reset statistics.

```
diagnose wad worker bytcache flush [<index>]
```

Parameter	Description	Type	Size
[<index>]	Worker index or all workers if not set.	string	

diagnose wad worker bytcache stats

Show statistics.

```
diagnose wad worker bytcache stats [<index>]
```

Parameter	Description	Type	Size
[<index>]	Worker index or all workers if not set.	string	

diagnose wad worker bytcache toggle

Toggle operations.

```
diagnose wad worker bytcache toggle
```

diagnose wad worker bytcache toggle all

Set/unset all operations as busy.

```
diagnose wad worker bytcache toggle all [<index>]
```

Parameter	Description	Type	Size
[<index>]	Worker index or all workers if not set.	string	

diagnose wad worker bytcache toggle config

Toggle worker bytcache config.

```
diagnose wad worker bytcache toggle config [<index>]
```

Parameter	Description	Type	Size
[<index>]	Worker index or all workers if not set.	string	

diagnose wad worker bytcache toggle create

Toggle create as busy.

```
diagnose wad worker bytcache toggle create [<index>]
```

Parameter	Description	Type	Size
[<index>]	Worker index or all workers if not set.	string	

diagnose wad worker bytcache toggle read

Toggle read as busy.

```
diagnose wad worker bytcache toggle read [<index>]
```

Parameter	Description	Type	Size
[<index>]	Worker index or all workers if not set.	string	

diagnose wad worker cookie

Cookie information.

```
diagnose wad worker cookie
```

diagnose wad worker cookie map

Show cookie map info.

```
diagnose wad worker cookie map
```

diagnose wad worker filter

Show filter statistics.

```
diagnose wad worker filter
```

diagnose wad worker filter clear

Clear filter statistics.

```
diagnose wad worker filter clear
```

diagnose wad worker filter list

List filter statistics.

```
diagnose wad worker filter list
```

diagnose wad worker memcache

Memcache diagnostics.

```
diagnose wad worker memcache
```

diagnose wad worker memcache clear

Purge all entries.

```
diagnose wad worker memcache clear [<index>]
```

Parameter	Description	Type	Size
[<index>]	Worker index or all workers if not set.	string	

diagnose wad worker memcache flush

Reset statistics.

```
diagnose wad worker memcache flush [<index>]
```

Parameter	Description	Type	Size
[<index>]	Worker index or all workers if not set.	string	

diagnose wad worker memcache stats

Show statistics.

```
diagnose wad worker memcache stats [<index>]
```

Parameter	Description	Type	Size
[<index>]	Worker index or all workers if not set.	string	

diagnose wad worker memcache toggle

Toggle operations.

```
diagnose wad worker memcache toggle
```

diagnose wad worker memcache toggle all

Set/unset all operations as busy.

```
diagnose wad worker memcache toggle all [<index>]
```

Parameter	Description	Type	Size
[<index>]	Worker index or all workers if not set.	string	

diagnose wad worker memcache toggle config

Toggle worker memcache config.

```
diagnose wad worker memcache toggle config [<index>]
```

Parameter	Description	Type	Size
[<index>]	Worker index or all workers if not set.	string	

diagnose wad worker memcache toggle create

Toggle create as busy.

```
diagnose wad worker memcache toggle create [<index>]
```

Parameter	Description	Type	Size
[<index>]	Worker index or all workers if not set.	string	

diagnose wad worker memcache toggle read

Toggle read as busy.

```
diagnose wad worker memcache toggle read [<index>]
```

Parameter	Description	Type	Size
[<index>]	Worker index or all workers if not set.	string	

diagnose wad worker peer

Show peer statistics.

```
diagnose wad worker peer
```

diagnose wad worker peer clear

Clear peer statistics.

```
diagnose wad worker peer clear
```


diagnose wad worker peer list

List peer statistics.

```
diagnose wad worker peer list
```

diagnose wad worker policy

Show policy statistics.

```
diagnose wad worker policy
```

diagnose wad worker policy clear

Clear policy statistics.

```
diagnose wad worker policy clear
```

diagnose wad worker policy list

List policy statistics.

```
diagnose wad worker policy list
```

diagnose wad worker restart

Restart workers.

```
diagnose wad worker restart [<index>]
```

Parameter	Description	Type	Size
[<index>]	Worker index or all workers if not set.	string	

diagnose wad worker saml

Show saml sessions and GrpSID cache info.

```
diagnose wad worker saml [<index>]
```

Parameter	Description	Type	Size
[<index>]	Worker index or all workers if not set.	string	

diagnose wad worker scripts

Show scripts statistics.

```
diagnose wad worker scripts
```

diagnose wad worker scripts clear

Clear scripts statistics.

```
diagnose wad worker scripts clear
```

diagnose wad worker scripts list

List scripts statistics.

```
diagnose wad worker scripts list
```

diagnose wad worker webcache

Webcache diagnostics.

```
diagnose wad worker webcache
```

diagnose wad worker webcache clear

Purge all entries.

```
diagnose wad worker webcache clear [<index>]
```

Parameter	Description	Type	Size
[<index>]	Worker index or all workers if not set.	string	

diagnose wad worker webcache flush

Reset statistics.

```
diagnose wad worker webcache flush [<index>]
```

Parameter	Description	Type	Size
[<index>]	Worker index or all workers if not set.	string	

diagnose wad worker webcache stats

Show statistics.

```
diagnose wad worker webcache stats [<index>]
```

Parameter	Description	Type	Size
[<index>]	Worker index or all workers if not set.	string	

diagnose wad worker webcache summary

List statistics summary.

```
diagnose wad worker webcache summary
```

diagnose wad worker webcache toggle

Toggle operations.

```
diagnose wad worker webcache toggle
```

diagnose wad worker webcache toggle abort

Toggle abort as busy.

```
diagnose wad worker webcache toggle abort [<index>]
```

Parameter	Description	Type	Size
[<index>]	Worker index or all workers if not set.	string	

diagnose wad worker webcache toggle add_ref

Toggle add_ref as busy.

```
diagnose wad worker webcache toggle add_ref [<index>]
```

Parameter	Description	Type	Size
[<index>]	Worker index or all workers if not set.	string	

diagnose wad worker webcache toggle all

Set/unset all operations as busy.

```
diagnose wad worker webcache toggle all [<index>]
```

Parameter	Description	Type	Size
[<index>]	Worker index or all workers if not set.	string	

diagnose wad worker webcache toggle append

Toggle append as busy.

```
diagnose wad worker webcache toggle append [<index>]
```

Parameter	Description	Type	Size
[<index>]	Worker index or all workers if not set.	string	

diagnose wad worker webcache toggle config

Toggle worker webcache config.

```
diagnose wad worker webcache toggle config [<index>]
```

Parameter	Description	Type	Size
[<index>]	Worker index or all workers if not set.	string	

diagnose wad worker webcache toggle create

Toggle create as busy.

```
diagnose wad worker webcache toggle create [<index>]
```

Parameter	Description	Type	Size
[<index>]	Worker index or all workers if not set.	string	

diagnose wad worker webcache toggle read

Toggle read as busy.

```
diagnose wad worker webcache toggle read [<index>]
```

Parameter	Description	Type	Size
[<index>]	Worker index or all workers if not set.	string	

diagnose wad worker webcache toggle remove

Toggle remove as busy.

```
diagnose wad worker webcache toggle remove [<index>]
```

Parameter	Description	Type	Size
[<index>]	Worker index or all workers if not set.	string	

diagnose wad worker webcache toggle resolve

Toggle resolve as busy.

```
diagnose wad worker webcache toggle resolve [<index>]
```

Parameter	Description	Type	Size
[<index>]	Worker index or all workers if not set.	string	

diagnose wad worker webcache toggle update

Toggle update as busy.

```
diagnose wad worker webcache toggle update [<index>]
```

Parameter	Description	Type	Size
[<index>]	Worker index or all workers if not set.	string	

diagnose wadbd

WAN accelerator DB daemon.

This topic includes the following commands:

- [diagnose wadbd clear on page 3223](#)
- [diagnose wadbd restart on page 3223](#)
- [diagnose wadbd stats on page 3223](#)

diagnose wadbd clear

Remove all entries from the database.

```
diagnose wadbd clear
```

diagnose wadbd restart

Restart the daemon and reset the statistical parameters.

```
diagnose wadbd restart
```

diagnose wadbd stats

Show statistics.

```
diagnose wadbd stats
```

diagnose waf

WAF diagnostics.

This topic includes the following commands:

- [diagnose waf dump on page 3224](#)
- [diagnose waf info on page 3224](#)

diagnose waf dump

Dump WAF name table.

```
diagnose waf dump
```

diagnose waf info

Init WAF name table.

```
diagnose waf info
```

diagnose webfilter bword

Web banned word match filter.

This topic includes the following commands:

- [diagnose webfilter bword matchfilter on page 3224](#)

diagnose webfilter bword matchfilter

Filtered list display.

```
diagnose webfilter bword matchfilter <filter string>
```

Parameter	Description	Type	Size
<filter string>	Filter string from end of web filter banned word log line. For example: '1-n8 4 0 1 4 10 nC 4'	string	

diagnose webfilter fortiguard

FortiGuard Web Filter information

This topic includes the following commands:

- [diagnose webfilter fortiguard cache on page 3225](#)
- [diagnose webfilter fortiguard cache dump on page 3225](#)
- [diagnose webfilter fortiguard cache obs on page 3225](#)
- [diagnose webfilter fortiguard cache prefix on page 3225](#)
- [diagnose webfilter fortiguard cache tree on page 3226](#)
- [diagnose webfilter fortiguard cache ttl on page 3226](#)
- [diagnose webfilter fortiguard override on page 3226](#)
- [diagnose webfilter fortiguard override all-admin-override on page 3226](#)
- [diagnose webfilter fortiguard override all-user-override on page 3226](#)
- [diagnose webfilter fortiguard override all-warning on page 3226](#)
- [diagnose webfilter fortiguard override obs on page 3227](#)
- [diagnose webfilter fortiguard override statistics on page 3227](#)
- [diagnose webfilter fortiguard statistics on page 3227](#)
- [diagnose webfilter fortiguard statistics flush on page 3227](#)
- [diagnose webfilter fortiguard statistics list on page 3227](#)

diagnose webfilter fortiguard cache

Display WF cache content.

```
diagnose webfilter fortiguard cache
```

diagnose webfilter fortiguard cache dump

Display WF cache contents.

```
diagnose webfilter fortiguard cache dump
```

diagnose webfilter fortiguard cache obs

Display WF cache OBS info.

```
diagnose webfilter fortiguard cache obs
```

diagnose webfilter fortiguard cache prefix

Display WF cache contents of prefix type.

```
diagnose webfilter fortiguard cache prefix
```


diagnose webfilter fortiguard cache tree

Display WF cache in tree format.

```
diagnose webfilter fortiguard cache tree
```

diagnose webfilter fortiguard cache ttl

Display WF cache TTL list.

```
diagnose webfilter fortiguard cache ttl
```

diagnose webfilter fortiguard override

Display override content.

```
diagnose webfilter fortiguard override
```

diagnose webfilter fortiguard override all-admin-override

Display admin override entries of all vdoms.

```
diagnose webfilter fortiguard override all-admin-override
```

diagnose webfilter fortiguard override all-user-override

Display user override entries of all vdoms.

```
diagnose webfilter fortiguard override all-user-override
```

diagnose webfilter fortiguard override all-warning

Display warning/authentication entries of all vdoms.

```
diagnose webfilter fortiguard override all-warning
```

diagnose webfilter fortiguard override obs

Display override cache OBS info.

```
diagnose webfilter fortiguard override obs
```

diagnose webfilter fortiguard override statistics

Display override cache statistics.

```
diagnose webfilter fortiguard override statistics
```

diagnose webfilter fortiguard statistics

Rating cache and daemon statistics.

```
diagnose webfilter fortiguard statistics
```

diagnose webfilter fortiguard statistics flush

Flush rating cache and daemon statistics.

```
diagnose webfilter fortiguard statistics flush
```

diagnose webfilter fortiguard statistics list

Display rating cache and daemon statistics.

```
diagnose webfilter fortiguard statistics list
```

diagnose webfilter quota

Urlfilter daemon quota information.

This topic includes the following commands:

- [diagnose webfilter quota list on page 3228](#)

diagnose webfilter quota list

Display urlfilter daemon quota list.

```
diagnose webfilter quota list
```

diagnose webfilter stats

Proxy and flow webfilter statistics.

This topic includes the following commands:

- [diagnose webfilter stats clear on page 3228](#)
- [diagnose webfilter stats list on page 3228](#)

diagnose webfilter stats clear

Clear webfilter statistics.

```
diagnose webfilter stats clear <vdname>
```

Parameter	Description	Type	Size
<vdname>	VDOM name or global.	string	

diagnose webfilter stats list

Display webfilter statistics.

```
diagnose webfilter stats list <vdname>
```

Parameter	Description	Type	Size
<vdname>	VDOM name or global.	string	

diagnose web-ui

Web user interface.

This topic includes the following commands:

- [diagnose web-ui api-cache on page 3229](#)
- [diagnose web-ui api-cache statistic on page 3229](#)
- [diagnose web-ui api-stats on page 3229](#)
- [diagnose web-ui api-stats disable on page 3230](#)
- [diagnose web-ui api-stats enable on page 3230](#)
- [diagnose web-ui api-stats list on page 3230](#)
- [diagnose web-ui api-stats reset on page 3230](#)
- [diagnose web-ui api-stats status on page 3230](#)
- [diagnose web-ui backtrace on page 3230](#)
- [diagnose web-ui backtrace clear on page 3231](#)
- [diagnose web-ui backtrace disable on page 3231](#)
- [diagnose web-ui backtrace enable on page 3231](#)
- [diagnose web-ui backtrace httpsd on page 3231](#)
- [diagnose web-ui backtrace status on page 3231](#)
- [diagnose web-ui cache on page 3231](#)
- [diagnose web-ui cache disable on page 3232](#)
- [diagnose web-ui cache enable on page 3232](#)
- [diagnose web-ui localization on page 3232](#)
- [diagnose web-ui localization disable on page 3232](#)
- [diagnose web-ui localization enable on page 3232](#)

diagnose web-ui api-cache

shows statistics of REST API caching.

```
diagnose web-ui api-cache
```

diagnose web-ui api-cache statistic

Show REST API cache statistics.

```
diagnose web-ui api-cache statistic
```

diagnose web-ui api-stats

REST API performance statistics.

```
diagnose web-ui api-stats
```

diagnose web-ui api-stats disable

Disable REST API performance statistics.

```
diagnose web-ui api-stats disable
```

diagnose web-ui api-stats enable

Enable REST API performance statistics.

```
diagnose web-ui api-stats enable
```

diagnose web-ui api-stats list

List all REST API performance statistics.

```
diagnose web-ui api-stats list <api-uri>
```

Parameter	Description	Type	Size
<api-uri>	API access URI/prefix. (type.path.name.action)	string	

diagnose web-ui api-stats reset

Reset all REST API performance statistics.

```
diagnose web-ui api-stats reset
```

diagnose web-ui api-stats status

Status of REST API performance statistics.

```
diagnose web-ui api-stats status
```

diagnose web-ui backtrace

Web-ui backtrace.

```
diagnose web-ui backtrace
```

diagnose web-ui backtrace clear

Clear all backtrace log.

```
diagnose web-ui backtrace clear
```

diagnose web-ui backtrace disable

Disable web-ui backtrace.

```
diagnose web-ui backtrace disable
```

diagnose web-ui backtrace enable

Enable web-ui backtrace.

```
diagnose web-ui backtrace enable
```

diagnose web-ui backtrace httpsd

List all httpsd backtrace.

```
diagnose web-ui backtrace httpsd <pid>
```

Parameter	Description	Type	Size
<pid>	Details of httpsd backtrace.	string	

diagnose web-ui backtrace status

Status of web-ui backtrace.

```
diagnose web-ui backtrace status
```

diagnose web-ui cache

Enable/disable caching of static resources.

```
diagnose web-ui cache
```

diagnose web-ui cache disable

Disable caching of static resources.

```
diagnose web-ui cache disable
```

diagnose web-ui cache enable

Enable caching of static resources.

```
diagnose web-ui cache enable
```

diagnose web-ui localization

Enable/disable language localization.

```
diagnose web-ui localization
```

diagnose web-ui localization disable

Disable language localization.

```
diagnose web-ui localization disable
```

diagnose web-ui localization enable

Enable language localization.

```
diagnose web-ui localization enable
```

diagnose wireless-controller

Wireless controller.

This topic includes the following commands:

- [diagnose wireless-controller wlac](#) on page 3233
- [diagnose wireless-controller wlac_hlp](#) on page 3233
- [diagnose wireless-controller wlsta](#) on page 3234

- [diagnose wireless-controller wlwtp on page 3234](#)

diagnose wireless-controller wlac

WLAN AC.

```
diagnose wireless-controller wlac <-c|-d|-k|-h> <value1> <value2> <value3> <value4> <value5>  
<value6> <value7> <value8> <value9> <value10> <value11> <value12>
```

Parameter	Description	Type	Size
<-c -d -k -h>	Control plane, data plane or help.	string	
<value1>	Value of command.	string	
<value2>	Value of command.	string	
<value3>	Value of command.	string	
<value4>	Value of command.	string	
<value5>	Value of command.	string	
<value6>	Value of command.	string	
<value7>	Value of command.	string	
<value8>	Value of command.	string	
<value9>	Value of command.	string	
<value10>	Value of command.	string	
<value11>	Value of command.	string	
<value12>	Value of command.	string	

diagnose wireless-controller wlac_hlp

WLAN AC HELPER.

```
diagnose wireless-controller wlac_hlp <-c|-h> <value1> <value2> <value3>
```

Parameter	Description	Type	Size
<-c -h>	Control plane or help.	string	
<value1>	Value of command.	string	
<value2>	Value of command.	string	
<value3>	Value of command.	string	

diagnose wireless-controller wlsta

WLAN STA.

```
diagnose wireless-controller wlsta <cmd|-h> <value1> <value2> <value3>
```

Parameter	Description	Type	Size
<cmd -h>	Command or help.	string	
<value1>	Value of command.	string	
<value2>	Value of command.	string	
<value3>	Value of command.	string	

diagnose wireless-controller wlwtp

WLAN WTP.

```
diagnose wireless-controller wlwtp <-c|-k|-h> <value1> <value2> <value3>
```

Parameter	Description	Type	Size
<-c -k -h>	Control plane or help.	string	
<value1>	Value of command.	string	
<value2>	Value of command.	string	
<value3>	Value of command.	string	

diagnose wpa

wpa daemon

This topic includes the following commands:

- [diagnose wpa wpad on page 3234](#)
- [diagnose wpa wpas on page 3235](#)

diagnose wpa wpad

wpad diagnostics.

```
diagnose wpa wpad <subcmd> <value1> <value2> <value3> <value4> <value5>
```

Parameter	Description	Type	Size
<subcmd>	sub command.	string	
<value1>	Value of command.	string	
<value2>	Value of command.	string	
<value3>	Value of command.	string	
<value4>	Value of command.	string	
<value5>	Value of command.	string	

diagnose wpa wpas

wpas diagnostics.

```
diagnose wpa wpas <subcmd>
```

Parameter	Description	Type	Size
<subcmd>	sub command.	string	

CLI execute commands

Use execute commands to run system commands.

This section includes syntax for the following commands:

- [execute api-user on page 3239](#)
- [execute auto-script on page 3239](#)
- [execute backup on page 3241](#)
- [execute batch on page 3255](#)
- [execute ble on page 3256](#)
- [execute bypass-mode on page 3261](#)
- [execute central-mgmt on page 3262](#)
- [execute cfg on page 3263](#)
- [execute clear on page 3263](#)
- [execute cli on page 3264](#)
- [execute config-transaction on page 3264](#)
- [execute cpu on page 3265](#)
- [execute date on page 3266](#)
- [execute device-upgrade on page 3266](#)
- [execute dhcp on page 3267](#)
- [execute dhcp6 on page 3268](#)
- [execute disconnect-admin-session on page 3269](#)
- [execute disk on page 3269](#)
- [execute ecnt-dsl on page 3271](#)
- [execute enter on page 3271](#)
- [execute erase-disk on page 3272](#)
- [execute extender on page 3272](#)
- [execute fabric-vpn on page 3277](#)
- [execute factoryreset-for-central-management on page 3278](#)
- [execute factoryreset-shutdown on page 3278](#)
- [execute factoryreset on page 3277](#)
- [execute factoryreset2 on page 3277](#)
- [execute fctems on page 3278](#)
- [execute federated-upgrade on page 3279](#)
- [execute fips on page 3281](#)
- [execute firewall on page 3282](#)
- [execute formatlogdisk on page 3282](#)
- [execute forticarrier-license on page 3283](#)
- [execute forticloud-sandbox on page 3283](#)
- [execute fortiguard-log on page 3283](#)

- [execute fortiguard-message on page 3284](#)
- [execute fortitoken-cloud on page 3288](#)
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- [execute vm-license on page 3390](#)
- [execute vpn on page 3392](#)
- [execute wake-on-lan on page 3402](#)
- [execute webcache on page 3402](#)
- [execute webfilter on page 3403](#)
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execute api-user

api-user

This topic includes the following commands:

- [execute api-user generate-key on page 3239](#)

execute api-user generate-key

Generate key for API users.

```
execute api-user generate-key <name>
```

Parameter	Description	Type	Size
<name>	API user name.	string	

execute auto-script

auto-script

This topic includes the following commands:

- [execute auto-script backup ftp on page 3239](#)
- [execute auto-script backup tftp on page 3240](#)
- [execute auto-script delete on page 3240](#)
- [execute auto-script result on page 3240](#)
- [execute auto-script start on page 3241](#)
- [execute auto-script status on page 3241](#)
- [execute auto-script stop on page 3241](#)
- [execute auto-script stopall on page 3241](#)

execute auto-script backup ftp

Backup output file to FTP sever.

```
execute auto-script backup ftp <name> <ftp server>[:ftp port] <Enter>|<user> <passwd>
```

Parameter	Description	Type	Size
<name>	Script name.	string	
<ftp server>[:ftp port]	FTP server IPv4, IPv6, or FQDN can be attached with port.	string	
<Enter> <user>	FTP username may be needed.	string	
<passwd>	FTP password.	string	

execute auto-script backup tftp

Backup output file to TFTP sever.

```
execute auto-script backup tftp <name> <tftp server>
```

Parameter	Description	Type	Size
<name>	Script name.	string	
<tftp server>	TFTP server IPv4, IPv6, or FQDN.	string	

execute auto-script delete

Delete output of executed scripts.

```
execute auto-script delete <name>
```

Parameter	Description	Type	Size
<name>	Script name.	string	

execute auto-script result

Display output of executed scripts.

```
execute auto-script result <name>
```

Parameter	Description	Type	Size
<name>	Script name.	string	

execute auto-script start

Start script.

```
execute auto-script start <name>
```

Parameter	Description	Type	Size
<name>	Script name.	string	

execute auto-script status

List of scripts currently running or executed.

```
execute auto-script status
```

execute auto-script stop

Stop script.

```
execute auto-script stop <name>
```

Parameter	Description	Type	Size
<name>	Script name.	string	

execute auto-script stopall

Stop all scripts currently running.

```
execute auto-script stopall
```

execute backup

backup

This topic includes the following commands:

- [execute backup config flash on page 3242](#)
- [execute backup config ftp on page 3243](#)
- [execute backup config management-station on page 3243](#)

- [execute backup config sftp on page 3243](#)
- [execute backup config tftp on page 3244](#)
- [execute backup config usb on page 3244](#)
- [execute backup config usb-mode on page 3244](#)
- [execute backup disk alllogs ftp on page 3245](#)
- [execute backup disk alllogs tftp on page 3245](#)
- [execute backup disk alllogs usb on page 3245](#)
- [execute backup disk ipsarchives ftp on page 3245](#)
- [execute backup disk ipsarchives tftp on page 3246](#)
- [execute backup disk ipsarchives usb on page 3246](#)
- [execute backup disk log ftp on page 3246](#)
- [execute backup disk log tftp on page 3247](#)
- [execute backup disk log usb on page 3247](#)
- [execute backup full-config ftp on page 3247](#)
- [execute backup full-config sftp on page 3248](#)
- [execute backup full-config tftp on page 3248](#)
- [execute backup full-config usb on page 3248](#)
- [execute backup full-config usb-mode on page 3249](#)
- [execute backup ipsuserdefsig ftp on page 3249](#)
- [execute backup ipsuserdefsig tftp on page 3249](#)
- [execute backup memory alllogs ftp on page 3249](#)
- [execute backup memory alllogs tftp on page 3250](#)
- [execute backup memory log ftp on page 3250](#)
- [execute backup memory log tftp on page 3250](#)
- [execute backup obfuscated-config ftp on page 3251](#)
- [execute backup obfuscated-config management-station on page 3251](#)
- [execute backup obfuscated-config sftp on page 3251](#)
- [execute backup obfuscated-config tftp on page 3252](#)
- [execute backup obfuscated-config usb on page 3252](#)
- [execute backup obfuscated-full-config ftp on page 3252](#)
- [execute backup obfuscated-full-config sftp on page 3253](#)
- [execute backup obfuscated-full-config tftp on page 3253](#)
- [execute backup obfuscated-full-config usb on page 3253](#)
- [execute backup obfuscated-yaml-config ftp on page 3254](#)
- [execute backup obfuscated-yaml-config tftp on page 3254](#)
- [execute backup yaml-config ftp on page 3254](#)
- [execute backup yaml-config tftp on page 3255](#)

execute backup config flash

Backup config file to flash.

```
execute backup config flash <comment>
```

Parameter	Description	Type	Size
<comment>	Make a comment for this config backup.	string	

execute backup config ftp

Backup config file to FTP server.

```
execute backup config ftp <string> <ftp server>[:ftp port] <Enter>|<user> <passwd>  
<Enter>|<passwd>
```

Parameter	Description	Type	Size
<string>	Make a file name (path) on the FTP server.	string	
<ftp server>[:ftp port]	FTP server IPv4, IPv6, or FQDN can be attached with port.	string	
<Enter> <user>	FTP username may be needed.	string	
<passwd>	FTP password.	string	
<Enter> <passwd>	Optional password to protect the backup content.	string	

execute backup config management-station

Backup config file to management station.

```
execute backup config management-station <comment>
```

Parameter	Description	Type	Size
<comment>	Make a comment for this config backup.	string	

execute backup config sftp

Backup config file to SFTP server.

```
execute backup config sftp <string> <sftp server>[:sftp port] <user> <passwd> <Enter>|<passwd>
```

Parameter	Description	Type	Size
<string>	Make a file name (path) on the SFTP server.	string	

Parameter	Description	Type	Size
<sftp server>[:sftp port]	SFTP server IPv4, IPv6 can be attached with port.	string	
<user>	SFTP username.	string	
<passwd>	SFTP password.	string	
<Enter> <passwd>	Optional password to protect the backup content.	string	

execute backup config tftp

Backup config file to TFTP server.

```
execute backup config tftp <string> <tftp server> <Enter>|<passwd>
```

Parameter	Description	Type	Size
<string>	Make a file name (path) on the TFTP server.	string	
<tftp server>	TFTP server IPv4, IPv6, or FQDN.	string	
<Enter> <passwd>	Optional password to protect the backup content.	string	

execute backup config usb

Backup config file to USB disk.

```
execute backup config usb <string> <Enter>|<passwd>
```

Parameter	Description	Type	Size
<string>	Make a file name on the USB disk.	string	
<Enter> <passwd>	Optional password to protect the backup content.	string	

execute backup config usb-mode

Backup config file for USB mode.

```
execute backup config usb-mode <Enter>|<passwd>
```

Parameter	Description	Type	Size
<Enter> <passwd>	Optional password to protect the backup file.	string	

execute backup disk alllogs ftp

Backup all log files to FTP server.

```
execute backup disk alllogs ftp <ftp server>[:ftp port] <Enter>|<user> <passwd> <Enter>|<string>
```

Parameter	Description	Type	Size
<ftp server>[:ftp port]	FTP server IPv4, IPv6, or FQDN can be attached with port.	string	
<Enter> <user>	FTP username may be needed.	string	
<passwd>	FTP password.	string	
<Enter> <string>	Optional log file compression option [uncompressed compressed].	string	

execute backup disk alllogs tftp

Backup all log file(s) to TFTP server.

```
execute backup disk alllogs tftp <tftp server>
```

Parameter	Description	Type	Size
<tftp server>	TFTP server IPv4, IPv6, or FQDN.	string	

execute backup disk alllogs usb

Backup all log files to USB.

```
execute backup disk alllogs usb
```

execute backup disk ipsarchives ftp

Backup IPS archive file(s) to FTP server.

```
execute backup disk ipsarchives ftp <ftp server>[:ftp port] <Enter>|<user> <passwd>
```

Parameter	Description	Type	Size
<ftp server>[:ftp port]	FTP server IPv4, IPv6, or FQDN can be attached with port.	string	

Parameter	Description	Type	Size
<Enter> <user>	FTP username may be needed.	string	
<passwd>	FTP password.	string	

execute backup disk ipsarchives tftp

Backup IPS archive file(s) to TFTP server.

```
execute backup disk ipsarchives tftp <tftp server>
```

Parameter	Description	Type	Size
<tftp server>	TFTP server IPv4, IPv6, or FQDN.	string	

execute backup disk ipsarchives usb

Backup IPS archive file(s) to USB.

```
execute backup disk ipsarchives usb
```

execute backup disk log ftp

Backup specific log file(s) to FTP server.

```
execute backup disk log ftp <ftp server>[:ftp port] <user> <passwd> <string> <Enter>|<string>
```

Parameter	Description	Type	Size
<ftp server>[:ftp port]	FTP server IPv4, IPv6, or FQDN can be attached with port.	string	
<user>	FTP username.	string	
<passwd>	FTP password.	string	
<string>	, traffic, event, virus, webfilter, ips, emailfilter, anomaly, voip, dlp, app-ctrl, waf, dns, ssh, ssl, file-filter, icap, sctp-filter, forti-switch	string	
<Enter> <string>	Optional log file compression option [uncompressed compressed].	string	

execute backup disk log tftp

Backup specific log file(s) to TFTP server.

```
execute backup disk log tftp <tftp server> <string>
```

Parameter	Description	Type	Size
<tftp server>	TFTP server IPv4, IPv6, or FQDN.	string	
<string>	, traffic, event, virus, webfilter, ips, emailfilter, anomaly, voip, dlp, app-ctrl, waf, dns, ssh, ssl, file-filter, icap, sctp-filter, forti-switch	string	

execute backup disk log usb

Backup specific log file(s) to USB.

```
execute backup disk log usb <string>
```

Parameter	Description	Type	Size
<string>	, traffic, event, virus, webfilter, ips, emailfilter, anomaly, voip, dlp, app-ctrl, waf, dns, ssh, ssl, file-filter, icap, sctp-filter, forti-switch	string	

execute backup full-config ftp

Backup full config file to FTP server.

```
execute backup full-config ftp <string> <ftp server>[:ftp port] <Enter>|<user> <passwd>  
<Enter>|<passwd>
```

Parameter	Description	Type	Size
<string>	Make a file name (path) on the FTP server.	string	
<ftp server>[:ftp port]	FTP server IPv4, IPv6, or FQDN can be attached with port.	string	
<Enter> <user>	FTP username may be needed.	string	
<passwd>	FTP password.	string	
<Enter> <passwd>	Optional password to protect the backup content.	string	

execute backup full-config sftp

Backup full config file to SFTP server.

```
execute backup full-config sftp <string> <sftp server>[:sftp port] <user> <passwd>  
<Enter>|<passwd>
```

Parameter	Description	Type	Size
<string>	Make a file name (path) on the SFTP server.	string	
<sftp server>[:sftp port]	SFTP server IPv4, IPv6 can be attached with port.	string	
<user>	SFTP username.	string	
<passwd>	SFTP password.	string	
<Enter> <passwd>	Optional password to protect the backup content.	string	

execute backup full-config tftp

Backup full config file to TFTP server.

```
execute backup full-config tftp <string> <tftp server> <Enter>|<passwd>
```

Parameter	Description	Type	Size
<string>	Make a file name (path) on the TFTP server.	string	
<tftp server>	TFTP server IPv4, IPv6, or FQDN.	string	
<Enter> <passwd>	Optional password to protect the backup content.	string	

execute backup full-config usb

Backup full config file to USB disk.

```
execute backup full-config usb <string> <Enter>|<passwd>
```

Parameter	Description	Type	Size
<string>	Make a file name on the USB disk.	string	
<Enter> <passwd>	Optional password to protect the backup content.	string	

execute backup full-config usb-mode

Backup full config file for USB mode.

```
execute backup full-config usb-mode <Enter>|<passwd>
```

Parameter	Description	Type	Size
<Enter> <passwd>	Optional password to protect the backup file.	string	

execute backup ipsuserdefsig ftp

Backup user defined IPS signatures to FTP server.

```
execute backup ipsuserdefsig ftp <string> <ftp server>[:ftp port] <Enter>|<user> <passwd>
```

Parameter	Description	Type	Size
<string>	Make a file name (path) on the FTP server.	string	
<ftp server>[:ftp port]	FTP server IPv4, IPv6, or FQDN can be attached with port.	string	
<Enter> <user>	FTP username may be needed.	string	
<passwd>	FTP password.	string	

execute backup ipsuserdefsig tftp

Backup user defined IPS signatures to TFTP server.

```
execute backup ipsuserdefsig tftp <string> <tftp server>
```

Parameter	Description	Type	Size
<string>	Make a file name (path) on the TFTP server.	string	
<tftp server>	TFTP server IPv4, IPv6, or FQDN.	string	

execute backup memory alllogs ftp

Backup all log files to FTP server.

```
execute backup memory alllogs ftp <ftp server>[:ftp port] <Enter>|<user> <passwd>
```


Parameter	Description	Type	Size
<ftp server>[:ftp port]	FTP server IPv4, IPv6, or FQDN can be attached with port.	string	
<Enter> <user>	FTP username may be needed.	string	
<passwd>	FTP password.	string	

execute backup memory alllogs tftp

Backup all log file(s) to TFTP server.

```
execute backup memory alllogs tftp <tftp server>
```

Parameter	Description	Type	Size
<tftp server>	TFTP server IPv4, IPv6, or FQDN.	string	

execute backup memory log ftp

Backup specific log file(s) to FTP server.

```
execute backup memory log ftp <ftp server>[:ftp port] <user> <passwd> <string>
```

Parameter	Description	Type	Size
<ftp server>[:ftp port]	FTP server IPv4, IPv6, or FQDN can be attached with port.	string	
<user>	FTP username.	string	
<passwd>	FTP password.	string	
<string>	, traffic, event, virus, webfilter, ips, emailfilter, anomaly, voip, dlp, app-ctrl, waf, dns, ssh, ssl, file-filter, icap, sctp-filter, forti-switch	string	

execute backup memory log tftp

Backup specific log file(s) to TFTP server.

```
execute backup memory log tftp <tftp server> <string>
```

Parameter	Description	Type	Size
<tfp server>	TFTP server IPv4, IPv6, or FQDN.	string	
<string>	, traffic, event, virus, webfilter, ips, emailfilter, anomaly, voip, dlp, app-ctrl, waf, dns, ssh, ssl, file-filter, icap, sctp-filter, forti-switch	string	

execute backup obfuscated-config ftp

Backup obfuscated config file to FTP server.

```
execute backup obfuscated-config ftp <string> <ftp server>[:ftp port] <Enter>|<user> <passwd>
<Enter>|<passwd>
```

Parameter	Description	Type	Size
<string>	Make a file name (path) on the FTP server.	string	
<ftp server>[:ftp port]	FTP server IPv4, IPv6, or FQDN can be attached with port.	string	
<Enter> <user>	FTP username may be needed.	string	
<passwd>	FTP password.	string	
<Enter> <passwd>	Optional password to protect the backup content.	string	

execute backup obfuscated-config management-station

Backup obfuscated config file to management station.

```
execute backup obfuscated-config management-station <comment>
```

Parameter	Description	Type	Size
<comment>	Make a comment for this config backup.	string	

execute backup obfuscated-config sftp

Backup obfuscated config file to SFTP server.

```
execute backup obfuscated-config sftp <string> <sftp server>[:sftp port] <user> <passwd>
<Enter>|<passwd>
```

Parameter	Description	Type	Size
<string>	Make a file name (path) on the SFTP server.	string	
<sftp server>[:sftp port]	SFTP server IPv4, IPv6 can be attached with port.	string	
<user>	SFTP username.	string	
<passwd>	SFTP password.	string	
<Enter> <passwd>	Optional password to protect the backup content.	string	

execute backup obfuscated-config tftp

Backup obfuscated config file to TFTP server.

```
execute backup obfuscated-config tftp <string> <tftp server> <Enter>|<passwd>
```

Parameter	Description	Type	Size
<string>	Make a file name (path) on the TFTP server.	string	
<tftp server>	TFTP server IPv4, IPv6, or FQDN.	string	
<Enter> <passwd>	Optional password to protect the backup content.	string	

execute backup obfuscated-config usb

Backup obfuscated config file to USB disk.

```
execute backup obfuscated-config usb <string> <Enter>|<passwd>
```

Parameter	Description	Type	Size
<string>	Make a file name on the USB disk.	string	
<Enter> <passwd>	Optional password to protect the backup content.	string	

execute backup obfuscated-full-config ftp

Backup obfuscated full config file to FTP server.

```
execute backup obfuscated-full-config ftp <string> <ftp server>[:ftp port] <Enter>|<user> <passwd> <Enter>|<passwd>
```

Parameter	Description	Type	Size
<string>	Make a file name (path) on the FTP server.	string	
<ftp server>[:ftp port]	FTP server IPv4, IPv6, or FQDN can be attached with port.	string	
<Enter> <user>	FTP username may be needed.	string	
<passwd>	FTP password.	string	
<Enter> <passwd>	Optional password to protect the backup content.	string	

execute backup obfuscated-full-config sftp

Backup obfuscated full config file to SFTP server.

```
execute backup obfuscated-full-config sftp <string> <sftp server>[:sftp port] <user> <passwd>
<Enter>|<passwd>
```

Parameter	Description	Type	Size
<string>	Make a file name (path) on the SFTP server.	string	
<sftp server>[:sftp port]	SFTP server IPv4, IPv6 can be attached with port.	string	
<user>	SFTP username.	string	
<passwd>	SFTP password.	string	
<Enter> <passwd>	Optional password to protect the backup content.	string	

execute backup obfuscated-full-config tftp

Backup obfuscated full config file to TFTP server.

```
execute backup obfuscated-full-config tftp <string> <tftp server> <Enter>|<passwd>
```

Parameter	Description	Type	Size
<string>	Make a file name (path) on the TFTP server.	string	
<tftp server>	TFTP server IPv4, IPv6, or FQDN.	string	
<Enter> <passwd>	Optional password to protect the backup content.	string	

execute backup obfuscated-full-config usb

Backup obfuscated full config file to USB disk.

```
execute backup obfuscated-full-config usb <string> <Enter>|<passwd>
```

Parameter	Description	Type	Size
<string>	Make a file name on the USB disk.	string	
<Enter> <passwd>	Optional password to protect the backup content.	string	

execute backup obfuscated-yaml-config ftp

Backup obfuscated YAML config file to FTP server.

```
execute backup obfuscated-yaml-config ftp <string> <ftp server>[:ftp port] <Enter>|<user> <passwd>
<Enter>|<passwd>
```

Parameter	Description	Type	Size
<string>	Make a file name (path) on the FTP server.	string	
<ftp server>[:ftp port]	FTP server IPv4, IPv6, or FQDN can be attached with port.	string	
<Enter> <user>	FTP username may be needed.	string	
<passwd>	FTP password.	string	
<Enter> <passwd>	Optional password to protect the backup content.	string	

execute backup obfuscated-yaml-config tftp

Backup obfuscated YAML config file to TFTP server.

```
execute backup obfuscated-yaml-config tftp <string> <tftp server> <Enter>|<passwd>
```

Parameter	Description	Type	Size
<string>	Make a file name (path) on the TFTP server.	string	
<tftp server>	TFTP server IPv4, IPv6, or FQDN.	string	
<Enter> <passwd>	Optional password to protect the backup content.	string	

execute backup yaml-config ftp

Backup YAML config file to FTP server.

```
execute backup yaml-config ftp <string> <ftp server>[:ftp port] <Enter>|<user> <passwd>
<Enter>|<passwd>
```

Parameter	Description	Type	Size
<string>	Make a file name (path) on the FTP server.	string	
<ftp server>[:ftp port]	FTP server IPv4, IPv6, or FQDN can be attached with port.	string	
<Enter> <user>	FTP username may be needed.	string	
<passwd>	FTP password.	string	
<Enter> <passwd>	Optional password to protect the backup content.	string	

execute backup yaml-config tftp

Backup YAML config file to TFTP server.

```
execute backup yaml-config tftp <string> <tftp server> <Enter>|<passwd>
```

Parameter	Description	Type	Size
<string>	Make a file name (path) on the TFTP server.	string	
<tftp server>	TFTP server IPv4, IPv6, or FQDN.	string	
<Enter> <passwd>	Optional password to protect the backup content.	string	

execute batch

batch

This topic includes the following commands:

- [execute batch end on page 3255](#)
- [execute batch lastlog on page 3256](#)
- [execute batch start on page 3256](#)
- [execute batch status on page 3256](#)

execute batch end

Batch mode end.

```
execute batch end
```

execute batch lastlog

Read the result of last batch commands.

```
execute batch lastlog
```

execute batch start

Batch mode start.

```
execute batch start
```

execute batch status

Batch mode status.

```
execute batch status
```

execute ble

ble

This topic includes the following commands:

- [execute ble check_default on page 3257](#)
- [execute ble check_password on page 3257](#)
- [execute ble check_registration on page 3257](#)
- [execute ble check_upgrade on page 3257](#)
- [execute ble dhcp on page 3257](#)
- [execute ble hostname on page 3258](#)
- [execute ble image on page 3258](#)
- [execute ble interface on page 3258](#)
- [execute ble ip on page 3258](#)
- [execute ble matrix on page 3259](#)
- [execute ble model on page 3259](#)
- [execute ble ping on page 3259](#)
- [execute ble pppoe on page 3259](#)
- [execute ble register on page 3259](#)
- [execute ble serial on page 3260](#)
- [execute ble shutdown on page 3260](#)

- [execute ble static on page 3260](#)
- [execute ble type on page 3260](#)
- [execute ble upgrade on page 3261](#)
- [execute ble version on page 3261](#)

execute ble check_default

Check If Factory Reset State.

```
execute ble check_default
```

execute ble check_password

Check If Password set.

```
execute ble check_password
```

execute ble check_registration

Check device FortiCare registration status.

```
execute ble check_registration
```

execute ble check_upgrade

Check If Upgrade Available.

```
execute ble check_upgrade <patch>
```

Parameter	Description	Type	Size
<patch>	start build patch.	string	

execute ble dhcp

Interface External DHCP client mode.

```
execute ble dhcp <interface>
```


Parameter	Description	Type	Size
<interface>	Network interface to be configured.	string	

execute ble hostname

Get or Set System Hostname.

```
execute ble hostname <name>
```

Parameter	Description	Type	Size
<name>	Host Name.	string	

execute ble image

Download image list.

```
execute ble image <patch>
```

Parameter	Description	Type	Size
<patch>	start build patch.	string	

execute ble interface

List Management Interfaces.

```
execute ble interface
```

execute ble ip

Get Interface IP Address.

```
execute ble ip <interface>
```

Parameter	Description	Type	Size
<interface>	Wan Interface.	string	

execute ble matrix

Download Upgrade Matrix.

```
execute ble matrix <patch>
```

Parameter	Description	Type	Size
<patch>	start build patch.	string	

execute ble model

Get System Model.

```
execute ble model
```

execute ble ping

Ping IP Address or Domain Name.

```
execute ble ping <ip>
```

Parameter	Description	Type	Size
<ip>	IP address	string	

execute ble pppoe

Interface Static Setting.

```
execute ble pppoe <interface> <username> <password>
```

Parameter	Description	Type	Size
<interface>	Network interface to be configured.	string	
<username>	Username of the PPPoE account, provided by your ISP.	string	
<password>	Please input password value.	string	

execute ble register

Register FortiGate.

```
execute ble register <email> <password> <reseller-id> <reseller>
```

Parameter	Description	Type	Size
<email>	Email Address.	string	
<password>	Password of FortiCare Account.	string	
<reseller-id>	Reseller Id.	string	
<reseller>	Reseller.	string	

execute ble serial

Get System Serial Number.

```
execute ble serial
```

execute ble shutdown

Shutdown Bluetooth.

```
execute ble shutdown
```

execute ble static

Interface Static Setting.

```
execute ble static <interface> <class_ip> <net_netmask> <gateway_ip>
```

Parameter	Description	Type	Size
<interface>	Network interface to be configured.	string	
<class_ip>	IP address (syntax = 192.168.11.1).	string	
<net_netmask>	subnet mask (syntax = 255.255.255.0).	string	
<gateway_ip>	Gateway IP address (syntax = 192.168.11.99).	string	

execute ble type

Get Device Type.

```
execute ble type
```

execute ble upgrade

Upgrade Firmware.

```
execute ble upgrade <version>
```

Parameter	Description	Type	Size
<version>	Firmware Version.	string	

execute ble version

Get OS Version.

```
execute ble version
```

execute bypass-mode

bypass-mode

This topic includes the following commands:

- [execute bypass-mode disable on page 3261](#)
- [execute bypass-mode enable on page 3261](#)

execute bypass-mode disable

disable bypass

```
execute bypass-mode disable <index>
```

Parameter	Description	Type	Size
<index>	Bypass pair index (1-16), or all	string	

execute bypass-mode enable

enable bypass

```
execute bypass-mode enable <index>
```

Parameter	Description	Type	Size
<index>	Bypass pair index (1-16), or all	string	

execute central-mgmt

central-mgmt

This topic includes the following commands:

- [execute central-mgmt register-device on page 3262](#)
- [execute central-mgmt set-mgmt-id on page 3262](#)
- [execute central-mgmt unregister-device on page 3262](#)

execute central-mgmt register-device

Register device to FortiManager from unregistered device list.

```
execute central-mgmt register-device <fmg-serial-no> <fmg-register-password>
```

Parameter	Description	Type	Size
<fmg-serial-no>	FortiManager serial number.	string	
<fmg-register-password>	Register password in to FortiManager.	string	

execute central-mgmt set-mgmt-id

Management ID of Central Management Service.

```
execute central-mgmt set-mgmt-id <management id>
```

Parameter	Description	Type	Size
<management id>	Management ID (must be entered in encrypted format).	string	

execute central-mgmt unregister-device

Remove device from its manager's device list.

```
execute central-mgmt unregister-device <fmg-serial-no>
```

Parameter	Description	Type	Size
<fmg-serial-no>	FortiManager serial number.	string	

execute cfg

cfg

This topic includes the following commands:

- [execute cfg reload on page 3263](#)
- [execute cfg save on page 3263](#)

execute cfg reload

Reboot to reload the configs.

```
execute cfg reload
```

execute cfg save

Save configs.

```
execute cfg save
```

execute clear

clear

This topic includes the following commands:

- [execute clear system arp table on page 3263](#)

execute clear system arp table

Clear system ARP table.

```
execute clear system arp table
```

execute cli

cli

This topic includes the following commands:

- [execute cli check-template-status on page 3264](#)
- [execute cli status-msg-only on page 3264](#)

execute cli check-template-status

Check SCP script template running status.

```
execute cli check-template-status
```

execute cli status-msg-only

CLI standardized error output.

```
execute cli status-msg-only <enable/disable>
```

Parameter	Description	Type	Size
<enable/disable>	Enable/disable CLI standardized error output.	string	

execute config-transaction

config-transaction

This topic includes the following commands:

- [execute config-transaction abort on page 3265](#)
- [execute config-transaction commit on page 3265](#)
- [execute config-transaction start on page 3265](#)

execute config-transaction abort

Abort configuration transaction.

```
execute config-transaction abort
```

execute config-transaction commit

Commit configuration transaction.

```
execute config-transaction commit
```

execute config-transaction start

Start configuration transaction.

```
execute config-transaction start <integer>
```

Parameter	Description	Type	Size
<integer>	Transaction timeout in minutes (1 - 60). Default value is 5.	string	

execute cpu

cpu

This topic includes the following commands:

- [execute cpu add on page 3265](#)
- [execute cpu show on page 3266](#)

execute cpu add

Activate new CPU.

```
execute cpu add <number>
```

Parameter	Description	Type	Size
<number>	New Active CPU Number.	string	

execute cpu show

Show CPU number.

```
execute cpu show
```

execute date

System date.

```
execute date <yyyy-mm-dd>
```

Parameter	Description	Type	Size
<yyyy-mm-dd>	yyyy: 2001-2037, mm: 1-12, dd: 1-31.	string	

execute device-upgrade

device-upgrade

This topic includes the following commands:

- [execute device-upgrade cancel on page 3266](#)
- [execute device-upgrade immediate on page 3266](#)

execute device-upgrade cancel

Cancel a Fortinet device's upgrade by removing it from the upgrade table.

```
execute device-upgrade cancel <serial>
```

Parameter	Description	Type	Size
<serial>	Serial number of the Fortinet device to upgrade.	string	

execute device-upgrade immediate

Configure a Fortinet device to upgrade immediately.

```
execute device-upgrade immediate <device-type> <serial> <major> <minor> <patch>
```

Parameter	Description	Type	Size
<device-type>	Fortinet device type to upgrade.	string	
<serial>	Fortinet device serial number to upgrade.	string	
<major>	Major version of the Fortinet OS image being upgraded to.	string	
<minor>	Minor version of the Fortinet OS image being upgraded to.	string	
<patch>	Patch version of the Fortinet OS image being upgraded to.	string	

execute dhcp

dhcp

This topic includes the following commands:

- [execute dhcp lease-clear on page 3267](#)
- [execute dhcp lease-list on page 3267](#)

execute dhcp lease-clear

Clear all DHCP leases.

```
execute dhcp lease-clear <IPv4 address> or <IPv4 starting address-IPv4 ending address> <all>
```

Parameter	Description	Type	Size
<IPv4 address> or <IPv4 starting address-IPv4 ending address>	Clear lease(s) on this IP address.	string	
<all>	Clear all leases.	string	

execute dhcp lease-list

List all DHCP leases.

```
execute dhcp lease-list <interface>
```

Parameter	Description	Type	Size
<interface>	List leases on this interface.	string	

execute dhcp6

dhcp6

This topic includes the following commands:

- [execute dhcp6 lease-clear on page 3268](#)
- [execute dhcp6 lease-list on page 3268](#)

execute dhcp6 lease-clear

Clear all DHCPv6 leases.

```
execute dhcp6 lease-clear <IPv6 address> or <IPv6 starting address-IPv6 ending address> <all>
```

Parameter	Description	Type	Size
<IPv6 address> or <IPv6 starting address-IPv6 ending address>	Clear lease(s) on this IPv6 address.	string	
<all>	Clear all leases.	string	

execute dhcp6 lease-list

List all DHCPv6 leases.

```
execute dhcp6 lease-list <interface>
```

Parameter	Description	Type	Size
<interface>	List leases on this interface.	string	

execute disconnect-admin-session

Disconnect logged-in admin user.

```
execute disconnect-admin-session <integer>
```

Parameter	Description	Type	Size
<integer>	Index of user to be disconnected in logged-users table.	string	

execute disk

disk

This topic includes the following commands:

- [execute disk format on page 3269](#)
- [execute disk list on page 3269](#)
- [execute disk raid disable on page 3270](#)
- [execute disk raid enable on page 3270](#)
- [execute disk raid rebuild on page 3270](#)
- [execute disk raid rebuild-level on page 3270](#)
- [execute disk raid status on page 3270](#)
- [execute disk scan on page 3271](#)

execute disk format

Format a partition.

```
execute disk format
```

execute disk list

List disk devices and partitions.

```
execute disk list
```

execute disk raid disable

disable RAID

```
execute disk raid disable
```

execute disk raid enable

enable RAID

```
execute disk raid enable <RAID level>
```

Parameter	Description	Type	Size
<RAID level>	supported: Raid-0, Raid-1 (default: Raid-0)	string	

execute disk raid rebuild

rebuild RAID

```
execute disk raid rebuild
```

execute disk raid rebuild-level

rebuild RAID with new level

```
execute disk raid rebuild-level <RAID level>
```

Parameter	Description	Type	Size
<RAID level>	supported: Raid-0, Raid-1	string	

execute disk raid status

show RAID status

```
execute disk raid status
```

execute disk scan

Scan a partition and fix errors.

```
execute disk scan
```

execute ecnt-dsl

ecnt-dsl

This topic includes the following commands:

- [execute ecnt-dsl update on page 3271](#)
- [execute ecnt-dsl upload on page 3271](#)

execute ecnt-dsl update

Update ECNT Firmware

```
execute ecnt-dsl update
```

execute ecnt-dsl upload

upload file

```
execute ecnt-dsl upload <url> <file>
```

Parameter	Description	Type	Size
<url>	URL of file server	string	
<file>	Full path of file to be uploaded.	string	

execute enter

Select virtual domain.

```
execute enter <name>
```

Parameter	Description	Type	Size
<name>	VDOM name.	string	

execute erase-disk

Erase a disk.

```
execute erase-disk
```

execute extender

extender

This topic includes the following commands:

- [execute extender delete-fortiextender-image on page 3272](#)
- [execute extender install-forticloud-mdm-package on page 3273](#)
- [execute extender install-forticloud-os-image on page 3273](#)
- [execute extender list-fortiextender-image on page 3273](#)
- [execute extender lte-carrier add on page 3273](#)
- [execute extender lte-carrier del on page 3274](#)
- [execute extender lte-simmap add on page 3274](#)
- [execute extender lte-simmap del on page 3274](#)
- [execute extender push-fortiextender-image on page 3274](#)
- [execute extender push-fortiextender-stage-image on page 3275](#)
- [execute extender query-forticloud-mdmpkg-image on page 3275](#)
- [execute extender query-forticloud-os-image on page 3275](#)
- [execute extender reset-fortiextender on page 3276](#)
- [execute extender restart-fortiextender-daemon on page 3276](#)
- [execute extender upload-fortiextender-image ftp on page 3276](#)
- [execute extender upload-fortiextender-image tftp on page 3276](#)

execute extender delete-fortiextender-image

Delete FortiExtender images.

```
execute extender delete-fortiextender-image
```

execute extender install-forticloud-mdm-package

Install FortiExtender modem package from Cloud.

```
execute extender install-forticloud-mdm-package <filename> <sn>
```

Parameter	Description	Type	Size
<filename>	FortiExtender Cloud modem package version.	string	
<sn>	FortiExtender serial number.	string	

execute extender install-forticloud-os-image

Install FortiExtender OS image from Cloud.

```
execute extender install-forticloud-os-image <filename> <sn>
```

Parameter	Description	Type	Size
<filename>	FortiExtender Cloud image version.	string	
<sn>	FortiExtender serial number.	string	

execute extender list-fortiextender-image

List FortiExtender images.

```
execute extender list-fortiextender-image
```

execute extender lte-carrier add

Add a LTE carrier with string.

```
execute extender lte-carrier add <SN> <string> [<string>]
```

Parameter	Description	Type	Size
<SN>	FortiExtender serial number.	string	
<string>	Newly added carrier name on the FEXT.	string	
[<string>]	Optional and default as GENERIC. Base carrier name on the FEXT, where the PRI and FW is referred by the newly added carrier.	string	

execute extender lte-carrier del

Delete a LTE carrier with string.

```
execute extender lte-carrier del <SN> <string>
```

Parameter	Description	Type	Size
<SN>	FortiExtender serial number.	string	
<string>	Carrier name on the FEXT.	string	

execute extender lte-simmap add

Add a carrier based on MCC/MNC.

```
execute extender lte-simmap add <SN> <string> <string> <string>
```

Parameter	Description	Type	Size
<SN>	FortiExtender serial number.	string	
<string>	MCC number.	string	
<string>	MNC number.	string	
<string>	Carrier name on the FEXT.	string	

execute extender lte-simmap del

Delete a LTE carrier with string.

```
execute extender lte-simmap del <SN> <string> <string> <string>
```

Parameter	Description	Type	Size
<SN>	FortiExtender serial number.	string	
<string>	MCC number.	string	
<string>	MNC number.	string	
<string>	Carrier name on the FEXT.	string	

execute extender push-fortiextender-image

Push FortiExtender image to a managed FortiExtender.

```
execute extender push-fortiextender-image <vdom> <sn> <filename>
```

Parameter	Description	Type	Size
<vdom>	FortiExtender session VDOM.	string	
<sn>	FortiExtender serial number.	string	
<filename>	FortiExtender image filename.	string	

execute extender push-fortiextender-stage-image

Push FortiExtender stage image to a managed FortiExtender.

```
execute extender push-fortiextender-stage-image <vdom> <sn> <filename>
```

Parameter	Description	Type	Size
<vdom>	FortiExtender session VDOM.	string	
<sn>	FortiExtender serial number.	string	
<filename>	FortiExtender image filename.	string	

execute extender query-forticloud-mdmpkg-image

Query FortiExtender modem packages on Cloud.

```
execute extender query-forticloud-mdmpkg-image <all>|<filename> <sn>
```

Parameter	Description	Type	Size
<all> <filename>	FortiExtender Cloud modem packages.	string	
<sn>	FortiExtender serial number.	string	

execute extender query-forticloud-os-image

Query FortiExtender OS images on Cloud.

```
execute extender query-forticloud-os-image <all>|<filename> <sn>
```

Parameter	Description	Type	Size
<all> <filename>	FortiExtender Cloud OS images.	string	
<sn>	FortiExtender serial number.	string	

execute extender reset-fortiextender

Restart managed FortiExtender.

```
execute extender reset-fortiextender <all>|<SN>
```

Parameter	Description	Type	Size
<all> <SN>	FortiExtender serial number.	string	

execute extender restart-fortiextender-daemon

Restart ForExtender AC daemon.

```
execute extender restart-fortiextender-daemon
```

execute extender upload-fortiextender-image ftp

Upload FortiExtender image from FTP server.

```
execute extender upload-fortiextender-image ftp <string> <ftp server>[:ftp port] <Enter>|<user>  
<passwd>
```

Parameter	Description	Type	Size
<string>	FortiExtender image file name on the remote server.	string	
<ftp server>[:ftp port]	FTP server IPv4, IPv6, or FQDN can be attached with port.	string	
<Enter> <user>	FTP username may be needed.	string	
<passwd>	FTP password.	string	

execute extender upload-fortiextender-image tftp

Upload FortiExtender image from TFTP server.

```
execute extender upload-fortiextender-image tftp <string> <tftp server>
```

Parameter	Description	Type	Size
<string>	File name on the TFTP server.	string	
<tftp server>	TFTP server IPv4, IPv6, or FQDN.	string	

execute fabric-vpn

fabric-vpn

This topic includes the following commands:

- [execute fabric-vpn flush-setup on page 3277](#)
- [execute fabric-vpn update-setup on page 3277](#)

execute fabric-vpn flush-setup

Remove fabric VPN settings.

```
execute fabric-vpn flush-setup
```

execute fabric-vpn update-setup

Update fabric VPN setup.

```
execute fabric-vpn update-setup
```

execute factoryreset

Reset to factory default now.

```
execute factoryreset
```

execute factoryreset2

Reset to factory default except system.global.vdom-mode/system.global.long-vdom-name/VDOMS/system.virtual-switch/system.interface/system.settings/router.static/router.static6.

```
execute factoryreset2
```

execute factoryreset-for-central-management

Reset to factory default except system.central-management.serial-number/system.central-management.fmg.

```
execute factoryreset-for-central-management
```

execute factoryreset-shutdown

Reset to factory default and shutdown.

```
execute factoryreset-shutdown
```

execute fctems

fctems

This topic includes the following commands:

- [execute fctems is-verified on page 3278](#)
- [execute fctems unverify on page 3278](#)
- [execute fctems verify on page 3279](#)

execute fctems is-verified

Check if Configured EMS server has a verified certificate.

```
execute fctems is-verified <fctems>
```

Parameter	Description	Type	Size
<fctems>	FortiClient EMS table entry id in CMDB.	string	

execute fctems unverify

Unverify FortiClient EMS server.

```
execute fctems unverify <fctems>
```

Parameter	Description	Type	Size
<fctems>	FortiClient EMS table entry id in CMDB.	string	

execute fctems verify

Verify FortiClient EMS server.

```
execute fctems verify <fctems>
```

Parameter	Description	Type	Size
<fctems>	FortiClient EMS table entry id in CMDB.	string	

execute federated-upgrade

federated-upgrade

This topic includes the following commands:

- [execute federated-upgrade cancel on page 3279](#)
- [execute federated-upgrade initialize on page 3279](#)
- [execute federated-upgrade quick-fortigate-upgrade on page 3280](#)
- [execute federated-upgrade quick-full-upgrade on page 3280](#)
- [execute federated-upgrade restart on page 3280](#)
- [execute federated-upgrade safe-cancel on page 3281](#)
- [execute federated-upgrade status on page 3281](#)

execute federated-upgrade cancel

Cancel the currently configured upgrade.

```
execute federated-upgrade cancel
```

execute federated-upgrade initialize

Set up a federated upgrade.

```
execute federated-upgrade initialize
```

execute federated-upgrade quick-fortigate-upgrade

Set up a 15 minute immediate mode upgrade for all FortiGates in the CSF tree.

```
execute federated-upgrade quick-fortigate-upgrade <major> <minor> <patch> <delay-minutes> <max-minutes>
```

Parameter	Description	Type	Size
<major>	Major version of the Fortinet OS image being upgraded to.	string	
<minor>	Minor version of the Fortinet OS image being upgraded to.	string	
<patch>	Patch version of the Fortinet OS image being upgraded to.	string	
<delay-minutes>	Minutes to delay before starting the upgrade setup.	string	
<max-minutes>	Number of minutes allowed for upgrade preparation.	string	

execute federated-upgrade quick-full-upgrade

Set up a 15 minute immediate mode upgrade for all CSF devices.

```
execute federated-upgrade quick-full-upgrade <major> <minor> <patch> <delay-minutes> <max-minutes>
```

Parameter	Description	Type	Size
<major>	Major version of the Fortinet OS image being upgraded to.	string	
<minor>	Minor version of the Fortinet OS image being upgraded to.	string	
<patch>	Patch version of the Fortinet OS image being upgraded to.	string	
<delay-minutes>	Minutes to delay before starting the upgrade setup.	string	
<max-minutes>	Number of minutes allowed for upgrade preparation.	string	

execute federated-upgrade restart

Restart the currently configured federated upgrade.

```
execute federated-upgrade restart
```

execute federated-upgrade safe-cancel

Cancel the currently configured upgrade via the safe cancel API. Only cancels user-created upgrades.

```
execute federated-upgrade safe-cancel
```

execute federated-upgrade status

Show the current status of federated upgrade.

```
execute federated-upgrade status
```

execute fips

fips

This topic includes the following commands:

- [execute fips tftp-drbg-entropy-source on page 3281](#)
- [execute fips tftp-test-vectors on page 3281](#)

execute fips tftp-drbg-entropy-source

tftp files and generate drbg entropy source samples

```
execute fips tftp-drbg-entropy-source <ip> <dir> <number>
```

Parameter	Description	Type	Size
<ip>	IP address of the tftp server	string	
<dir>	directory for the entropy sample files	string	
<number>	total number of the entropy samples.	string	

execute fips tftp-test-vectors

tftp files and generate test vector results

```
execute fips tftp-test-vectors <ip> <dir> <file name>
```


Parameter	Description	Type	Size
<ip>	IP address of the tftp server	string	
<dir>	directory of the test files	string	
<file name>	The JSON file to test.	string	

execute firewall

firewall

This topic includes the following commands:

- [execute firewall ssh generate local-ca on page 3282](#)
- [execute firewall ssh generate local-key on page 3282](#)

execute firewall ssh generate local-ca

Generate the default ssh local key.

```
execute firewall ssh generate local-ca <string>
```

Parameter	Description	Type	Size
<string>	Local CA name.	string	

execute firewall ssh generate local-key

Generate the default ssh local key.

```
execute firewall ssh generate local-key <string>
```

Parameter	Description	Type	Size
<string>	Local key name.	string	

execute formatlogdisk

Format log disk.

```
execute formatlogdisk
```

execute forticarrier-license

forticarrier-license

```
execute forticarrier-license <activation-code>
```

Parameter	Description	Type	Size
<activation-code>	Format:0000-0000-0000-0000-0001 or <license-key> Format:0000-0000-0000-0000-0000-0000-00	string	

execute forticloud-sandbox

forticloud-sandbox

This topic includes the following commands:

- [execute forticloud-sandbox region on page 3283](#)
- [execute forticloud-sandbox update on page 3283](#)

execute forticloud-sandbox region

Get FortiCloud sandbox region.

```
execute forticloud-sandbox region
```

execute forticloud-sandbox update

Update FortiCloud sandbox contract.

```
execute forticloud-sandbox update
```

execute fortiguard-log

fortiguard-log

This topic includes the following commands:

- [execute fortiguard-log certificate-activation on page 3284](#)
- [execute fortiguard-log migration on page 3284](#)

- [execute fortiguard-log update on page 3284](#)

execute fortiguard-log certificate-activation

Activate FortiCloud certification.

```
execute fortiguard-log certificate-activation <code>
```

Parameter	Description	Type	Size
<code>	Activation code.	string	

execute fortiguard-log migration

Migrate standalone FortiGate Cloud account to FortiCloud.

```
execute fortiguard-log migration <password>
```

Parameter	Description	Type	Size
<password>	Password.	string	

execute fortiguard-log update

Update FortiCloud Contract.

```
execute fortiguard-log update
```

execute fortiguard-message

fortiguard-message

This topic includes the following commands:

- [execute fortiguard-message add on page 3284](#)
- [execute fortiguard-message info on page 3285](#)
- [execute fortiguard-message update on page 3285](#)

execute fortiguard-message add

Add FortiGuard Message Service activation code.

```
execute fortiguard-message add <activation code>
```

Parameter	Description	Type	Size
<activation code>	Activation code for FortiGuard Message Service.	string	

execute fortiguard-message info

Show info about FortiGuard Message Service.

```
execute fortiguard-message info
```

execute fortiguard-message update

Force to update FortiGuard Message Service.

```
execute fortiguard-message update
```

execute fortitoken

fortitoken

This topic includes the following commands:

- [execute fortitoken activate on page 3285](#)
- [execute fortitoken import ftp on page 3286](#)
- [execute fortitoken import tftp on page 3287](#)
- [execute fortitoken import usb on page 3287](#)
- [execute fortitoken import-sn-file on page 3287](#)
- [execute fortitoken sync on page 3287](#)

execute fortitoken activate

Activate FortiToken(s) with FortiGuard.

```
execute fortitoken activate <id> <id> <id> <id> <id> <id> <id> <id> <id> <id> <id> <id> <id> <id> <id> <id> <id> <id> <id>
```

Parameter	Description	Type	Size
<id>	FortiToken ID.	string	
<id>	FortiToken ID.	string	
<id>	FortiToken ID.	string	
<id>	FortiToken ID.	string	
<id>	FortiToken ID.	string	
<id>	FortiToken ID.	string	
<id>	FortiToken ID.	string	
<id>	FortiToken ID.	string	
<id>	FortiToken ID.	string	
<id>	FortiToken ID.	string	
<id>	FortiToken ID.	string	
<id>	FortiToken ID.	string	
<id>	FortiToken ID.	string	
<id>	FortiToken ID.	string	
<id>	FortiToken ID.	string	
<id>	FortiToken ID.	string	
<id>	FortiToken ID.	string	
<id>	FortiToken ID.	string	
<id>	FortiToken ID.	string	
<id>	FortiToken ID.	string	
<id>	FortiToken ID.	string	

execute fortitoken import ftp

Import FortiToken seeds file from FTP server.

```
execute fortitoken import ftp <file name> <ftp server>[:ftp port] <Enter>|<user> <passwd>
```

Parameter	Description	Type	Size
<file name>	FortiToken seeds file name.	string	
<ftp server>[:ftp port]	FTP server IPv4, IPv6, or FQDN can be attached with port.	string	
<Enter> <user>	FTP username may be needed.	string	
<passwd>	FTP password.	string	

execute fortitoken import tftp

Import FortiToken seeds file from TFTP server.

```
execute fortitoken import tftp <file name> <tftp server>
```

Parameter	Description	Type	Size
<file name>	FortiToken seeds file name.	string	
<tftp server>	TFTP server IPv4, IPv6, or FQDN.	string	

execute fortitoken import usb

Import FortiToken seeds file from USB drive.

```
execute fortitoken import usb <file name>
```

Parameter	Description	Type	Size
<file name>	FortiToken seeds file name.	string	

execute fortitoken import-sn-file

Import FTK_200 serial number from FortiCare.

```
execute fortitoken import-sn-file <FTK_200 Serial Number>
```

Parameter	Description	Type	Size
<FTK_200 Serial Number>	FTK_200 serial number.	string	

execute fortitoken sync

Synchronize FortiToken by adjusting for drift of internal clock.

```
execute fortitoken sync <id> <code> <next code>
```

Parameter	Description	Type	Size
<id>	FortiToken ID.	string	
<code>	FortiToken code.	string	

Parameter	Description	Type	Size
<next code>	Next FortiToken code.	string	

execute fortitoken-cloud

fortitoken-cloud

This topic includes the following commands:

- [execute fortitoken-cloud migrate-ftm on page 3288](#)
- [execute fortitoken-cloud new on page 3288](#)
- [execute fortitoken-cloud show on page 3289](#)
- [execute fortitoken-cloud sync on page 3289](#)
- [execute fortitoken-cloud trial on page 3289](#)
- [execute fortitoken-cloud update on page 3289](#)

execute fortitoken-cloud migrate-ftm

Migrate FortiToken service to FortiToken Cloud.

```
execute fortitoken-cloud migrate-ftm <license number> <vdom>
```

Parameter	Description	Type	Size
<license number>	FortiToken mobile license number.	string	
<vdom>	VDOM name.	string	

execute fortitoken-cloud new

Send new activation code for a user.

```
execute fortitoken-cloud new <user name> <user type> <vdom>
```

Parameter	Description	Type	Size
<user name>	User name for new token.	string	
<user type>	Enter admin, local or remote.	string	
<vdom>	VDOM name.	string	

execute fortitoken-cloud show

Show service status of this FortiGate.

```
execute fortitoken-cloud show
```

execute fortitoken-cloud sync

Synchronize users to FortiToken Cloud.

```
execute fortitoken-cloud sync <user type>
```

Parameter	Description	Type	Size
<user type>	Enter <return>, all, local or remote.	string	

execute fortitoken-cloud trial

Activate free trial.

```
execute fortitoken-cloud trial
```

execute fortitoken-cloud update

Update VDOM list to FortiToken Cloud.

```
execute fortitoken-cloud update
```

execute fortitoken-mobile

fortitoken-mobile

This topic includes the following commands:

- [execute fortitoken-mobile import on page 3290](#)
- [execute fortitoken-mobile poll on page 3290](#)
- [execute fortitoken-mobile provision on page 3290](#)
- [execute fortitoken-mobile renew on page 3290](#)

execute fortitoken-mobile import

Import a list of tokens from FortiGuard to the FortiGate unit.

```
execute fortitoken-mobile import <code>
```

Parameter	Description	Type	Size
<code>	Software Token Redemption Certificate.	string	

execute fortitoken-mobile poll

Poll soft token states.

```
execute fortitoken-mobile poll
```

execute fortitoken-mobile provision

Provision a soft token.

```
execute fortitoken-mobile provision <sn>
```

Parameter	Description	Type	Size
<sn>	MobileToken serial number.	string	

execute fortitoken-mobile renew

Renew a locked mobile FortiToken.

```
execute fortitoken-mobile renew <sn>
```

Parameter	Description	Type	Size
<sn>	MobileToken serial number.	string	

execute fsso

fsso

This topic includes the following commands:

- [execute fsso refresh on page 3291](#)

execute fsso refresh

Refresh FSSO groups.

```
execute fsso refresh
```

execute ha

ha

This topic includes the following commands:

- [execute ha disconnect on page 3291](#)
- [execute ha failover set on page 3292](#)
- [execute ha failover status on page 3292](#)
- [execute ha failover unset on page 3292](#)
- [execute ha ignore-hardware-revision disable on page 3292](#)
- [execute ha ignore-hardware-revision enable on page 3293](#)
- [execute ha ignore-hardware-revision status on page 3293](#)
- [execute ha manage on page 3293](#)
- [execute ha synchronize on page 3293](#)

execute ha disconnect

Disconnect from HA cluster.

```
execute ha disconnect <string> <string> <ip> <netmask>
```

Parameter	Description	Type	Size
<string>	Serial number.	string	
<string>	Interface name.	string	
<ip>	IP or subnet of the interface.	string	
<netmask>	Netmask of the interface.	string	

execute ha failover set

Set the given virtual cluster as slave and trigger failover. Argument optional; if argument omitted, all virtual clusters are affected.

```
execute ha failover set [integer]
```

Parameter	Description	Type	Size
[integer]	Virtual cluster ID. Optional; if not given, all virtual clusters are affected.	string	

execute ha failover status

Display whether the given virtual cluster has been set as slave for failover. Argument optional; if no argument given, display statuses of all virtual clusters.

```
execute ha failover status [integer]
```

Parameter	Description	Type	Size
[integer]	Virtual cluster ID. Optional; if not given, all virtual clusters are affected.	string	

execute ha failover unset

If the given virtual cluster has been set as slave before, unset it so HA will use normal criteria to decide the master. May trigger a failover. Argument optional; if argument not given, all virtual clusters are affected.

```
execute ha failover unset [integer]
```

Parameter	Description	Type	Size
[integer]	Virtual cluster ID. Optional; if not given, all virtual clusters are affected.	string	

execute ha ignore-hardware-revision disable

disable HA ignore hardware revision mode

```
execute ha ignore-hardware-revision disable
```

execute ha ignore-hardware-revision enable

enable HA ignore hardware revision mode

```
execute ha ignore-hardware-revision enable
```

execute ha ignore-hardware-revision status

display HA ignore hardware revision mode

```
execute ha ignore-hardware-revision status
```

execute ha manage

HA cluster index.

```
execute ha manage <string> <string>
```

Parameter	Description	Type	Size
<string>	HA cluster index.	string	
<string>	Login admin name.	string	

execute ha synchronize

HA synchronize commands.

```
execute ha synchronize <string>
```

Parameter	Description	Type	Size
<string>	File type.	string	

execute hscalefw-license

hscalefw-license

```
execute hscalefw-license <activation-code>
```

Parameter	Description	Type	Size
<activation-code>	Format:0000-0000-0000-0000-0001 or <license-key> Format:0000-0000-0000-0000-0000-00	string	

execute interface

interface

This topic includes the following commands:

- [execute interface dhcp6client-renew on page 3294](#)
- [execute interface dhcpclient-renew on page 3294](#)
- [execute interface pppoe-reconnect on page 3294](#)

execute interface dhcp6client-renew

Renew DHCPv6 lease.

```
execute interface dhcp6client-renew <interface>
```

Parameter	Description	Type	Size
<interface>	Renew DHCPv6 lease on this interface.	string	

execute interface dhcpclient-renew

Renew DHCP lease.

```
execute interface dhcpclient-renew <interface>
```

Parameter	Description	Type	Size
<interface>	Renew DHCP lease on this interface.	string	

execute interface pppoe-reconnect

Reconnect to PPPoE server.

```
execute interface pppoe-reconnect <interface>
```

Parameter	Description	Type	Size
<interface>	Reconnect PPPoE on this interface.	string	

execute internet-service4

internet-service4

This topic includes the following commands:

- [execute internet-service4 refresh on page 3295](#)

execute internet-service4 refresh

Refresh Internet Service database (IPv4).

```
execute internet-service4 refresh
```

execute internet-service6

internet-service6

This topic includes the following commands:

- [execute internet-service6 refresh on page 3295](#)

execute internet-service6 refresh

Refresh Internet Service database (IPv6).

```
execute internet-service6 refresh
```

execute ipam

ipam

This topic includes the following commands:

- [execute ipam create-dhcp-server on page 3296](#)

execute ipam create-dhcp-server

Create a DHCP server managed by IPAM.

```
execute ipam create-dhcp-server <interface>
```

Parameter	Description	Type	Size
<interface>	Interface for the DHCP server.	string	

execute iscsi

iscsi

This topic includes the following commands:

- [execute iscsi login on page 3296](#)
- [execute iscsi logout on page 3296](#)
- [execute iscsi show on page 3297](#)

execute iscsi login

Login to iSCSI.

```
execute iscsi login <name>
```

Parameter	Description	Type	Size
<name>	iSCSI name.	string	

execute iscsi logout

Logout from iSCSI.

```
execute iscsi logout <name>
```

Parameter	Description	Type	Size
<name>	iSCSI name.	string	

execute iscsi show

Show iSCSI info.

```
execute iscsi show <name>
```

Parameter	Description	Type	Size
<name>	iSCSI name.	string	

execute log

log

This topic includes the following commands:

- [execute log backup ftp on page 3298](#)
- [execute log backup local on page 3298](#)
- [execute log backup tftp on page 3298](#)
- [execute log delete on page 3299](#)
- [execute log delete-all on page 3299](#)
- [execute log detail on page 3299](#)
- [execute log display on page 3299](#)
- [execute log filter category on page 3299](#)
- [execute log filter device on page 3300](#)
- [execute log filter dump on page 3300](#)
- [execute log filter field on page 3300](#)
- [execute log filter free-style on page 3301](#)
- [execute log filter ha-member on page 3301](#)
- [execute log filter local-search-mode on page 3301](#)
- [execute log filter max-checklines on page 3301](#)
- [execute log filter pre-fetch-pages on page 3301](#)
- [execute log filter reset on page 3302](#)
- [execute log filter start-line on page 3302](#)
- [execute log filter view-lines on page 3302](#)
- [execute log flush-cache on page 3302](#)
- [execute log flush-cache-all on page 3303](#)
- [execute log fortianalyzer manual-failover on page 3303](#)
- [execute log fortianalyzer test-connectivity on page 3303](#)
- [execute log fortianalyzer-cloud test-connectivity on page 3303](#)
- [execute log fortianalyzer2 manual-failover on page 3303](#)
- [execute log fortianalyzer3 manual-failover on page 3303](#)

- [execute log fortiguard test-connectivity on page 3304](#)
- [execute log list on page 3304](#)
- [execute log raw-backup ftp on page 3304](#)
- [execute log raw-backup tftp on page 3304](#)
- [execute log restore on page 3305](#)
- [execute log roll on page 3305](#)
- [execute log shift-time on page 3305](#)
- [execute log upload on page 3305](#)
- [execute log upload-progress on page 3305](#)

execute log backup ftp

Backup logs and report databases to remote FTP server.

```
execute log backup ftp <filename> <ftp server>[:ftp port] <user> <passwd>
```

Parameter	Description	Type	Size
<filename>	Make file name on the remote FTP server	string	
<ftp server> [:ftp port]	FTP server IPv4, IPv6, or FQDN can be attached with port.	string	
<user>	FTP username.	string	
<passwd>	FTP password.	string	

execute log backup local

Backup logs and report databases to local storage device.

```
execute log backup local <path>
```

Parameter	Description	Type	Size
<path>	Path to store logs and report databases.	string	

execute log backup tftp

Backup logs and report databases to remote TFTP server.

```
execute log backup tftp <filename> <tftp server>
```

Parameter	Description	Type	Size
<filename>	Make file name on the remote TFTP server	string	
<tftp server>	TFTP server IPv4, IPv6, or FQDN.	string	

execute log delete

Delete local logs of one category.

```
execute log delete
```

execute log delete-all

Delete all local logs and recreate report database.

```
execute log delete-all
```

execute log detail

Display utm log entries for a particular traffic log.

```
execute log detail <category> <utmref>
```

Parameter	Description	Type	Size
<category>	Category for UTM logs	string	
<utmref>	You can copy and paste it from log display result by tuning on it using 'exec log filter show-utm-ref 1'	string	

execute log display

Display filtered log entries.

```
execute log display
```

execute log filter category

Category.

```
execute log filter category <category>
```

Parameter	Description	Type	Size
<category>	Category name, press enter for options.	string	

execute log filter device

Device to get log from.

```
execute log filter device <device>
```

Parameter	Description	Type	Size
<device>	Device name, press enter for options.	string	

execute log filter dump

Dump current filter settings.

```
execute log filter dump
```

execute log filter field

Filter by field.

```
execute log filter field <name> <argument 1> <argument 2> <argument 3> <argument 4> <argument 5>  
<argument 6> <argument 7>
```

Parameter	Description	Type	Size
<name>	Field name, press enter for options.	string	
<argument 1>	Field search argument 1, press enter for more help.	string	
<argument 2>	<argument 2>	string	
<argument 3>	<argument 3>	string	
<argument 4>	<argument 4>	string	
<argument 5>	<argument 5>	string	
<argument 6>	<argument 6>	string	
<argument 7>	<argument 7>	string	

execute log filter free-style

Filter by free-style expression.

```
execute log filter free-style <expression>
```

Parameter	Description	Type	Size
<expression>	Log filter expression.	string	

execute log filter ha-member

HA member.

```
execute log filter ha-member <sn>
```

Parameter	Description	Type	Size
<sn>	Serial number of HA member.	string	

execute log filter local-search-mode

local log search mode

```
execute log filter local-search-mode <mode>
```

Parameter	Description	Type	Size
<mode>	Local log search mode, press enter for options.	string	

execute log filter max-checklines

Maximum number of lines to check.

```
execute log filter max-checklines <number>
```

Parameter	Description	Type	Size
<number>	0 or (100 - 1000000).	string	

execute log filter pre-fetch-pages

Number of pages to check in advance under on-demand log search mode.

```
execute log filter pre-fetch-pages <number>
```

Parameter	Description	Type	Size
<number>	(2 - 10).	string	

execute log filter reset

Reset filter.

```
execute log filter reset <enter|all|field>
```

Parameter	Description	Type	Size
<enter all field>	<enter all> to reset all, <field> to reset field only.	string	

execute log filter start-line

Start line to display.

```
execute log filter start-line <number>
```

Parameter	Description	Type	Size
<number>	>=1	string	

execute log filter view-lines

Lines per view.

```
execute log filter view-lines <number>
```

Parameter	Description	Type	Size
<number>	Number of lines to view (5 - 1000).	string	

execute log flush-cache

Write disk log cache of current category to disk in compressed format.

```
execute log flush-cache
```

execute log flush-cache-all

Write disk log cache of all categories to disk in compressed format.

```
execute log flush-cache-all
```

execute log fortianalyzer manual-failover

Manually failover to use the other server.

```
execute log fortianalyzer manual-failover
```

execute log fortianalyzer test-connectivity

Query FortiAnalyzer connection status.

```
execute log fortianalyzer test-connectivity
```

execute log fortianalyzer-cloud test-connectivity

Query FortiAnalyzer Cloud connection status.

```
execute log fortianalyzer-cloud test-connectivity
```

execute log fortianalyzer2 manual-failover

Manually failover to use the other server.

```
execute log fortianalyzer2 manual-failover
```

execute log fortianalyzer3 manual-failover

Manually failover to use the other server.

```
execute log fortianalyzer3 manual-failover
```

execute log fortiguard test-connectivity

Query FortiGuard connection status.

```
execute log fortiguard test-connectivity
```

execute log list

List current and rolled log files info.

```
execute log list <category>
```

Parameter	Description	Type	Size
<category>	Category name, press enter for options.	string	

execute log raw-backup ftp

Backup raw logs to remote FTP server.

```
execute log raw-backup ftp <remotedir> <ftp server>[:ftp port] <user> <passwd>
```

Parameter	Description	Type	Size
<remotedir>	Remote directory on FTP server	string	
<ftp server> [:ftp port]	FTP server IPv4, IPv6, or FQDN can be attached with port.	string	
<user>	FTP username.	string	
<passwd>	FTP password.	string	

execute log raw-backup tftp

Backup raw logs to remote TFTP server.

```
execute log raw-backup tftp <remotedir> <tftp server>
```

Parameter	Description	Type	Size
<remotedir>	Existing remote directory on TFTP server	string	
<tftp server>	TFTP server IPv4, IPv6, or FQDN.	string	

execute log restore

Restore logs and report databases from local storage device.

```
execute log restore <path>
```

Parameter	Description	Type	Size
<path>	Path to restore logs and report databases.	string	

execute log roll

Roll log files now.

```
execute log roll
```

execute log shift-time

Shift log time stamps.

```
execute log shift-time <hours>
```

Parameter	Description	Type	Size
<hours>	Hours to shift log and report time stamps by.	string	

execute log upload

Upload log and archives to FortiAnalyzer/FortiCloud.

```
execute log upload
```

execute log upload-progress

Check FortiCloud upload progress.

```
execute log upload-progress
```


execute lte-modem

lte-modem

This topic includes the following commands:

- [execute lte-modem PLMN-profile change-password on page 3306](#)
- [execute lte-modem PLMN-profile delete on page 3307](#)
- [execute lte-modem PLMN-profile list on page 3307](#)
- [execute lte-modem PLMN-profile lock on page 3307](#)
- [execute lte-modem PLMN-profile modify on page 3307](#)
- [execute lte-modem PLMN-profile show-password on page 3308](#)
- [execute lte-modem PLMN-profile unlock on page 3308](#)
- [execute lte-modem cold-reboot on page 3308](#)
- [execute lte-modem get-modem-firmware ftp on page 3308](#)
- [execute lte-modem get-modem-firmware management-station on page 3308](#)
- [execute lte-modem get-modem-firmware tftp on page 3309](#)
- [execute lte-modem get-modem-firmware usb on page 3309](#)
- [execute lte-modem get-pri-firmware ftp on page 3309](#)
- [execute lte-modem get-pri-firmware management-station on page 3310](#)
- [execute lte-modem get-pri-firmware tftp on page 3310](#)
- [execute lte-modem get-pri-firmware usb on page 3310](#)
- [execute lte-modem power-off on page 3310](#)
- [execute lte-modem power-on on page 3310](#)
- [execute lte-modem purge-billing-data on page 3311](#)
- [execute lte-modem reboot on page 3311](#)
- [execute lte-modem set-operation-mode on page 3311](#)
- [execute lte-modem set-usb-mode on page 3311](#)
- [execute lte-modem start-upgrade on page 3311](#)
- [execute lte-modem start-upgrade-remote on page 3312](#)
- [execute lte-modem wireless-profile create on page 3312](#)
- [execute lte-modem wireless-profile delete on page 3312](#)
- [execute lte-modem wireless-profile list on page 3312](#)
- [execute lte-modem wireless-profile modify on page 3313](#)
- [execute lte-modem wireless-profile test on page 3313](#)

execute lte-modem PLMN-profile change-password

Change PLMN-Profile Setting password.

```
execute lte-modem PLMN-profile change-password <new password> <password confirm>
```

Parameter	Description	Type	Size
<new password>	New PLMN lock password (0-24 characters).	string	
<password confirm>	Confirm new PLMN password.	string	

execute lte-modem PLMN-profile delete

Delete a PLMN profile.

```
execute lte-modem PLMN-profile delete <(0-9)>
```

Parameter	Description	Type	Size
<(0-9)>	PLMN profile ID.	string	

execute lte-modem PLMN-profile list

List all the PLMN profiles in the Modem.

```
execute lte-modem PLMN-profile list
```

execute lte-modem PLMN-profile lock

Lock PLMN-Profile Setting.

```
execute lte-modem PLMN-profile lock
```

execute lte-modem PLMN-profile modify

Create a PLMN profile.

```
execute lte-modem PLMN-profile modify <(0-9)> <code>
```

Parameter	Description	Type	Size
<(0-9)>	PLMN profile ID.	string	
<code>	PLMN profile code (1 to 9 characters).	string	

execute lte-modem PLMN-profile show-password

Show current PLMN-Profile lock password.

```
execute lte-modem PLMN-profile show-password
```

execute lte-modem PLMN-profile unlock

Unlock PLMN-Profile Setting.

```
execute lte-modem PLMN-profile unlock <password>
```

Parameter	Description	Type	Size
<password>	PLMN lock password (0-24 characters).	string	

execute lte-modem cold-reboot

Cold reboot LTE Modem.

```
execute lte-modem cold-reboot
```

execute lte-modem get-modem-firmware ftp

Load image from FTP server.

```
execute lte-modem get-modem-firmware ftp <string> <ftp server>[:ftp port] <Enter>|<user> <passwd>
```

Parameter	Description	Type	Size
<string>	Image file name(path) on the remote server.	string	
<ftp server>[:ftp port]	FTP server IPv4, IPv6, or FQDN can be attached with port.	string	
<Enter> <user>	FTP username may be needed.	string	
<passwd>	FTP password.	string	

execute lte-modem get-modem-firmware management-station

Restore image from Management station.

```
execute lte-modem get-modem-firmware management-station <string>
```

Parameter	Description	Type	Size
<string>	Image ID on the server.	string	

execute lte-modem get-modem-firmware tftp

Restore image from TFTP server.

```
execute lte-modem get-modem-firmware tftp <string> <tftp server>
```

Parameter	Description	Type	Size
<string>	Image file name on the TFTP server.	string	
<tftp server>	TFTP server IPv4, IPv6, or FQDN.	string	

execute lte-modem get-modem-firmware usb

Restore image from USB disk.

```
execute lte-modem get-modem-firmware usb <string>
```

Parameter	Description	Type	Size
<string>	Image file name on the USB disk.	string	

execute lte-modem get-pri-firmware ftp

Load image from FTP server.

```
execute lte-modem get-pri-firmware ftp <string> <ftp server>[:ftp port] <Enter>|<user> <passwd>
```

Parameter	Description	Type	Size
<string>	Image file name(path) on the remote server.	string	
<ftp server>[:ftp port]	FTP server IPv4, IPv6, or FQDN can be attached with port.	string	
<Enter> <user>	FTP username may be needed.	string	
<passwd>	FTP password.	string	

execute lte-modem get-pri-firmware management-station

Restore image from Management station.

```
execute lte-modem get-pri-firmware management-station <string>
```

Parameter	Description	Type	Size
<string>	Image ID on the server.	string	

execute lte-modem get-pri-firmware tftp

Restore image from TFTP server.

```
execute lte-modem get-pri-firmware tftp <string> <tftp server>
```

Parameter	Description	Type	Size
<string>	Image file name on the TFTP server.	string	
<tftp server>	TFTP server IPv4, IPv6, or FQDN.	string	

execute lte-modem get-pri-firmware usb

Restore image from USB disk.

```
execute lte-modem get-pri-firmware usb <string>
```

Parameter	Description	Type	Size
<string>	Image file name on the USB disk.	string	

execute lte-modem power-off

Power off LTE Modem.

```
execute lte-modem power-off
```

execute lte-modem power-on

Power on LTE Modem.

```
execute lte-modem power-on
```

execute lte-modem purge-billing-data

Purge all existing LTE Modem billing data.

```
execute lte-modem purge-billing-data
```

execute lte-modem reboot

Warm reboot LTE Modem.

```
execute lte-modem reboot
```

execute lte-modem set-operation-mode

Set LTE Modem operation mode.

```
execute lte-modem set-operation-mode <( 0, 1)>
```

Parameter	Description	Type	Size
<(0, 1)>	Operation mode. 0 - Online 1 - Low Power	string	

execute lte-modem set-usb-mode

Set LTE Modem USB speed mode.

```
execute lte-modem set-usb-mode <{0, 1}>
```

Parameter	Description	Type	Size
<{0, 1}>	Operation mode. 0 - High speed 1 - Super high speed	string	

execute lte-modem start-upgrade

Start LTE Modem firmware upgrade.

```
execute lte-modem start-upgrade
```

execute lte-modem start-upgrade-remote

Start LTE Modem firmware upgrade now via forticloud service

```
execute lte-modem start-upgrade-remote
```

execute lte-modem wireless-profile create

Create a wireless profile.

```
execute lte-modem wireless-profile create <name> <profile type> <(0 - 4)> <name> <(0 - 3)>
<name>|<Enter> <password>
```

Parameter	Description	Type	Size
<name>	Wireless profile name 1 to 16 characters.	string	
<profile type>	Wireless profile type. 0 - 3GPP	string	
<(0 - 4)>	Wireless profile PDP type. 0 - IPV4 1 - PPP 2 - IPV6 3 - IPV4V6	string	
<name>	Wireless profile APN name 0 to 32 characters.	string	
<(0 - 3)>	Wireless profile authentication type. 0 - None 1 - PAP 2 - CHAP 3 - PAP and CHAP	string	
<name> <Enter>	Wireless profile user Name 1 to 32 characters, or <Enter> if authentication is none.	string	
<password>	Wireless profile password 1 to 32 characters.	string	

execute lte-modem wireless-profile delete

Delete a wireless profile from the Modem.

```
execute lte-modem wireless-profile delete <(1-16)>
```

Parameter	Description	Type	Size
<(1-16)>	Wireless profile ID.	string	

execute lte-modem wireless-profile list

List all the wireless profiles in the Modem.

```
execute lte-modem wireless-profile list
```

execute lte-modem wireless-profile modify

Modify a wireless profile.

```
execute lte-modem wireless-profile modify <(1-16)> <name> <profile type> <(0 - 4)> <name> <(0 - 3)> <name>|<Enter> <password>
```

Parameter	Description	Type	Size
<(1-16)>	Wireless profile ID.	string	
<name>	Wireless profile name 1 to 16 characters.	string	
<profile type>	Wireless profile type. 0 - 3GPP	string	
<(0 - 4)>	Wireless profile PDP type. 0 - IPV4 1 - PPP 2 - IPV6 3 - IPV4V6	string	
<name>	Wireless profile APN name 0 to 32 characters.	string	
<(0 - 3)>	Wireless profile authentication type. 0 - None 1 - PAP 2 - CHAP 3 - PAP and CHAP	string	
<name> <Enter>	Wireless profile user name 1 to 32 characters, or <Enter> if authentication is none.	string	
<password>	Wireless profile password 1 to 32 characters.	string	

execute lte-modem wireless-profile test

Test wireless profiles.

```
execute lte-modem wireless-profile test <(1-16)|<Enter>>
```

Parameter	Description	Type	Size
<(1-16) <Enter>>	Wireless profile ID.	string	

execute mem

mem

This topic includes the following commands:

- [execute mem add on page 3314](#)

execute mem add

Online new memory blocks.

```
execute mem add
```

execute modem

modem

This topic includes the following commands:

- [execute modem dial on page 3314](#)
- [execute modem hangup on page 3314](#)
- [execute modem trigger on page 3314](#)

execute modem dial

Manually dial the MODEM.

```
execute modem dial
```

execute modem hangup

Manually hang up the MODEM.

```
execute modem hangup
```

execute modem trigger

Trigger the MODEM if it is stuck.

```
execute modem trigger
```

execute mrouter

mrouter

This topic includes the following commands:

- [execute mrouter clear dense-routes on page 3315](#)
- [execute mrouter clear igmp-group on page 3315](#)
- [execute mrouter clear igmp-interface on page 3315](#)
- [execute mrouter clear multicast-routes on page 3316](#)
- [execute mrouter clear sparse-mode-bsr on page 3316](#)
- [execute mrouter clear sparse-routes on page 3316](#)
- [execute mrouter clear statistics on page 3316](#)

execute mrouter clear dense-routes

Clear PIM dense mode routes.

```
execute mrouter clear dense-routes <xxx.xxx.xxx.xxx> <xxx.xxx.xxx.xxx>
```

Parameter	Description	Type	Size
<xxx.xxx.xxx.xxx>	Group IP address.	string	
<xxx.xxx.xxx.xxx>	Source IP address.	string	

execute mrouter clear igmp-group

Clear all IGMP entries for one or all groups.

```
execute mrouter clear igmp-group <xxx.xxx.xxx.xxx> <string>
```

Parameter	Description	Type	Size
<xxx.xxx.xxx.xxx>	Group IP address.	string	
<string>	Interface name.	string	

execute mrouter clear igmp-interface

Clear all IGMP entries from one interface.

```
execute mrouter clear igmp-interface <string>
```

Parameter	Description	Type	Size
<string>	Interface name.	string	

execute mrouter clear multicast-routes

Clear all PIM dense mode and sparse mode routes.

```
execute mrouter clear multicast-routes <xxx.xxx.xxx.xxx> <xxx.xxx.xxx.xxx>
```

Parameter	Description	Type	Size
<xxx.xxx.xxx.xxx>	Group IP address.	string	
<xxx.xxx.xxx.xxx>	Source IP address.	string	

execute mrouter clear sparse-mode-bsr

Clear PIM-SM RP sets learned from the BSR.

```
execute mrouter clear sparse-mode-bsr
```

execute mrouter clear sparse-routes

Clear PIM sparse mode routes.

```
execute mrouter clear sparse-routes <xxx.xxx.xxx.xxx> <xxx.xxx.xxx.xxx>
```

Parameter	Description	Type	Size
<xxx.xxx.xxx.xxx>	Group IP address.	string	
<xxx.xxx.xxx.xxx>	Source IP address.	string	

execute mrouter clear statistics

Clear PIM routing statistics.

```
execute mrouter clear statistics <xxx.xxx.xxx.xxx> <xxx.xxx.xxx.xxx>
```

Parameter	Description	Type	Size
<xxx.xxx.xxx.xxx>	Group IP address.	string	
<xxx.xxx.xxx.xxx>	Source IP address.	string	

execute nsx

nsx

This topic includes the following commands:

- [execute nsx group delete on page 3317](#)
- [execute nsx group import on page 3317](#)
- [execute nsx group list on page 3317](#)

execute nsx group delete

Delete NSX Security Groups.

```
execute nsx group delete <vdom> <filter>
```

Parameter	Description	Type	Size
<vdom>	VDOM.	string	
<filter>	Name Filter.	string	

execute nsx group import

Import NSX Security Groups.

```
execute nsx group import <name> <vdom> <filter>
```

Parameter	Description	Type	Size
<name>	SDN connector.	string	
<vdom>	VDOM.	string	
<filter>	Name Filter.	string	

execute nsx group list

List NSX Security Groups.

```
execute nsx group list <name> <filter>
```

Parameter	Description	Type	Size
<name>	SDN connector.	string	
<filter>	Name Filter.	string	

execute ping

PING command.

```
execute ping <ip>
```

Parameter	Description	Type	Size
<ip>	IP address or domain name.	string	

execute ping6

PINGv6 command.

```
execute ping6
```

execute ping6-options

ping6-options

This topic includes the following commands:

- [execute ping6-options adaptive-ping on page 3319](#)
- [execute ping6-options data-size on page 3319](#)
- [execute ping6-options interface on page 3319](#)
- [execute ping6-options interval on page 3319](#)
- [execute ping6-options pattern on page 3320](#)
- [execute ping6-options repeat-count on page 3320](#)
- [execute ping6-options reset on page 3320](#)
- [execute ping6-options source6 on page 3320](#)
- [execute ping6-options timeout on page 3320](#)
- [execute ping6-options tos on page 3321](#)
- [execute ping6-options ttl on page 3321](#)

- [execute ping6-options use-sdwan on page 3321](#)
- [execute ping6-options validate-reply on page 3321](#)
- [execute ping6-options view-settings on page 3322](#)

execute ping6-options adaptive-ping

Adaptive ping <enable|disable>.

```
execute ping6-options adaptive-ping <string>
```

Parameter	Description	Type	Size
<string>	<enable disable>.	string	

execute ping6-options data-size

Integer value to specify datagram size in bytes.

```
execute ping6-options data-size <integer>
```

Parameter	Description	Type	Size
<integer>	Integer value [0,65507].	string	

execute ping6-options interface

Auto | <outgoing interface>.

```
execute ping6-options interface <string>
```

Parameter	Description	Type	Size
<string>	Auto <outgoing interface>.	string	

execute ping6-options interval

Integer value to specify seconds to wait between two pings.

```
execute ping6-options interval <integer>
```

Parameter	Description	Type	Size
<integer>	Integer value [1, 2147483647]	string	

execute ping6-options pattern

Hex format of pattern, e.g. 00ffaabb.

```
execute ping6-options pattern <string>
```

Parameter	Description	Type	Size
<string>	Hex format of pattern, e.g. 00ffaabb.	string	

execute ping6-options repeat-count

Integer value to specify how many times to repeat PING.

```
execute ping6-options repeat-count <string>
```

Parameter	Description	Type	Size
<string>	Integer value [1, 2147483647]	string	

execute ping6-options reset

Reset settings.

```
execute ping6-options reset
```

execute ping6-options source6

Auto | <source interface IPv6>.

```
execute ping6-options source6 <xxxx:xxxx:xxxx:xxxx:xxxx:xxxx:xxxx:xxxx>
```

Parameter	Description	Type	Size
<xxxx:xxxx:xxxx:xxxx:xxxx:xxxx:xxxx:xxxx>	<source interface IPv6> Auto	string	

execute ping6-options timeout

Integer value to specify timeout in seconds.

```
execute ping6-options timeout <integer>
```

Parameter	Description	Type	Size
<integer>	Integer value [0, 2147483647]	string	

execute ping6-options tos

IPv6 type-of-service (traffic class) value.

```
execute ping6-options tos <integer>
```

Parameter	Description	Type	Size
<integer>	Hex number [0x00, 0xFF]	string	

execute ping6-options ttl

Integer value to specify time-to-live.

```
execute ping6-options ttl <integer>
```

Parameter	Description	Type	Size
<integer>	Integer value [1,255]	string	

execute ping6-options use-sdwan

Use SD-WAN rules to get output interface <yes | no>.

```
execute ping6-options use-sdwan <string>
```

Parameter	Description	Type	Size
<string>	<yes no>.	string	

execute ping6-options validate-reply

Validate reply data <yes | no>.

```
execute ping6-options validate-reply <string>
```

Parameter	Description	Type	Size
<string>	<yes no>.	string	

execute ping6-options view-settings

View the current settings for PING option.

```
execute ping6-options view-settings
```

execute ping-options

ping-options

This topic includes the following commands:

- [execute ping-options adaptive-ping on page 3322](#)
- [execute ping-options data-size on page 3322](#)
- [execute ping-options df-bit on page 3323](#)
- [execute ping-options interface on page 3323](#)
- [execute ping-options interval on page 3323](#)
- [execute ping-options pattern on page 3323](#)
- [execute ping-options repeat-count on page 3324](#)
- [execute ping-options reset on page 3324](#)
- [execute ping-options source on page 3324](#)
- [execute ping-options timeout on page 3324](#)
- [execute ping-options tos on page 3325](#)
- [execute ping-options ttl on page 3325](#)
- [execute ping-options use-sdwan on page 3325](#)
- [execute ping-options validate-reply on page 3325](#)
- [execute ping-options view-settings on page 3326](#)

execute ping-options adaptive-ping

Adaptive ping <enable|disable>.

```
execute ping-options adaptive-ping <string>
```

Parameter	Description	Type	Size
<string>	<enable disable>.	string	

execute ping-options data-size

Integer value to specify datagram size in bytes.

```
execute ping-options data-size <integer>
```

Parameter	Description	Type	Size
<integer>	Integer value [0,65507].	string	

execute ping-options df-bit

Set DF bit in IP header <yes | no>.

```
execute ping-options df-bit <string>
```

Parameter	Description	Type	Size
<string>	<yes no>.	string	

execute ping-options interface

Auto | <outgoing interface>.

```
execute ping-options interface <string>
```

Parameter	Description	Type	Size
<string>	Auto <outgoing interface>.	string	

execute ping-options interval

Integer value to specify seconds between two pings.

```
execute ping-options interval <integer>
```

Parameter	Description	Type	Size
<integer>	Integer value [1, 2147483647]	string	

execute ping-options pattern

Hex format of pattern, e.g. 00ffaabb.

```
execute ping-options pattern <string>
```

Parameter	Description	Type	Size
<string>	Hex format of pattern, e.g. 00ffaabb.	string	

execute ping-options repeat-count

Integer value to specify how many times to repeat PING.

```
execute ping-options repeat-count <integer>
```

Parameter	Description	Type	Size
<integer>	Integer value [1, 2147483647]	string	

execute ping-options reset

Reset settings.

```
execute ping-options reset
```

execute ping-options source

Auto | <source interface IP>.

```
execute ping-options source <xxx.xxx.xxx.xxx>
```

Parameter	Description	Type	Size
<xxx.xxx.xxx.xxx>	<source interface IP> Auto	string	

execute ping-options timeout

Integer value to specify timeout in seconds.

```
execute ping-options timeout <integer>
```

Parameter	Description	Type	Size
<integer>	Integer value [0, 2147483647]	string	

execute ping-options tos

IP type-of-service option.

```
execute ping-options tos <string>
```

Parameter	Description	Type	Size
<string>	default IP TOS defaults to 0 lowcost IP TOS minimize cost lowdelay IP TOS minimize delay reliability IP TOS maximize reliability throughput IP TOS maximize throughput	string	

execute ping-options ttl

Integer value to specify time-to-live.

```
execute ping-options ttl <integer>
```

Parameter	Description	Type	Size
<integer>	Integer value [1,255].	string	

execute ping-options use-sdwan

Use SD-WAN rules to get output interface <yes | no>.

```
execute ping-options use-sdwan <string>
```

Parameter	Description	Type	Size
<string>	<yes no>.	string	

execute ping-options validate-reply

Validate reply data <yes | no>.

```
execute ping-options validate-reply <string>
```

Parameter	Description	Type	Size
<string>	<yes no>.	string	

execute ping-options view-settings

View the current settings for PING option.

```
execute ping-options view-settings
```

execute policy-packet-capture

policy-packet-capture

This topic includes the following commands:

- [execute policy-packet-capture delete-all on page 3326](#)

execute policy-packet-capture delete-all

Delete all captured packet.

```
execute policy-packet-capture delete-all
```

execute private-encryption-key

private-encryption-key

This topic includes the following commands:

- [execute private-encryption-key sample on page 3326](#)
- [execute private-encryption-key verify on page 3326](#)

execute private-encryption-key sample

Generate base64 clear text and its HMAC signature encrypted by private key.

```
execute private-encryption-key sample
```

execute private-encryption-key verify

Verify if the input base64 HMAC is encrypted by private key.

```
execute private-encryption-key verify <string> <string>
```

Parameter	Description	Type	Size
<string>	base64-clear-text.	string	
<string>	base64-hmac-signature.	string	

execute reboot

Reboot now.

```
execute reboot <comment> <string>
```

Parameter	Description	Type	Size
<comment>	comment	string	
<string>	Reboot comments.	string	

execute replace-device

replace-device

This topic includes the following commands:

- [execute replace-device fortiap on page 3327](#)
- [execute replace-device fortiswitch on page 3328](#)

execute replace-device fortiap

FortiAP.

```
execute replace-device fortiap <fortiap-id> <fortiap-id>
```

Parameter	Description	Type	Size
<fortiap-id>	Old FortiAP serial number.	string	
<fortiap-id>	New FortiAP serial number.	string	

execute replace-device fortiswitch

FortiSwitch.

```
execute replace-device fortiswitch <fortiswitch-id> <fortiswitch-id>
```

Parameter	Description	Type	Size
<fortiswitch-id>	Existing FortiSwitch serial number.	string	
<fortiswitch-id>	New FortiSwitch serial number.	string	

execute report

report

This topic includes the following commands:

- [execute report flush-cache on page 3328](#)
- [execute report recreate-db on page 3328](#)
- [execute report run on page 3328](#)
- [execute report sandbox-status on page 3329](#)

execute report flush-cache

Flush report caches

```
execute report flush-cache
```

execute report recreate-db

Recreate the report database

```
execute report recreate-db
```

execute report run

generate a report, only last 7-days data available

```
execute report run [layout name] [Start Time] [End Time]
```

Parameter	Description	Type	Size
[layout name]	Layout name for a report. If not provided, the default layout will be used.	string	
[Start Time]	Start time of the report time period ("yyyy-mm-dd hh").	string	
[End Time]	End time of the report time period ("yyyy-mm-dd hh").	string	

execute report sandbox-status

sending sandbox status for testing

```
execute report sandbox-status [status] [sha256]
```

Parameter	Description	Type	Size
[status]	The status of sandbox returning result	string	
[sha256]	SHA256 checksum	string	

execute report-config

report-config

This topic includes the following commands:

- [execute report-config reset on page 3329](#)

execute report-config reset

Reset report templates to the factory default

```
execute report-config reset
```

execute restore

restore

This topic includes the following commands:

- [execute restore av ftp on page 3330](#)
- [execute restore av tftp on page 3331](#)

- [execute restore config dhcp on page 3331](#)
- [execute restore config flash on page 3331](#)
- [execute restore config ftp on page 3332](#)
- [execute restore config management-station normal on page 3332](#)
- [execute restore config management-station script on page 3332](#)
- [execute restore config management-station template on page 3332](#)
- [execute restore config tftp on page 3333](#)
- [execute restore config usb on page 3333](#)
- [execute restore config usb-mode on page 3333](#)
- [execute restore image flash on page 3333](#)
- [execute restore image ftp on page 3334](#)
- [execute restore image management-station on page 3334](#)
- [execute restore image tftp on page 3334](#)
- [execute restore image url on page 3335](#)
- [execute restore image usb on page 3335](#)
- [execute restore ips ftp on page 3335](#)
- [execute restore ips tftp on page 3335](#)
- [execute restore ipsuserdefsig ftp on page 3336](#)
- [execute restore ipsuserdefsig tftp on page 3336](#)
- [execute restore manual-license ftp on page 3336](#)
- [execute restore manual-license tftp on page 3337](#)
- [execute restore other-objects ftp on page 3337](#)
- [execute restore other-objects tftp on page 3337](#)
- [execute restore script ftp on page 3338](#)
- [execute restore script lastlog on page 3338](#)
- [execute restore script scp on page 3338](#)
- [execute restore script tftp on page 3339](#)
- [execute restore secondary-image ftp on page 3339](#)
- [execute restore secondary-image tftp on page 3339](#)
- [execute restore secondary-image url on page 3339](#)
- [execute restore secondary-image usb on page 3340](#)
- [execute restore vmlicense ftp on page 3340](#)
- [execute restore vmlicense tftp on page 3340](#)

execute restore av ftp

Restore antivirus database from FTP server.

```
execute restore av ftp <string> <ftp server>[:ftp port] <Enter>|<user> <passwd>
```

Parameter	Description	Type	Size
<string>	Antivirus data base file name (path) on the remote server.	string	
<ftp server>[:ftp port]	FTP server IPv4, IPv6, or FQDN can be attached with port.	string	
<Enter> <user>	FTP username may be needed.	string	
<passwd>	FTP password.	string	

execute restore av tftp

Restore antivirus database from TFTP server.

```
execute restore av tftp <string> <tftp server>
```

Parameter	Description	Type	Size
<string>	Antivirus database file name on the TFTP server.	string	
<tftp server>	TFTP server IPv4, IPv6, or FQDN.	string	

execute restore config dhcp

Load config file via DHCP.

```
execute restore config dhcp <port> <Enter> | <vlanid>
```

Parameter	Description	Type	Size
<port>	Port to be DHCP client.	string	
<Enter> <vlanid>	Enter or specify VLAN ID to create a VLAN on the <port>.	string	

execute restore config flash

Load config file from flash to firewall.

```
execute restore config flash <revision>
```

Parameter	Description	Type	Size
<revision>	Revision ID on the flash.	string	

execute restore config ftp

Load config file from FTP server.

```
execute restore config ftp <string> <ftp server>[:ftp port] <Enter>|<user> <passwd>  
<Enter>|<passwd>
```

Parameter	Description	Type	Size
<string>	Configure file name(path) on the remote server.	string	
<ftp server>[:ftp port]	FTP server IPv4, IPv6, or FQDN can be attached with port.	string	
<Enter> <user>	FTP username may be needed.	string	
<passwd>	FTP password.	string	
<Enter> <passwd>	Password may be needed to restore.	string	

execute restore config management-station normal

Load normal config file from management station to firewall.

```
execute restore config management-station normal <revision>
```

Parameter	Description	Type	Size
<revision>	Revision to retrieve, or enter '0' to get latest revision list.	string	

execute restore config management-station script

Load script config file from management station to firewall.

```
execute restore config management-station script <revision>
```

Parameter	Description	Type	Size
<revision>	Revision to retrieve, or enter '0' to get latest revision list.	string	

execute restore config management-station template

Load template config file from management station to firewall.

```
execute restore config management-station template <revision>
```

Parameter	Description	Type	Size
<revision>	Revision to retrieve, or enter '0' to get latest revision list.	string	

execute restore config tftp

Load config file from TFTP server to firewall.

```
execute restore config tftp <string> <tftp server> <Enter>|<passwd>
```

Parameter	Description	Type	Size
<string>	File name on the TFTP server.	string	
<tftp server>	TFTP server IPv4, IPv6, or FQDN.	string	
<Enter> <passwd>	Password may be needed to restore.	string	

execute restore config usb

Load config file from USB disk to firewall.

```
execute restore config usb <string> <Enter>|<passwd>
```

Parameter	Description	Type	Size
<string>	File name on USB disk.	string	
<Enter> <passwd>	Password may be needed to restore.	string	

execute restore config usb-mode

Load config file from USB disk and reboot.

```
execute restore config usb-mode <Enter>|<passwd>
```

Parameter	Description	Type	Size
<Enter> <passwd>	Optional password to protect.	string	

execute restore image flash

Restore image from flash.

```
execute restore image flash <revision>
```

Parameter	Description	Type	Size
<revision>	Image revision ID on flash.	string	

execute restore image ftp

Load image from FTP server.

```
execute restore image ftp <string> <ftp server>[:ftp port] <Enter>|<user> <passwd>
```

Parameter	Description	Type	Size
<string>	Image file name(path) on the remote server.	string	
<ftp server>[:ftp port]	FTP server IPv4, IPv6, or FQDN can be attached with port.	string	
<Enter> <user>	FTP username may be needed.	string	
<passwd>	FTP password.	string	

execute restore image management-station

Restore image from Management station.

```
execute restore image management-station <string>
```

Parameter	Description	Type	Size
<string>	Image ID on the server.	string	

execute restore image tftp

Restore image from TFTP server.

```
execute restore image tftp <string> <tftp address>
```

Parameter	Description	Type	Size
<string>	Image file name on the TFTP server.	string	
<tftp address>	TFTP server IPv4, IPv6, or FQDN.	string	

execute restore image url

Restore image from URL with HTTP/HTTPS protocols. Decrypt image if needed.

```
execute restore image url <string> <Enter>|<passwd>|<force> <Enter>|<force>
```

Parameter	Description	Type	Size
<string>	URL string with protocol prefix. e.g: https://example.com/image.aes	string	
<Enter> <passwd> <force>	Image encryption passphrase.	string	
<Enter> <force>	Bypass signature and validity checking.	string	

execute restore image usb

Restore image from USB disk.

```
execute restore image usb <string>
```

Parameter	Description	Type	Size
<string>	Image file name on the USB disk.	string	

execute restore ips ftp

Restore IPS database from FTP server.

```
execute restore ips ftp <string> <ftp server>[:ftp port] <Enter>|<user> <passwd>
```

Parameter	Description	Type	Size
<string>	IPS data base file name (path) on the remote server.	string	
<ftp server>[:ftp port]	FTP server IPv4, IPv6, or FQDN can be attached with port.	string	
<Enter> <user>	FTP username may be needed.	string	
<passwd>	FTP password.	string	

execute restore ips tftp

Restore IPS database from TFTP server.

```
execute restore ips tftp <string> <tftp server>
```

Parameter	Description	Type	Size
<string>	IPS database file name on the TFTP server.	string	
<tftp server>	TFTP server IPv4, IPv6, or FQDN.	string	

execute restore ipsuserdefsig ftp

Restore user-defined ips signatures file from FTP server.

```
execute restore ipsuserdefsig ftp <string> <ftp server>[:ftp port] <Enter>|<user> <passwd>
```

Parameter	Description	Type	Size
<string>	User-defined ips signatures file on the remote server.	string	
<ftp server>[:ftp port]	FTP server IPv4, IPv6, or FQDN can be attached with port.	string	
<Enter> <user>	FTP username may be needed.	string	
<passwd>	FTP password.	string	

execute restore ipsuserdefsig tftp

Restore user defined IPS signatures file from TFTP server.

```
execute restore ipsuserdefsig tftp <string> <tftp server>
```

Parameter	Description	Type	Size
<string>	File name on the TFTP server.	string	
<tftp server>	TFTP server IPv4, IPv6, or FQDN.	string	

execute restore manual-license ftp

Restore Manual License from FTP server.

```
execute restore manual-license ftp <string> <ftp server>[:ftp port] <Enter>|<user> <passwd>
```

Parameter	Description	Type	Size
<string>	FortiGuard Contract License file name on the FTP server.	string	

Parameter	Description	Type	Size
<ftp server>[:ftp port]	FTP server IPv4, IPv6, or FQDN can be attached with port.	string	
<Enter> <user>	FTP username may be needed.	string	
<passwd>	FTP password.	string	

execute restore manual-license tftp

Restore Manual License from TFTP server.

```
execute restore manual-license tftp <string> <tftp server>
```

Parameter	Description	Type	Size
<string>	Fortiguard Contract License file name on the TFTP server.	string	
<tftp server>	TFTP server IPv4, IPv6, or FQDN.	string	

execute restore other-objects ftp

Restore other FortiGuard packages from FTP server. Current support: Internet-service Database Apps/Maps and URL Allow List.

```
execute restore other-objects ftp <string> <ftp server>[:ftp port] <Enter>|<user> <passwd>
```

Parameter	Description	Type	Size
<string>	Other FortiGuard package file name on the FTP server.	string	
<ftp server>[:ftp port]	FTP server IPv4, IPv6, or FQDN can be attached with port.	string	
<Enter> <user>	FTP username may be needed.	string	
<passwd>	FTP password.	string	

execute restore other-objects tftp

Restore other FortiGuard packages from TFTP server. Current support: Internet-service Database Apps/Maps and URL Allow List.

```
execute restore other-objects tftp <string> <tftp server>
```


Parameter	Description	Type	Size
<string>	Other FortiGuard package file name on the TFTP server.	string	
<tftp server>	TFTP server IPv4, IPv6, or FQDN.	string	

execute restore script ftp

Load script from FTP server.

```
execute restore script ftp <string> <ftp server>[:ftp port] <Enter>|<user> <passwd>
```

Parameter	Description	Type	Size
<string>	Script on the remote server.	string	
<ftp server>[:ftp port]	FTP server IPv4, IPv6, or FQDN can be attached with port.	string	
<Enter> <user>	FTP username may be needed.	string	
<passwd>	FTP password.	string	

execute restore script lastlog

Read the result of last restored script.

```
execute restore script lastlog
```

execute restore script scp

Load script from SCP server to firewall.

```
execute restore script scp <string> <ip> <user> <Enter>|<passwd>
```

Parameter	Description	Type	Size
<string>	File name on the SCP server.	string	
<ip>	IP address.	string	
<user>	User name.	string	
<Enter> <passwd>	Enter or input password.	string	

execute restore script tftp

Load script from TFTP server to firewall.

```
execute restore script tftp <string> <tftp server> <Enter>|<passwd>
```

Parameter	Description	Type	Size
<string>	File name on the TFTP server.	string	
<tftp server>	TFTP server IPv4, IPv6, or FQDN.	string	
<Enter> <passwd>	Password may be needed to restore.	string	

execute restore secondary-image ftp

Load image from FTP server.

```
execute restore secondary-image ftp <string> <ftp server>[:ftp port] <Enter>|<user> <passwd>
```

Parameter	Description	Type	Size
<string>	Image file name(path) on the remote server.	string	
<ftp server>[:ftp port]	FTP server IPv4, IPv6, or FQDN can be attached with port.	string	
<Enter> <user>	FTP username may be needed.	string	
<passwd>	FTP password.	string	

execute restore secondary-image tftp

Restore image from TFTP server.

```
execute restore secondary-image tftp <string> <tftp address>
```

Parameter	Description	Type	Size
<string>	Image file name on the TFTP server.	string	
<tftp address>	TFTP server IPv4, IPv6, or FQDN.	string	

execute restore secondary-image url

Restore image from URL with HTTP/HTTPS protocols. Decrypt image if needed.

```
execute restore secondary-image url <string> <Enter>|<passwd>|<force> <Enter>|<force>
```

Parameter	Description	Type	Size
<string>	URL string with protocol prefix. e.g: https://example.com/image.aes	string	
<Enter> <passwd> <force>	Image encryption passphrase.	string	
<Enter> <force>	Bypass signature and validity checking.	string	

execute restore secondary-image usb

Restore image from USB disk.

```
execute restore secondary-image usb <string>
```

Parameter	Description	Type	Size
<string>	Image file name on the USB disk.	string	

execute restore vmlicense ftp

Restore VM license from FTP server.

```
execute restore vmlicense ftp <string> <ftp server>[:ftp port] <Enter>|<user> <passwd>
```

Parameter	Description	Type	Size
<string>	VM license file name(path) on the remote server.	string	
<ftp server>[:ftp port]	FTP server IPv4, IPv6, or FQDN can be attached with port.	string	
<Enter> <user>	FTP username may be needed.	string	
<passwd>	FTP password.	string	

execute restore vmlicense tftp

restore VM license from tftp server

```
execute restore vmlicense tftp <string> <tftp server>
```

Parameter	Description	Type	Size
<string>	VM license file name on the tftp server	string	

Parameter	Description	Type	Size
<tftp server>	TFTP server IPv4, IPv6, or FQDN.	string	

execute revision

revision

This topic includes the following commands:

- [execute revision delete config on page 3341](#)
- [execute revision delete image on page 3341](#)
- [execute revision list config on page 3341](#)
- [execute revision list image on page 3342](#)

execute revision delete config

Delete config revision on local disk.

```
execute revision delete config <revision> <rev_id>
```

Parameter	Description	Type	Size
<revision>	Revision ID(s) on local disk. Eg. 1 3-6 8	string	
<rev_id>	place holder for multiple Revision IDs, at most 10 a time.	string	

execute revision delete image

Delete image revision on local disk.

```
execute revision delete image <revision> <rev_id>
```

Parameter	Description	Type	Size
<revision>	Revision ID(s) on local disk. Eg. 1 3-6 8	string	
<rev_id>	place holder for multiple Revision IDs, at most 10 a time.	string	

execute revision list config

List config revision on local disk.

```
execute revision list config
```

execute revision list image

List image revision on local disk.

```
execute revision list image
```

execute router

router

This topic includes the following commands:

- [execute router clear bfd session on page 3342](#)
- [execute router clear bgp all on page 3343](#)
- [execute router clear bgp as on page 3343](#)
- [execute router clear bgp dampening on page 3343](#)
- [execute router clear bgp external on page 3343](#)
- [execute router clear bgp flap-statistics on page 3343](#)
- [execute router clear bgp ip on page 3343](#)
- [execute router clear bgp ipv6 on page 3344](#)
- [execute router clear ospf process on page 3344](#)
- [execute router clear ospf6 process on page 3344](#)
- [execute router restart on page 3344](#)

execute router clear bfd session

Clear BFD session.

```
execute router clear bfd session <xxx.xxx.xxx.xxx> <xxx.xxx.xxx.xxx> <string>
```

Parameter	Description	Type	Size
<xxx.xxx.xxx.xxx>	Source IP address.	string	
<xxx.xxx.xxx.xxx>	Destination IP address.	string	
<string>	Interface name.	string	

execute router clear bgp all

Clear all BGP peers.

```
execute router clear bgp all
```

execute router clear bgp as

Clear BGP peer by AS number.

```
execute router clear bgp as
```

execute router clear bgp dampening

Clear route flap dampening information.

```
execute router clear bgp dampening
```

execute router clear bgp external

Clear all external peers.

```
execute router clear bgp external
```

execute router clear bgp flap-statistics

Clear route flap statistics.

```
execute router clear bgp flap-statistics
```

execute router clear bgp ip

Clear BGP peer by IP address.

```
execute router clear bgp ip
```

execute router clear bgp ipv6

Clear BGP peer by IPv6 address.

```
execute router clear bgp ipv6
```

execute router clear ospf process

Clear and restart OSPF router.

```
execute router clear ospf process
```

execute router clear ospf6 process

Clear and restart OSPF6 router.

```
execute router clear ospf6 process
```

execute router restart

Restart routing software.

```
execute router restart
```

execute sdn

sdn

This topic includes the following commands:

- [execute sdn tag add nsx on page 3344](#)
- [execute sdn tag remove nsx on page 3345](#)

execute sdn tag add nsx

NSX tag VM.

```
execute sdn tag add nsx <name> <ip-addr> <tagname> <0/1>
```

Parameter	Description	Type	Size
<name>	NSX SDN connector name.	string	
<ip-addr>	VM IP address.	string	
<tagname>	Tag name.	string	
<0/1>	Disable/enable use of Spoofguard.	string	

execute sdn tag remove nsx

NSX remove VM from tag.

```
execute sdn tag remove nsx <name> <ip-addr> <tagname> <0/1>
```

Parameter	Description	Type	Size
<name>	NSX SDN connector name.	string	
<ip-addr>	VM IP address.	string	
<tagname>	Tag name.	string	
<0/1>	Disable/enable use of Spoofguard.	string	

execute send-fds-statistics

Send FortiGuard statistics.

```
execute send-fds-statistics
```

execute send-fmg-list

Send connected FortiManager list to FortiGuard.

```
execute send-fmg-list
```

execute sensor

sensor

This topic includes the following commands:

- [execute sensor detail on page 3346](#)
- [execute sensor list on page 3346](#)

execute sensor detail

List detailed sensors and readings

```
execute sensor detail
```

execute sensor list

List sensors and readings

```
execute sensor list
```

execute set

set

This topic includes the following commands:

- [execute set system session filter clear all on page 3347](#)
- [execute set system session filter clear dport on page 3347](#)
- [execute set system session filter clear dst on page 3347](#)
- [execute set system session filter clear duration on page 3347](#)
- [execute set system session filter clear expire on page 3347](#)
- [execute set system session filter clear policy on page 3348](#)
- [execute set system session filter clear proto on page 3348](#)
- [execute set system session filter clear sport on page 3348](#)
- [execute set system session filter clear src on page 3348](#)
- [execute set system session filter clear vd on page 3348](#)
- [execute set system session filter dport on page 3348](#)
- [execute set system session filter dst on page 3349](#)
- [execute set system session filter duration on page 3349](#)
- [execute set system session filter expire on page 3349](#)
- [execute set system session filter list on page 3349](#)
- [execute set system session filter negate dport on page 3350](#)
- [execute set system session filter negate dst on page 3350](#)
- [execute set system session filter negate duration on page 3350](#)

- [execute set system session filter negate expire on page 3350](#)
- [execute set system session filter negate policy on page 3350](#)
- [execute set system session filter negate proto on page 3350](#)
- [execute set system session filter negate sport on page 3351](#)
- [execute set system session filter negate src on page 3351](#)
- [execute set system session filter negate vd on page 3351](#)
- [execute set system session filter policy on page 3351](#)
- [execute set system session filter proto on page 3351](#)
- [execute set system session filter sport on page 3352](#)
- [execute set system session filter src on page 3352](#)
- [execute set system session filter vd on page 3352](#)

execute set system session filter clear all

Clear session filter.

```
execute set system session filter clear all
```

execute set system session filter clear dport

Clear destination port.

```
execute set system session filter clear dport
```

execute set system session filter clear dst

Clear destination IP.

```
execute set system session filter clear dst
```

execute set system session filter clear duration

Clear duration.

```
execute set system session filter clear duration
```

execute set system session filter clear expire

Clear expire.

```
execute set system session filter clear expire
```

execute set system session filter clear policy

Clear policy ID.

```
execute set system session filter clear policy
```

execute set system session filter clear proto

Clear protocol.

```
execute set system session filter clear proto
```

execute set system session filter clear sport

Clear source port.

```
execute set system session filter clear sport
```

execute set system session filter clear src

Clear source IP.

```
execute set system session filter clear src
```

execute set system session filter clear vd

Clear virtual domain.

```
execute set system session filter clear vd
```

execute set system session filter dport

Destination port.

```
execute set system session filter dport <xxxx> <xxxx>
```

Parameter	Description	Type	Size
<xxxx>	<0-65535> (from).	string	
<xxxx>	<0-65535> (to).	string	

execute set system session filter dst

Destination IP address.

```
execute set system session filter dst <xxx.xxx.xxx.xxx> <xxx.xxx.xxx.xxx>
```

Parameter	Description	Type	Size
<xxx.xxx.xxx.xxx>	Destination IP (from).	string	
<xxx.xxx.xxx.xxx>	Destination IP (to).	string	

execute set system session filter duration

duration

```
execute set system session filter duration <xxx> <xxx>
```

Parameter	Description	Type	Size
<xxx>	Duration (from).	string	
<xxx>	Duration (to).	string	

execute set system session filter expire

expire

```
execute set system session filter expire <xxx> <xxx>
```

Parameter	Description	Type	Size
<xxx>	Expire (from).	string	
<xxx>	Expire (to).	string	

execute set system session filter list

List system session filter.

```
execute set system session filter list
```

execute set system session filter negate dport

Inverse destination port.

```
execute set system session filter negate dport
```

execute set system session filter negate dst

Inverse destination IP.

```
execute set system session filter negate dst
```

execute set system session filter negate duration

Inverse duration.

```
execute set system session filter negate duration
```

execute set system session filter negate expire

Inverse expire.

```
execute set system session filter negate expire
```

execute set system session filter negate policy

Inverse policy ID.

```
execute set system session filter negate policy
```

execute set system session filter negate proto

Inverse protocol.

```
execute set system session filter negate proto
```

execute set system session filter negate sport

Inverse source port.

```
execute set system session filter negate sport
```

execute set system session filter negate src

Inverse source IP.

```
execute set system session filter negate src
```

execute set system session filter negate vd

Inverse virtual domain.

```
execute set system session filter negate vd
```

execute set system session filter policy

Policy ID.

```
execute set system session filter policy <xxx> <xxx>
```

Parameter	Description	Type	Size
<xxx>	Policy ID (from).	string	
<xxx>	Policy ID (to).	string	

execute set system session filter proto

Protocol number.

```
execute set system session filter proto <xx> <xx>
```

Parameter	Description	Type	Size
<xx>	<0-255> (from).	string	
<xx>	<0-255> (to).	string	

execute set system session filter sport

Source port.

```
execute set system session filter sport <xxxx> <xxxx>
```

Parameter	Description	Type	Size
<xxxx>	<0-65535> (from).	string	
<xxxx>	<0-65535> (to).	string	

execute set system session filter src

Source IP address.

```
execute set system session filter src <xxx.xxx.xxx.xxx> <xxx.xxx.xxx.xxx>
```

Parameter	Description	Type	Size
<xxx.xxx.xxx.xxx>	Source IP (from).	string	
<xxx.xxx.xxx.xxx>	Source IP (to).	string	

execute set system session filter vd

Index of virtual domain. -1 matches all.

```
execute set system session filter vd <xxx>
```

Parameter	Description	Type	Size
<xxx>	Index of virtual domain. -1 matches all.	string	

execute set-next-reboot

set-next-reboot

This topic includes the following commands:

- [execute set-next-reboot primary on page 3353](#)
- [execute set-next-reboot secondary on page 3353](#)

execute set-next-reboot primary

partition

```
execute set-next-reboot primary
```

execute set-next-reboot secondary

partition

```
execute set-next-reboot secondary
```

execute shutdown

Shutdown now.

```
execute shutdown <comment> <string>
```

Parameter	Description	Type	Size
<comment>	comment	string	
<string>	Shutdown comments.	string	

execute speed-test

A bandwidth measuring tool.

```
execute speed-test <interface> <server> <mode>
```

Parameter	Description	Type	Size
<interface>	auto <outgoing interface name>.	string	
<server>	server name.	string	
<mode>	optional, Auto(default), TCP or UDP.	string	

execute speed-test-dbg

A bandwidth measuring tool for debug.

```
execute speed-test-dbg <interface> <server-ip> <max-out> <min-out>
```

Parameter	Description	Type	Size
<interface>	Speed test interface	string	
<server-ip>	Server IPv4 address	string	
<max-out>	Maximum allowed uploading bandwidth (kbps).	string	
<min-out>	Minimum allowed uploading bandwidth (kbps).	string	

execute speed-test-dynamic

A bandwidth measuring tool for ipsec tunnel.

```
execute speed-test-dynamic <interface> <tunnel_name> <'y'/'n'> <max-out> <min-out>
```

Parameter	Description	Type	Size
<interface>	ipsec phase1 interface.	string	
<tunnel_name>	all <specific tunnel name>.	string	
<'y'/'n'>	Set result to tunnels' shaper.	string	
<max-out>	Maximum allowed uploading bandwidth (kbps).	string	
<min-out>	Minimum allowed uploading bandwidth (kbps).	string	

execute speed-test-server

speed-test-server

This topic includes the following commands:

- [execute speed-test-server download on page 3355](#)
- [execute speed-test-server list on page 3355](#)

execute speed-test-server download

Download server list from FortiGate Cloud.

```
execute speed-test-server download
```

execute speed-test-server list

List all available servers.

```
execute speed-test-server list
```

execute ssh

Simple SSH client.

```
execute ssh <user@host> <port>
```

Parameter	Description	Type	Size
<user@host>	User-name @ IP address or domain name.	string	
<port>	port.	string	

execute ssh6

Simple IPv6 SSH client.

```
execute ssh6 <user@host> <port>
```

Parameter	Description	Type	Size
<user@host>	User-name @ IPv6 address or domain name.	string	
<port>	port.	string	

execute ssh6-options

ssh6-options

This topic includes the following commands:

- [execute ssh6-options interface on page 3356](#)
- [execute ssh6-options reset on page 3356](#)
- [execute ssh6-options source6 on page 3356](#)
- [execute ssh6-options view-settings on page 3356](#)

execute ssh6-options interface

Auto | <outgoing interface>.

```
execute ssh6-options interface <string>
```

Parameter	Description	Type	Size
<string>	Auto <outgoing interface>.	string	

execute ssh6-options reset

Reset settings.

```
execute ssh6-options reset
```

execute ssh6-options source6

Auto | <source interface IPv6>.

```
execute ssh6-options source6 <xxxx:xxxx:xxxx:xxxx:xxxx:xxxx:xxxx:xxxx>
```

Parameter	Description	Type	Size
<xxxx:xxxx:xxxx:xxxx:xxxx:xxxx:xxxx:xxxx>	<source interface IPv6> Auto	string	

execute ssh6-options view-settings

View current settings for SSH (IPv6) option.

```
execute ssh6-options view-settings
```

execute ssh-options

ssh-options

This topic includes the following commands:

- [execute ssh-options interface on page 3357](#)
- [execute ssh-options reset on page 3357](#)
- [execute ssh-options source on page 3357](#)
- [execute ssh-options view-settings on page 3357](#)

execute ssh-options interface

Auto | <outgoing interface>.

```
execute ssh-options interface <string>
```

Parameter	Description	Type	Size
<string>	Auto <outgoing interface>.	string	

execute ssh-options reset

Reset settings.

```
execute ssh-options reset
```

execute ssh-options source

Auto | <source interface IP>.

```
execute ssh-options source <xxx.xxx.xxx.xxx>
```

Parameter	Description	Type	Size
<xxx.xxx.xxx.xxx>	<source interface IP> Auto	string	

execute ssh-options view-settings

View the current settings for SSH option.

```
execute ssh-options view-settings
```

execute ssh-regen-keys

Regenerate SSH server keys.

```
execute ssh-regen-keys
```

execute switch-controller

switch-controller

This topic includes the following commands:

- [execute switch-controller custom-command](#) on page 3359
- [execute switch-controller diagnose-connection](#) on page 3360
- [execute switch-controller diagnose-connection-v6](#) on page 3360
- [execute switch-controller dsl reset](#) on page 3360
- [execute switch-controller dsl update ftp](#) on page 3360
- [execute switch-controller dsl update tftp](#) on page 3361
- [execute switch-controller flapguard reset](#) on page 3361
- [execute switch-controller get-conn-status](#) on page 3362
- [execute switch-controller get-physical-conn dot](#) on page 3362
- [execute switch-controller get-physical-conn standard](#) on page 3362
- [execute switch-controller get-sync-status all](#) on page 3362
- [execute switch-controller get-sync-status group](#) on page 3362
- [execute switch-controller get-sync-status name](#) on page 3363
- [execute switch-controller get-sync-status switch-id](#) on page 3363
- [execute switch-controller get-upgrade-status](#) on page 3363
- [execute switch-controller switch-action 802-1X clear-auth-mac](#) on page 3363
- [execute switch-controller switch-action 802-1X clear-auth-port](#) on page 3364
- [execute switch-controller switch-action bpdu-guard reset](#) on page 3364
- [execute switch-controller switch-action cable-diag](#) on page 3364
- [execute switch-controller switch-action factory-reset](#) on page 3365
- [execute switch-controller switch-action flow-tracking delete-flows-all](#) on page 3365
- [execute switch-controller switch-action flow-tracking expire-flows-all](#) on page 3365
- [execute switch-controller switch-action igmp-snoop clear-learned](#) on page 3365
- [execute switch-controller switch-action loop-guard reset](#) on page 3366
- [execute switch-controller switch-action mac-device-reset dynamic](#) on page 3366
- [execute switch-controller switch-action mac-device-reset nac](#) on page 3366
- [execute switch-controller switch-action mac-limit-violation reset all](#) on page 3366
- [execute switch-controller switch-action mac-limit-violation reset interface](#) on page 3367
- [execute switch-controller switch-action mac-limit-violation reset vlan](#) on page 3367

- [execute switch-controller switch-action mclag stats clear icl on page 3367](#)
- [execute switch-controller switch-action mclag stats clear mlag on page 3368](#)
- [execute switch-controller switch-action physical-ports led-flash serial-number on page 3368](#)
- [execute switch-controller switch-action physical-ports led-flash switch-group on page 3368](#)
- [execute switch-controller switch-action physical-ports led-flash tier1 on page 3369](#)
- [execute switch-controller switch-action physical-ports led-flash tier2plus on page 3369](#)
- [execute switch-controller switch-action poe reset on page 3369](#)
- [execute switch-controller switch-action restart delay all on page 3369](#)
- [execute switch-controller switch-action restart delay sn on page 3370](#)
- [execute switch-controller switch-action restart delay switch-group on page 3370](#)
- [execute switch-controller switch-action restart swtp all on page 3370](#)
- [execute switch-controller switch-action restart swtp sn on page 3370](#)
- [execute switch-controller switch-action restart swtp switch-group on page 3371](#)
- [execute switch-controller switch-action set-standalone on page 3371](#)
- [execute switch-controller switch-action sticky-mac delete-unsaved all on page 3371](#)
- [execute switch-controller switch-action sticky-mac delete-unsaved interface on page 3371](#)
- [execute switch-controller switch-action sticky-mac save all on page 3372](#)
- [execute switch-controller switch-action sticky-mac save interface on page 3372](#)
- [execute switch-controller switch-software cancel all on page 3372](#)
- [execute switch-controller switch-software cancel sn on page 3372](#)
- [execute switch-controller switch-software cancel switch-group on page 3373](#)
- [execute switch-controller switch-software delete on page 3373](#)
- [execute switch-controller switch-software list-available on page 3373](#)
- [execute switch-controller switch-software stage all on page 3373](#)
- [execute switch-controller switch-software stage sn on page 3374](#)
- [execute switch-controller switch-software stage switch-group on page 3374](#)
- [execute switch-controller switch-software upgrade on page 3374](#)
- [execute switch-controller switch-software upload ftp on page 3374](#)
- [execute switch-controller switch-software upload tftp on page 3375](#)
- [execute switch-controller virtual-port-pool request on page 3375](#)
- [execute switch-controller virtual-port-pool return on page 3375](#)
- [execute switch-controller virtual-port-pool show on page 3376](#)
- [execute switch-controller virtual-port-pool show-by-pool on page 3376](#)
- [execute switch-controller virtual-port-pool show-by-property on page 3376](#)
- [execute switch-controller virtual-port-pool show-by-tag on page 3376](#)

execute switch-controller custom-command

Push a FortiSwitch custom command to a FortiSwitch device.

```
execute switch-controller custom-command <cmd-name> <target-switch>
```

Parameter	Description	Type	Size
<cmd-name>	Names of commands to be pushed to this FortiSwitch device, as configured under config switch-controller custom-command.	string	
<target-switch>	FortiSwitch device to push the custom command to.	string	

execute switch-controller diagnose-connection

Get FortiSwitch connection diagnostics.

```
execute switch-controller diagnose-connection <switch>
```

Parameter	Description	Type	Size
<switch>	FortiSwitch device ID.	string	

execute switch-controller diagnose-connection-v6

Get FortiSwitch IPv6 connection diagnostics.

```
execute switch-controller diagnose-connection-v6 <switch>
```

Parameter	Description	Type	Size
<switch>	FortiSwitch device ID.	string	

execute switch-controller dsl reset

Reset DSL module on port of FortiSwitch.

```
execute switch-controller dsl reset <switch> <port>
```

Parameter	Description	Type	Size
<switch>	FortiSwitch device ID.	string	
<port>	FortiSwitch port.	string	

execute switch-controller dsl update ftp

Upload a DSL image from FTP server.

```
execute switch-controller dsl update ftp <string> <ftp server>[:ftp port] <Enter>|<user> <passwd> <switch> <port>
```

Parameter	Description	Type	Size
<string>	DSL image name on the FTP server.	string	
<ftp server>[:ftp port]	FTP server IPv4, IPv6, or FQDN can be attached with port.	string	
<Enter> <user>	FTP username may be needed.	string	
<passwd>	FTP password.	string	
<switch>	FortiSwitch device ID.	string	
<port>	FortiSwitch port.	string	

execute switch-controller dsl update tftp

Upload a DSL image from TFTP server.

```
execute switch-controller dsl update tftp <string> <tftp server> <switch> <port>
```

Parameter	Description	Type	Size
<string>	DSL image name on the TFTP server.	string	
<tftp server>	TFTP server IPv4, IPv6, or FQDN.	string	
<switch>	FortiSwitch device ID.	string	
<port>	FortiSwitch port.	string	

execute switch-controller flapguard reset

Reset flapguard on port.

```
execute switch-controller flapguard reset <switch-name> <port>
```

Parameter	Description	Type	Size
<switch-name>	Name.	string	
<port>	FortiSwitch port.	string	

execute switch-controller get-conn-status

Get FortiSwitch connection status.

```
execute switch-controller get-conn-status <switch>
```

Parameter	Description	Type	Size
<switch>	FortiSwitch device ID.	string	

execute switch-controller get-physical-conn dot

Get FortiLink connectivity graph in dot output format.

```
execute switch-controller get-physical-conn dot <fortilink-name>
```

Parameter	Description	Type	Size
<fortilink-name>	FortiLink name.	string	

execute switch-controller get-physical-conn standard

Get FortiLink connectivity graph in standard output format.

```
execute switch-controller get-physical-conn standard <fortilink-name>
```

Parameter	Description	Type	Size
<fortilink-name>	FortiLink name.	string	

execute switch-controller get-sync-status all

Get FortiSwitch sync status.

```
execute switch-controller get-sync-status all
```

execute switch-controller get-sync-status group

Get FortiSwitch sync status by group.

```
execute switch-controller get-sync-status group <group>
```

Parameter	Description	Type	Size
<group>	Group Name.	string	

execute switch-controller get-sync-status name

Get FortiSwitch sync status by switch name.

```
execute switch-controller get-sync-status name <switch-name>
```

Parameter	Description	Type	Size
<switch-name>	Name.	string	

execute switch-controller get-sync-status switch-id

Get FortiSwitch sync status by switch.

```
execute switch-controller get-sync-status switch-id <switch>
```

Parameter	Description	Type	Size
<switch>	FortiSwitch device ID.	string	

execute switch-controller get-upgrade-status

Get FortiSwitch upgrade status.

```
execute switch-controller get-upgrade-status
```

execute switch-controller switch-action 802-1X clear-auth-mac

Clear FortiSwitch MAC entry.

```
execute switch-controller switch-action 802-1X clear-auth-mac <switch> <mac>
```

Parameter	Description	Type	Size
<switch>	FortiSwitch device ID.	string	
<mac>	MAC address.	string	

execute switch-controller switch-action 802-1X clear-auth-port

Clear FortiSwitch MAC entries on a single interface.

```
execute switch-controller switch-action 802-1X clear-auth-port <switch> <port>
```

Parameter	Description	Type	Size
<switch>	FortiSwitch device ID.	string	
<port>	FortiSwitch port.	string	

execute switch-controller switch-action bpdu-guard reset

Reset BPDU guard on switch-interface.

```
execute switch-controller switch-action bpdu-guard reset <switch> <port>
```

Parameter	Description	Type	Size
<switch>	FortiSwitch device ID.	string	
<port>	FortiSwitch port.	string	

execute switch-controller switch-action cable-diag

Run a TDR diagnostic test on the specified FortiSwitch port.

```
execute switch-controller switch-action cable-diag <switch> <port>
```

Parameter	Description	Type	Size
<switch>	FortiSwitch device ID.	string	
<port>	FortiSwitch port.	string	

execute switch-controller switch-action factory-reset

Set FortiSwitch to factory default settings.

```
execute switch-controller switch-action factory-reset <switch>
```

Parameter	Description	Type	Size
<switch>	FortiSwitch device ID.	string	

execute switch-controller switch-action flow-tracking delete-flows-all

Delete all flows in the FortiSwitch.

```
execute switch-controller switch-action flow-tracking delete-flows-all <switch>
```

Parameter	Description	Type	Size
<switch>	FortiSwitch device ID.	string	

execute switch-controller switch-action flow-tracking expire-flows-all

Expire all flows in the FortiSwitch.

```
execute switch-controller switch-action flow-tracking expire-flows-all <switch>
```

Parameter	Description	Type	Size
<switch>	FortiSwitch device ID.	string	

execute switch-controller switch-action igmp-snoop clear-learned

Clear FortiSwitch IGMP snooping multicast Groups and Queriers.

```
execute switch-controller switch-action igmp-snoop clear-learned <switch>
```

Parameter	Description	Type	Size
<switch>	FortiSwitch device ID.	string	

execute switch-controller switch-action loop-guard reset

Reset loop-guard on switch-interface.

```
execute switch-controller switch-action loop-guard reset <switch> <port>
```

Parameter	Description	Type	Size
<switch>	FortiSwitch device ID.	string	
<port>	FortiSwitch port.	string	

execute switch-controller switch-action mac-device-reset dynamic

Remove specific or all DPP devices.

```
execute switch-controller switch-action mac-device-reset dynamic <mac>
```

Parameter	Description	Type	Size
<mac>	MAC address of the DPP device.	string	

execute switch-controller switch-action mac-device-reset nac

Remove NAC devices and return MAC to onboarding VLAN.

```
execute switch-controller switch-action mac-device-reset nac <mac>
```

Parameter	Description	Type	Size
<mac>	MAC address of the NAC device.	string	

execute switch-controller switch-action mac-limit-violation reset all

Reset all MAC learning limit violations in FortiSwitch.

```
execute switch-controller switch-action mac-limit-violation reset all <switch>
```

Parameter	Description	Type	Size
<switch>	FortiSwitch device ID.	string	

execute switch-controller switch-action mac-limit-violation reset interface

Reset MAC learning limit violations on a FortiSwitch interface.

```
execute switch-controller switch-action mac-limit-violation reset interface <switch> <port>
```

Parameter	Description	Type	Size
<switch>	FortiSwitch device ID.	string	
<port>	FortiSwitch ports.	string	

execute switch-controller switch-action mac-limit-violation reset vlan

Reset MAC learning limit violations on a FortiSwitch VLAN.

```
execute switch-controller switch-action mac-limit-violation reset vlan <switch> <vlan-id>
```

Parameter	Description	Type	Size
<switch>	FortiSwitch device ID.	string	
<vlan-id>	FortiSwitch VLAN ID.	string	

execute switch-controller switch-action mclag stats clear icl

Clears MCLAG inter-chassis-link statistics.

```
execute switch-controller switch-action mclag stats clear icl <switch>
```

Parameter	Description	Type	Size
<switch>	FortiSwitch device ID.	string	

execute switch-controller switch-action mclag stats clear mlag

Clears MCLAGs statistics for MCLAG enabled trunk.

```
execute switch-controller switch-action mclag stats clear mlag <switch> <mclag-trunk-name>
```

Parameter	Description	Type	Size
<switch>	FortiSwitch device ID.	string	
<mclag-trunk-name>	MCLAG's trunk name.	string	

execute switch-controller switch-action physical-ports led-flash serial-number

Enable FortiSwitch LED flash mode by serial number.

```
execute switch-controller switch-action physical-ports led-flash serial-number <switch> <time>
```

Parameter	Description	Type	Size
<switch>	FortiSwitch device ID.	string	
<time>	FortiSwitch LED flash mode in minutes < disable 5 15 30 60 >.	string	

execute switch-controller switch-action physical-ports led-flash switch-group

Enable LED flash mode on FortiSwitches in the switch-group.

```
execute switch-controller switch-action physical-ports led-flash switch-group <switch-group ID> <time>
```

Parameter	Description	Type	Size
<switch-group ID>	FortiSwitch group ID.	string	
<time>	FortiSwitch LED flash mode in minutes < disable 5 15 30 60 >.	string	

execute switch-controller switch-action physical-ports led-flash tier1

Enable LED flash mode on all tier 1 FortiSwitch units.

```
execute switch-controller switch-action physical-ports led-flash tier1 <time>
```

Parameter	Description	Type	Size
<time>	FortiSwitch LED flash mode in minutes < disable 5 15 30 60 >.	string	

execute switch-controller switch-action physical-ports led-flash tier2plus

Enable LED flash mode on all tier 2 and lower FortiSwitch units.

```
execute switch-controller switch-action physical-ports led-flash tier2plus <time>
```

Parameter	Description	Type	Size
<time>	FortiSwitch LED flash mode in minutes < disable 5 15 30 60 >.	string	

execute switch-controller switch-action poe reset

Reset PoE port on FortiSwitch.

```
execute switch-controller switch-action poe reset <switch> <port>
```

Parameter	Description	Type	Size
<switch>	FortiSwitch device ID.	string	
<port>	FortiSwitch port.	string	

execute switch-controller switch-action restart delay all

Restart delay all FortiSwitch devices.

```
execute switch-controller switch-action restart delay all
```


execute switch-controller switch-action restart delay sn

Restart delay FortiSwitch device identified by serial number.

```
execute switch-controller switch-action restart delay sn <switch>
```

Parameter	Description	Type	Size
<switch>	FortiSwitch device ID.	string	

execute switch-controller switch-action restart delay switch-group

Restart delay FortiSwitch devices belonging to switch-group.

```
execute switch-controller switch-action restart delay switch-group <switch-group ID>
```

Parameter	Description	Type	Size
<switch-group ID>	Switch group ID.	string	

execute switch-controller switch-action restart swtp all

Restart all FortiSwitch devices.

```
execute switch-controller switch-action restart swtp all
```

execute switch-controller switch-action restart swtp sn

Restart FortiSwitch device identified by serial number.

```
execute switch-controller switch-action restart swtp sn <switch>
```

Parameter	Description	Type	Size
<switch>	FortiSwitch device ID.	string	

execute switch-controller switch-action restart swtp switch-group

Restart FortiSwitch devices belonging to switch-group.

```
execute switch-controller switch-action restart swtp switch-group <switch-group ID>
```

Parameter	Description	Type	Size
<switch-group ID>	Switch group ID.	string	

execute switch-controller switch-action set-standalone

Set FortiSwitch to local/non-FortiLink mode.

```
execute switch-controller switch-action set-standalone <switch>
```

Parameter	Description	Type	Size
<switch>	FortiSwitch device ID.	string	

execute switch-controller switch-action sticky-mac delete-unsaved all

Delete all unsync Sticky MAC entries on FSW.

```
execute switch-controller switch-action sticky-mac delete-unsaved all <switch>
```

Parameter	Description	Type	Size
<switch>	FortiSwitch device ID.	string	

execute switch-controller switch-action sticky-mac delete-unsaved interface

Delete specific interface's unsync Sticky MAC entries on FSW.

```
execute switch-controller switch-action sticky-mac delete-unsaved interface <switch> <port>
```

Parameter	Description	Type	Size
<switch>	FortiSwitch device ID.	string	
<port>	Delete unsaved Sticky MAC entries for the specified interface.	string	

execute switch-controller switch-action sticky-mac save all

Sync and save all Sticky MAC entries to config file (loads entries on boot).

```
execute switch-controller switch-action sticky-mac save all <switch>
```

Parameter	Description	Type	Size
<switch>	FortiSwitch device ID.	string	

execute switch-controller switch-action sticky-mac save interface

Sync and save specific interface Sticky MAC entries to config file (loads entries on boot).

```
execute switch-controller switch-action sticky-mac save interface <switch> <port>
```

Parameter	Description	Type	Size
<switch>	FortiSwitch device ID.	string	
<port>	Save Sticky MAC entries for the specified interface.	string	

execute switch-controller switch-software cancel all

Cancel staged image to all FortiSwitch devices.

```
execute switch-controller switch-software cancel all
```

execute switch-controller switch-software cancel sn

Cancel staged image to FortiSwitch device identified by serial number.

```
execute switch-controller switch-software cancel sn <switch>
```

Parameter	Description	Type	Size
<switch>	FortiSwitch device ID.	string	

execute switch-controller switch-software cancel switch-group

Cancel staged image to FortiSwitch devices belonging to switch-group.

```
execute switch-controller switch-software cancel switch-group <switch-group ID>
```

Parameter	Description	Type	Size
<switch-group ID>	Switch group ID.	string	

execute switch-controller switch-software delete

Delete FortiSwitch image.

```
execute switch-controller switch-software delete <all>|<image-name>
```

Parameter	Description	Type	Size
<all> <image-name>	Delete all images or specific image.	string	

execute switch-controller switch-software list-available

List FortiSwitch image(s) available on FortiGate.

```
execute switch-controller switch-software list-available
```

execute switch-controller switch-software stage all

Stage image to all FortiSwitch devices.

```
execute switch-controller switch-software stage all <filename>
```

Parameter	Description	Type	Size
<filename>	FortiSwitch image filename.	string	

execute switch-controller switch-software stage sn

Stage image to FortiSwitch device identified by serial number.

```
execute switch-controller switch-software stage sn <switch> <filename>
```

Parameter	Description	Type	Size
<switch>	FortiSwitch device ID.	string	
<filename>	FortiSwitch image filename.	string	

execute switch-controller switch-software stage switch-group

Stage image to FortiSwitch devices belonging to switch-group.

```
execute switch-controller switch-software stage switch-group <switch-group ID> <filename>
```

Parameter	Description	Type	Size
<switch-group ID>	Switch group ID.	string	
<filename>	FortiSwitch image filename.	string	

execute switch-controller switch-software upgrade

Upgrade FortiSwitch image to a managed FortiSwitch device.

```
execute switch-controller switch-software upgrade <switch> <filename>
```

Parameter	Description	Type	Size
<switch>	FortiSwitch device ID.	string	
<filename>	FortiSwitch image filename.	string	

execute switch-controller switch-software upload ftp

Upload a FortiSwitch image from FTP server.

```
execute switch-controller switch-software upload ftp <string> <ftp server>[:ftp port]  
<Enter>|<user> <passwd>
```

Parameter	Description	Type	Size
<string>	FortiSwitch image name on the FTP server.	string	
<ftp server>[:ftp port]	FTP server IPv4, IPv6, or FQDN can be attached with port.	string	
<Enter> <user>	FTP username may be needed.	string	
<passwd>	FTP password.	string	

execute switch-controller switch-software upload tftp

Upload a FortiSwitch image from TFTP server.

```
execute switch-controller switch-software upload tftp <string> <tftp server>
```

Parameter	Description	Type	Size
<string>	FortiSwitch image name on the TFTP server.	string	
<tftp server>	TFTP server IPv4, IPv6, or FQDN.	string	

execute switch-controller virtual-port-pool request

Request virtual port from pool.

```
execute switch-controller virtual-port-pool request <switch> <port>
```

Parameter	Description	Type	Size
<switch>	FortiSwitch device ID.	string	
<port>	FortiSwitch port.	string	

execute switch-controller virtual-port-pool return

Return virtual port to pool.

```
execute switch-controller virtual-port-pool return <switch> <port>
```

Parameter	Description	Type	Size
<switch>	FortiSwitch device ID.	string	
<port>	FortiSwitch port.	string	

execute switch-controller virtual-port-pool show

Show details of virtual ports in pool.

```
execute switch-controller virtual-port-pool show
```

execute switch-controller virtual-port-pool show-by-pool

Show details of virtual ports in pool by pool name.

```
execute switch-controller virtual-port-pool show-by-pool <pool>
```

Parameter	Description	Type	Size
<pool>	Pool Name.	string	

execute switch-controller virtual-port-pool show-by-property

Show details of virtual ports in pool by property name.

```
execute switch-controller virtual-port-pool show-by-property <property>
```

Parameter	Description	Type	Size
<property>	Property Name.	string	

execute switch-controller virtual-port-pool show-by-tag

Show details of virtual ports in pool by tag name.

```
execute switch-controller virtual-port-pool show-by-tag <tag>
```

Parameter	Description	Type	Size
<tag>	Tag Name.	string	

execute sync-IPSec

Sync all IPSec from peers.

```
execute sync-IPSec
```

execute sync-session

Sync all sessions from peers.

```
execute sync-session
```

execute system

system

This topic includes the following commands:

- [execute system custom-language import on page 3377](#)
- [execute system fortisandbox test-connectivity on page 3377](#)

execute system custom-language import

Import a custom language from the TFTP server.

```
execute system custom-language import <string> <string> <ip>
```

Parameter	Description	Type	Size
<string>	The language name.	string	
<string>	The file name on the TFTP server.	string	
<ip>	IP address of the TFTP server.	string	

execute system fortisandbox test-connectivity

Query FortiSandbox connection status.

```
execute system fortisandbox test-connectivity
```


execute tac

tac

This topic includes the following commands:

- [execute tac report on page 3378](#)

execute tac report

Debug report.

```
execute tac report
```

execute telnet

Simple telnet client.

```
execute telnet <dest> <port>
```

Parameter	Description	Type	Size
<dest>	IP address or domain name.	string	
<port>	port	string	

execute telnet-options

telnet-options

This topic includes the following commands:

- [execute telnet-options interface on page 3378](#)
- [execute telnet-options reset on page 3379](#)
- [execute telnet-options source on page 3379](#)
- [execute telnet-options view-settings on page 3379](#)

execute telnet-options interface

Auto | <outgoing interface>.

```
execute telnet-options interface <string>
```

Parameter	Description	Type	Size
<string>	Auto <outgoing interface>.	string	

execute telnet-options reset

Reset settings.

```
execute telnet-options reset
```

execute telnet-options source

Auto | <source interface IP>.

```
execute telnet-options source <xxx.xxx.xxx.xxx>
```

Parameter	Description	Type	Size
<xxx.xxx.xxx.xxx>	<source interface IP> Auto	string	

execute telnet-options view-settings

View the current settings for TELNET option.

```
execute telnet-options view-settings
```

execute test

test

This topic includes the following commands:

- [execute test tftp-analytics-report on page 3379](#)

execute test tftp-analytics-report

tftp analytics report.

```
execute test tftp-analytics-report <ip> <dir> <checksum>
```

Parameter	Description	Type	Size
<ip>	IP address of the TFTP server.	string	
<dir>	Directory for the analytics report.	string	
<checksum>	Checksum for the analytics report.	string	

execute time

System time.

```
execute time <hh:mm:ss>
```

Parameter	Description	Type	Size
<hh:mm:ss>	hh: 0-23, mm: 0-59, ss: 0-59.	string	

execute traceroute

Traceroute {IP|hostname}.

```
execute traceroute <dest>
```

Parameter	Description	Type	Size
<dest>	IP address or hostname.	string	

execute traceroute-options

traceroute-options

This topic includes the following commands:

- [execute traceroute-options device on page 3381](#)
- [execute traceroute-options queries on page 3381](#)
- [execute traceroute-options source on page 3381](#)
- [execute traceroute-options use-sdwan on page 3381](#)
- [execute traceroute-options view-settings on page 3381](#)

execute traceroute-options device

Auto | <ifname>.

```
execute traceroute-options device <string>
```

Parameter	Description	Type	Size
<string>	Auto <ifname>	string	

execute traceroute-options queries

Integer value to specify number of queries per hop.

```
execute traceroute-options queries <integer>
```

Parameter	Description	Type	Size
<integer>	Integer value [1, 10].	string	

execute traceroute-options source

Auto | <source interface IP>.

```
execute traceroute-options source <string>
```

Parameter	Description	Type	Size
<string>	Auto <source interface IP>.	string	

execute traceroute-options use-sdwan

Use SD-WAN rules to get output interface <yes | no>.

```
execute traceroute-options use-sdwan <string>
```

Parameter	Description	Type	Size
<string>	<yes no>.	string	

execute traceroute-options view-settings

View the current options of traceroute.

```
execute traceroute-options view-settings
```

execute tracert6

Traceroute for IPv6.

```
execute tracert6
```

execute update-av

Update AV engine/definitions.

```
execute update-av
```

execute update-eip

Update external IP.

```
execute update-eip
```

execute update-external-resource

Download external resource.

```
execute update-external-resource <name>
```

Parameter	Description	Type	Size
<name>	External resource name	string	

execute update-ffdb-on-demand

Update ondemand FFDB from FDS.

```
execute update-ffdb-on-demand
```

execute update-geo-ip

Update IP Geography DB.

```
execute update-geo-ip
```

execute update-ips

Update IPS engine/definitions.

```
execute update-ips
```

execute update-list

Download update server list.

```
execute update-list
```

execute update-now

Update now.

```
execute update-now
```

execute update-sata-firmware

Update SATA firmware.

```
execute update-sata-firmware
```

execute update-src-vis

Update src-vis object.

```
execute update-src-vis
```

execute upd-vd-license

Update VDOM license.

```
execute upd-vd-license <license key>
```

Parameter	Description	Type	Size
<license key>	VDOM license key.	string	

execute upload

upload

This topic includes the following commands:

- [execute upload config ftp on page 3384](#)
- [execute upload config tftp on page 3385](#)
- [execute upload config usb on page 3385](#)
- [execute upload image ftp on page 3385](#)
- [execute upload image tftp on page 3386](#)
- [execute upload image usb on page 3386](#)
- [execute upload report-img ftp on page 3386](#)
- [execute upload report-img tftp on page 3387](#)

execute upload config ftp

Load config file from FTP server.

```
execute upload config ftp <string> <comment> <ftp server>[:ftp port] <Enter>|<user> <passwd>  
<Enter>|<passwd>
```

Parameter	Description	Type	Size
<string>	Configure file name(path) on the remote server.	string	
<comment>	comments	string	
<ftp server>[:ftp port]	FTP server IPv4, IPv6, or FQDN can be attached with port.	string	
<Enter> <user>	FTP username may be needed.	string	
<passwd>	FTP password.	string	
<Enter> <passwd>	Password may be needed to restore.	string	

execute upload config tftp

Load config from TFTP server to local disk.

```
execute upload config tftp <string> <comment> <tftp server>
```

Parameter	Description	Type	Size
<string>	File name on the TFTP server.	string	
<comment>	comments	string	
<tftp server>	TFTP server IPv4, IPv6, or FQDN.	string	

execute upload config usb

Load config from USB to local disk.

```
execute upload config usb <string> <comment>
```

Parameter	Description	Type	Size
<string>	File name on USB disk.	string	
<comment>	comments	string	

execute upload image ftp

Load image from FTP server.

```
execute upload image ftp <string> <comment> <ftp server>[:ftp port] <Enter>|<user> <passwd>
```


Parameter	Description	Type	Size
<string>	Image file name(path) on the remote server.	string	
<comment>	comments	string	
<ftp server>[:ftp port]	FTP server IPv4, IPv6, or FQDN can be attached with port.	string	
<Enter> <user>	FTP username may be needed.	string	
<passwd>	FTP password.	string	

execute upload image tftp

Load image from TFTP server to local disk.

```
execute upload image tftp <string> <comment> <tftp server>
```

Parameter	Description	Type	Size
<string>	File name on the TFTP server.	string	
<comment>	comments	string	
<tftp server>	TFTP server IPv4, IPv6, or FQDN.	string	

execute upload image usb

Load image from USB to local disk.

```
execute upload image usb <string> <comment>
```

Parameter	Description	Type	Size
<string>	File name on USB disk.	string	
<comment>	comments	string	

execute upload report-img ftp

upload report image file from ftp server

```
execute upload report-img ftp <string> <ftp server>[:ftp port] <Enter>|<user> <passwd> <Enter>
```

Parameter	Description	Type	Size
<string>	Image file name(path) on the remote server.	string	
<ftp server>[:ftp port]	FTP server IPv4, IPv6, or FQDN can be attached with port.	string	
<Enter> <user>	FTP username may be needed.	string	
<passwd>	FTP password.	string	
<Enter>		string	

execute upload report-img tftp

upload report image file from tftp server

```
execute upload report-img tftp <string> <tftp server> <Enter>
```

Parameter	Description	Type	Size
<string>	File name on the TFTP server.	string	
<tftp server>	TFTP server IPv4, IPv6, or FQDN.	string	
<Enter>		string	

execute usb-device

usb-device

This topic includes the following commands:

- [execute usb-device disconnect on page 3387](#)
- [execute usb-device list on page 3388](#)
- [execute usb-device modeswitch on page 3388](#)

execute usb-device disconnect

Disconnect a USB device.

```
execute usb-device disconnect
```

execute usb-device list

Display the lists of the USB device.

```
execute usb-device list
```

execute usb-device modeswitch

Perform usb device mode switch

```
execute usb-device modeswitch <argument string>
```

Parameter	Description	Type	Size
<argument string>	usb_modeswitch arguments. e.g: usb_modeswitch '-v 0x12d1 -p 0x1f01 -V 0x12d1 -P 0x14dc'	string	

execute usb-disk

usb-disk

This topic includes the following commands:

- [execute usb-disk delete on page 3388](#)
- [execute usb-disk eject on page 3389](#)
- [execute usb-disk format on page 3389](#)
- [execute usb-disk list on page 3389](#)
- [execute usb-disk rename on page 3389](#)

execute usb-disk delete

Delete file from the USB disk.

```
execute usb-disk delete <filename>
```

Parameter	Description	Type	Size
<filename>	File in the USB disk.	string	

execute usb-disk eject

Eject the USB disk.

```
execute usb-disk eject
```

execute usb-disk format

Format the USB disk.

```
execute usb-disk format
```

execute usb-disk list

Display the contents of the USB disk.

```
execute usb-disk list
```

execute usb-disk rename

Rename file in the USB disk.

```
execute usb-disk rename <old> <new>
```

Parameter	Description	Type	Size
<old>	Old file in the USB disk.	string	
<new>	New file in the USB disk.	string	

execute vin

vin

This topic includes the following commands:

- [execute vin show on page 3390](#)

execute vin show

Show vin status.

```
execute vin show
```

execute vm-license

Download VM license from FortiCare.

```
execute vm-license <token> <proxy>
```

Parameter	Description	Type	Size
<token>	VM License Token.	string	
<proxy>	HTTP Proxy URL.	string	

execute vm-license-options

vm-license-options

This topic includes the following commands:

- [execute vm-license-options account-id on page 3390](#)
- [execute vm-license-options account-password on page 3391](#)
- [execute vm-license-options count on page 3391](#)
- [execute vm-license-options government on page 3391](#)
- [execute vm-license-options interval on page 3391](#)
- [execute vm-license-options proxy on page 3392](#)
- [execute vm-license-options reset on page 3392](#)
- [execute vm-license-options show on page 3392](#)
- [execute vm-license-options token on page 3392](#)

execute vm-license-options account-id

Account ID.

```
execute vm-license-options account-id <string>
```

Parameter	Description	Type	Size
<string>	Account ID.	string	

execute vm-license-options account-password

Account password.

```
execute vm-license-options account-password <string>
```

Parameter	Description	Type	Size
<string>	Account password.	string	

execute vm-license-options count

FortiFlex license download count (default=1, 0 means infinite).

```
execute vm-license-options count <integer>
```

Parameter	Description	Type	Size
<integer>	API call count.	string	

execute vm-license-options government

For government use <yes | no>.

```
execute vm-license-options government <string>
```

Parameter	Description	Type	Size
<string>	<yes no>.	string	

execute vm-license-options interval

FortiFlex license download interval (1-3600 sec, default=60).

```
execute vm-license-options interval <integer>
```

Parameter	Description	Type	Size
<integer>	API call interval.	string	

execute vm-license-options proxy

HTTP proxy URL.

```
execute vm-license-options proxy <string>
```

Parameter	Description	Type	Size
<string>	HTTP proxy URL.	string	

execute vm-license-options reset

Reset options.

```
execute vm-license-options reset
```

execute vm-license-options show

Show options.

```
execute vm-license-options show
```

execute vm-license-options token

Token.

```
execute vm-license-options token <string>
```

Parameter	Description	Type	Size
<string>	Token.	string	

execute vpn

vpn

This topic includes the following commands:

- [execute vpn certificate ca export tftp on page 3393](#)
- [execute vpn certificate ca import auto on page 3393](#)
- [execute vpn certificate ca import bundle on page 3394](#)

- [execute vpn certificate ca import tftp on page 3394](#)
- [execute vpn certificate crl import auto on page 3394](#)
- [execute vpn certificate ems_ca import tftp on page 3395](#)
- [execute vpn certificate local export tftp on page 3395](#)
- [execute vpn certificate local generate cmp on page 3395](#)
- [execute vpn certificate local generate default-gui-mgmt-cert on page 3396](#)
- [execute vpn certificate local generate default-ssl-ca on page 3396](#)
- [execute vpn certificate local generate default-ssl-ca-untrusted on page 3396](#)
- [execute vpn certificate local generate default-ssl-key-certs on page 3396](#)
- [execute vpn certificate local generate default-ssl-serv-key on page 3397](#)
- [execute vpn certificate local generate ec on page 3397](#)
- [execute vpn certificate local generate rsa on page 3398](#)
- [execute vpn certificate local import tftp on page 3398](#)
- [execute vpn certificate local verify on page 3399](#)
- [execute vpn certificate remote export tftp on page 3399](#)
- [execute vpn certificate remote import tftp on page 3399](#)
- [execute vpn ikecrypt dhperf compute on page 3400](#)
- [execute vpn ikecrypt dhperf generate on page 3400](#)
- [execute vpn ipsec tunnel down on page 3400](#)
- [execute vpn ipsec tunnel up on page 3400](#)
- [execute vpn sslvpn del-all on page 3401](#)
- [execute vpn sslvpn del-tunnel on page 3401](#)
- [execute vpn sslvpn del-web on page 3401](#)
- [execute vpn sslvpn list on page 3401](#)

execute vpn certificate ca export tftp

Export CA certificate to a TFTP server.

```
execute vpn certificate ca export tftp <string> <string> <ip>
```

Parameter	Description	Type	Size
<string>	CA certificate name.	string	
<string>	File name on the TFTP server.	string	
<ip>	IP address of TFTP server.	string	

execute vpn certificate ca import auto

Import CA certificate via SCEP.

```
execute vpn certificate ca import auto <string> <string> <ip> <fingerprint>
```


Parameter	Description	Type	Size
<string>	URL of the CA server.	string	
<string>	CA Identifier (optional).	string	
<ip>	Source-IP for communications to the CA server (optional).	string	
<fingerprint>	Fingerprint for authenticating CA certificate from server (optional).	string	

execute vpn certificate ca import bundle

Import certificate bundle from a TFTP server.

```
execute vpn certificate ca import bundle <string> <ip>
```

Parameter	Description	Type	Size
<string>	File name on the TFTP server.	string	
<ip>	IP address of TFTP server.	string	

execute vpn certificate ca import tftp

Import CA certificate from a TFTP server.

```
execute vpn certificate ca import tftp <string> <tftp server>
```

Parameter	Description	Type	Size
<string>	File name on the TFTP server.	string	
<tftp server>	TFTP server IPv4, IPv6, or FQDN.	string	

execute vpn certificate crl import auto

Update CRL.

```
execute vpn certificate crl import auto <string>
```

Parameter	Description	Type	Size
<string>	CRL name.	string	

execute vpn certificate ems_ca import tftp

Import Testing EMS CA certificate from a TFTP server.

```
execute vpn certificate ems_ca import tftp <string> <tftp server>
```

Parameter	Description	Type	Size
<string>	File name on the TFTP server.	string	
<tftp server>	TFTP server IPv4, IPv6, or FQDN.	string	

execute vpn certificate local export tftp

Export local certificate or certificate request to a TFTP server.

```
execute vpn certificate local export tftp <string> <string> <string> <tftp server>
```

Parameter	Description	Type	Size
<string>	Local certificate name.	string	
<string>	Certificate file type ('cer' 'p12' 'csr').	string	
<string>	File name on the TFTP server.	string	
<tftp server>	TFTP server IPv4, IPv6, or FQDN.	string	

execute vpn certificate local generate cmp

Generate a certificate request over CMPv2.

```
execute vpn certificate local generate cmp <string> <number> <string> <string> <string> <string>  
<string> <string> <string> <string> <ip>
```

Parameter	Description	Type	Size
<string>	Local certificate name.	string	
<number>	Key size: 1024, 1536, 2048, 4096.	string	
<string>	Server ('ADDRESS:PORT' for CMP server, add 'https://' before address to enable ssl/tls).	string	
<string>	Path (Path location inside CMP server)	string	
<string>	SrvCert (CMDB name of CMP server's certificate/root-CA)	string	
<string>	AuthCert (CMDB name of client's current certificate)	string	

Parameter	Description	Type	Size
<string>	User (Username for doing the IR with a pre-shared key)	string	
<string>	Password (Password for doing the IR with a pre-shared key)	string	
<string>	Subject (optional, e.g. "CN=User,O=Org,OU=Unit").	string	
<string>	Subject alternative name (optional, e.g. "DNS:dns1.com,IP:192.168.1.99").	string	
<ip>	Source-IP for communications to the CMP server (optional).	string	

execute vpn certificate local generate default-gui-mgmt-cert

Generate the default GUI mgmt admin-server certificate.

```
execute vpn certificate local generate default-gui-mgmt-cert
```

execute vpn certificate local generate default-ssl-ca

Generate the default CA certificate used by SSL Inspection.

```
execute vpn certificate local generate default-ssl-ca
```

execute vpn certificate local generate default-ssl-ca-untrusted

Generate the default untrusted CA certificate used by SSL Inspection.

```
execute vpn certificate local generate default-ssl-ca-untrusted
```

execute vpn certificate local generate default-ssl-key-certs

Generate the default RSA, DSA and ECDSA key certs for ssl resign.

```
execute vpn certificate local generate default-ssl-key-certs
```

execute vpn certificate local generate default-ssl-serv-key

Generate the default server key used by SSL Inspection.

```
execute vpn certificate local generate default-ssl-serv-key
```

execute vpn certificate local generate ec

Generate an elliptic curve certificate request.

```
execute vpn certificate local generate ec <string> <string> <string> <string> <string> <string>
<string> <string> <string> <string> <string> <string> <ip> <string> <string> <string> <string>
```

Parameter	Description	Type	Size
<string>	Local certificate name.	string	
<string>	Elliptic curve name: secp256r1, secp384r1 and secp521r1.	string	
<string>	Subject (Host IP/Domain Name/E-Mail).	string	
<string>	Country name (e.g. Canada) or country code (e.g. ca).	string	
<string>	State.	string	
<string>	City.	string	
<string>	Org.	string	
<string>	Unit(s); ',' as delimiter.	string	
<string>	Email.	string	
<string>	Subject alternative name (optional).	string	
<string>	URL of the CA server for signing via SCEP (optional).	string	
<string>	Challenge password for signing via SCEP (optional).	string	
<ip>	Source-IP for communications to the CA server (optional).	string	
<string>	CA identifier of the CA server for signing via SCEP (optional).	string	
<string>	Password for private-key (optional).	string	
<string>	Installed CA certificate for generating fingerprint for validating CA from SCEP server (optional).	string	
<string>	Fingerprint for authenticating CA certificate from SCEP server. Ignored if valid CA for generating fingerprint is specified (optional).	string	

execute vpn certificate local generate rsa

Generate a RSA certificate request.

```
execute vpn certificate local generate rsa <string> <number> <string> <string> <string> <string>
<string> <string> <string> <string> <string> <string> <ip> <string> <string> <string> <string>
```

Parameter	Description	Type	Size
<string>	Local certificate name.	string	
<number>	Key size: 1024, 1536, 2048, 4096.	string	
<string>	Subject (Host IP/Domain Name/E-Mail).	string	
<string>	Country name (e.g. Canada) or country code (e.g. ca).	string	
<string>	State.	string	
<string>	City.	string	
<string>	Org.	string	
<string>	Unit(s); ',' as delimiter.	string	
<string>	Email.	string	
<string>	Subject alternative name (optional).	string	
<string>	URL of the CA server for signing via SCEP (optional).	string	
<string>	Challenge password for signing via SCEP (optional).	string	
<ip>	Source-IP for communications to the CA server (optional).	string	
<string>	CA identifier of the CA server for signing via SCEP (optional).	string	
<string>	Password for private-key (optional).	string	
<string>	Installed CA certificate for generating fingerprint for validating CA from SCEP server (optional).	string	
<string>	Fingerprint for authenticating CA certificate from SCEP server. Ignored if valid CA for generating fingerprint is specified (optional).	string	

execute vpn certificate local import tftp

Import the signed certificate from a TFTP server.

```
execute vpn certificate local import tftp <string> <tftp server> <string> <Enter>|<passwd>
```

Parameter	Description	Type	Size
<string>	File name on the TFTP server.	string	
<tftp server>	TFTP server IPv4, IPv6, or FQDN.	string	
<string>	Certificate file type ('cer' 'p12').	string	
<Enter> <passwd>	Password for PKCS12 file.	string	

execute vpn certificate local verify

Verify certificate and private key files match and regenerate if mismatched.

```
execute vpn certificate local verify <string>
```

Parameter	Description	Type	Size
<string>	Local certificate name.	string	

execute vpn certificate remote export tftp

Export REMOTE certificate to a TFTP server.

```
execute vpn certificate remote export tftp <string> <string> <tftp server>
```

Parameter	Description	Type	Size
<string>	REMOTE certificate name.	string	
<string>	File name on the TFTP server.	string	
<tftp server>	TFTP server IPv4, IPv6, or FQDN.	string	

execute vpn certificate remote import tftp

Import REMOTE certificate from a TFTP server.

```
execute vpn certificate remote import tftp <string> <tftp server>
```

Parameter	Description	Type	Size
<string>	File name on the TFTP server.	string	
<tftp server>	TFTP server IPv4, IPv6, or FQDN.	string	

execute vpn ikecrypt dhperf compute

Run DH generate and compute benchmark.

```
execute vpn ikecrypt dhperf compute <rounds>
```

Parameter	Description	Type	Size
<rounds>	Number of DH generate and compute rounds to perform per group <1-100000>.	string	

execute vpn ikecrypt dhperf generate

Run DH generate benchmark.

```
execute vpn ikecrypt dhperf generate <rounds>
```

Parameter	Description	Type	Size
<rounds>	Number of DH generate rounds to perform per group <1-100000>.	string	

execute vpn ipsec tunnel down

Shut down the specified IPsec tunnel.

```
execute vpn ipsec tunnel down <phase2> <phase1> <serial>
```

Parameter	Description	Type	Size
<phase2>	Phase2 name.	string	
<phase1>	Phase1 name.	string	
<serial>	Phase2 serial number.	string	

execute vpn ipsec tunnel up

Activate the specified IPsec tunnel.

```
execute vpn ipsec tunnel up <phase2> <phase1> <serial>
```

Parameter	Description	Type	Size
<phase2>	Phase2 name.	string	

Parameter	Description	Type	Size
<phase1>	Phase1 name.	string	
<serial>	Phase2 serial number.	string	

execute vpn sslvpn del-all

Delete all connections under current VDOM.

```
execute vpn sslvpn del-all <tunnel>
```

Parameter	Description	Type	Size
<tunnel>	Press <Enter> to delete all or type "tunnel" to delete tunnel only.	string	

execute vpn sslvpn del-tunnel

Delete tunnel connection.

```
execute vpn sslvpn del-tunnel <index>
```

Parameter	Description	Type	Size
<index>	Tunnel index.	string	

execute vpn sslvpn del-web

Delete web connection.

```
execute vpn sslvpn del-web <index>
```

Parameter	Description	Type	Size
<index>	Web index.	string	

execute vpn sslvpn list

List tunnel connections.

```
execute vpn sslvpn list <web|tunnel>
```


Parameter	Description	Type	Size
<web tunnel>	Web or tunnel.	string	

execute wake-on-lan

Wake On LAN command.

```
execute wake-on-lan <interface> <host-mac> <protocol> <port> <ip> <password>
```

Parameter	Description	Type	Size
<interface>	Network interface to send out WoL packets.	string	
<host-mac>	Host MAC address to be woken up.	string	
<protocol>	Protocol used by WoL packets (1-WoL, 2-UDP, default = 2).	string	
<port>	Port used by UDP WoL packets, (0, 7, or 9, default = 9).	string	
<ip>	Broadcast IP used by UDP WoL packets.	string	
<password>	Password of the destination host if SecureOn is enabled.	string	

execute webcache

webcache

This topic includes the following commands:

- [execute webcache delete regular-expression on page 3402](#)
- [execute webcache delete simple-string on page 3403](#)
- [execute webcache delete status on page 3403](#)
- [execute webcache delete wildcard on page 3403](#)

execute webcache delete regular-expression

Delete objects matching a regular expression in webcache.

```
execute webcache delete regular-expression <pattern>
```

Parameter	Description	Type	Size
<pattern>	Pattern.	string	

execute webcache delete simple-string

Delete objects matching a simple string in webcache.

```
execute webcache delete simple-string <pattern>
```

Parameter	Description	Type	Size
<pattern>	Pattern.	string	

execute webcache delete status

Query pattern deletion status.

```
execute webcache delete status
```

execute webcache delete wildcard

Delete objects matching a wildcard in webcache.

```
execute webcache delete wildcard <pattern>
```

Parameter	Description	Type	Size
<pattern>	Pattern.	string	

execute webfilter

webfilter

This topic includes the following commands:

- [execute webfilter quota-reset on page 3403](#)

execute webfilter quota-reset

Reset the WF quota for a given user.

```
execute webfilter quota-reset <wf-profile> <endpoint>
```

Parameter	Description	Type	Size
<wf-profile>	Web filter profile.	string	
<endpoint>	Authenticated user or IP address.	string	

execute wireless-controller

wireless-controller

This topic includes the following commands:

- [execute wireless-controller delete-wtp-image on page 3404](#)
- [execute wireless-controller hs20-aoc backup-aoc ftp on page 3405](#)
- [execute wireless-controller hs20-aoc backup-aoc tftp on page 3405](#)
- [execute wireless-controller hs20-aoc delete-hs-aoc on page 3405](#)
- [execute wireless-controller hs20-aoc list-hs-aoc on page 3405](#)
- [execute wireless-controller hs20-aoc upload-aoc ftp on page 3406](#)
- [execute wireless-controller hs20-aoc upload-aoc tftp on page 3406](#)
- [execute wireless-controller hs20-icon backup-icon ftp on page 3406](#)
- [execute wireless-controller hs20-icon backup-icon tftp on page 3407](#)
- [execute wireless-controller hs20-icon delete-hs-icon on page 3407](#)
- [execute wireless-controller hs20-icon list-hs-icon on page 3407](#)
- [execute wireless-controller hs20-icon upload-icon ftp on page 3407](#)
- [execute wireless-controller hs20-icon upload-icon tftp on page 3408](#)
- [execute wireless-controller led-blink on page 3408](#)
- [execute wireless-controller list-wtp-image on page 3408](#)
- [execute wireless-controller mpsk-key create-keys on page 3408](#)
- [execute wireless-controller push-wtp-image on page 3409](#)
- [execute wireless-controller reset-wtp on page 3409](#)
- [execute wireless-controller restart-acd on page 3409](#)
- [execute wireless-controller restart-stad on page 3409](#)
- [execute wireless-controller restart-wtpd on page 3410](#)
- [execute wireless-controller spectral-scan on page 3410](#)
- [execute wireless-controller upload-wtp-image ftp on page 3410](#)
- [execute wireless-controller upload-wtp-image tftp on page 3411](#)

execute wireless-controller delete-wtp-image

Delete WTP images.

```
execute wireless-controller delete-wtp-image <all>|<image-name>
```

Parameter	Description	Type	Size
<all> <image-name>	Delete all images or specific image.	string	

execute wireless-controller hs20-aoc backup-aoc ftp

Backup a hotspot aoc plan to FTP server.

```
execute wireless-controller hs20-aoc backup-aoc ftp <string> <ftp server>[:ftp port]
<Enter>|<user> <passwd>
```

Parameter	Description	Type	Size
<string>	AOC plan file name on AC.	string	
<ftp server>[:ftp port]	FTP server IPv4, IPv6, or FQDN can be attached with port.	string	
<Enter> <user>	FTP username may be needed.	string	
<passwd>	FTP password.	string	

execute wireless-controller hs20-aoc backup-aoc tftp

Backup a hotspot aoc to TFTP server.

```
execute wireless-controller hs20-aoc backup-aoc tftp <string> <tftp server>
```

Parameter	Description	Type	Size
<string>	AOC plan file name on AC.	string	
<tftp server>	IP/IPv6 or FQDN address of TFTP server.	string	

execute wireless-controller hs20-aoc delete-hs-aoc

Delete hotspot aoc plans.

```
execute wireless-controller hs20-aoc delete-hs-aoc
```

execute wireless-controller hs20-aoc list-hs-aoc

List hotspot aoc plans.

```
execute wireless-controller hs20-aoc list-hs-aoc
```

execute wireless-controller hs20-aoc upload-aoc ftp

Upload a hotspot aoc plan from FTP server.

```
execute wireless-controller hs20-aoc upload-aoc ftp <string> <ftp server>[:ftp port]
<Enter>|<user> <passwd>
```

Parameter	Description	Type	Size
<string>	AOC plan file name on the remote server.	string	
<ftp server>[:ftp port]	FTP server IPv4, IPv6, or FQDN can be attached with port.	string	
<Enter> <user>	FTP username may be needed.	string	
<passwd>	FTP password.	string	

execute wireless-controller hs20-aoc upload-aoc tftp

Upload a hotspot aoc plan from TFTP server.

```
execute wireless-controller hs20-aoc upload-aoc tftp <string> <tftp server>
```

Parameter	Description	Type	Size
<string>	Aoc plan file name on the TFTP server.	string	
<tftp server>	TFTP server IPv4, IPv6, or FQDN.	string	

execute wireless-controller hs20-icon backup-icon ftp

Backup a hotspot icon to FTP server.

```
execute wireless-controller hs20-icon backup-icon ftp <string> <ftp server>[:ftp port]
<Enter>|<user> <passwd>
```

Parameter	Description	Type	Size
<string>	Icon file name on AC.	string	
<ftp server>[:ftp port]	FTP server IPv4, IPv6, or FQDN can be attached with port.	string	
<Enter> <user>	FTP username may be needed.	string	
<passwd>	FTP password.	string	

execute wireless-controller hs20-icon backup-icon tftp

Backup a hotspot icon to TFTP server.

```
execute wireless-controller hs20-icon backup-icon tftp <string> <tftp server>
```

Parameter	Description	Type	Size
<string>	Icon file name on AC.	string	
<tftp server>	IP/IPv6 or FQDN address of TFTP server.	string	

execute wireless-controller hs20-icon delete-hs-icon

Delete hotspot icons.

```
execute wireless-controller hs20-icon delete-hs-icon
```

execute wireless-controller hs20-icon list-hs-icon

List hotspot icons.

```
execute wireless-controller hs20-icon list-hs-icon
```

execute wireless-controller hs20-icon upload-icon ftp

Upload a hotspot icon from FTP server.

```
execute wireless-controller hs20-icon upload-icon ftp <string> <ftp server>[:ftp port]  
<Enter>|<user> <passwd>
```

Parameter	Description	Type	Size
<string>	Icon file name on the remote server.	string	
<ftp server>[:ftp port]	FTP server IPv4, IPv6, or FQDN can be attached with port.	string	
<Enter> <user>	FTP username may be needed.	string	
<passwd>	FTP password.	string	

execute wireless-controller hs20-icon upload-icon tftp

Upload a hotspot icon from TFTP server.

```
execute wireless-controller hs20-icon upload-icon tftp <string> <tftp server>
```

Parameter	Description	Type	Size
<string>	Icon file name on the TFTP server.	string	
<tftp server>	TFTP server IPv4, IPv6, or FQDN.	string	

execute wireless-controller led-blink

Blink status LED or power LED of managed FortiAP.

```
execute wireless-controller led-blink <wtp-id> <mode> <duration>
```

Parameter	Description	Type	Size
<wtp-id>	WTP ID.	string	
<mode>	[on off]	string	
<duration>	Blink duration in seconds (0 = unlimited).	string	

execute wireless-controller list-wtp-image

List WTP images.

```
execute wireless-controller list-wtp-image
```

execute wireless-controller mpsk-key create-keys

Create random MPSK keys.

```
execute wireless-controller mpsk-key create-keys <string> <string> <string> <string> <int> <int>
```

Parameter	Description	Type	Size
<string>	VDOM.	string	
<string>	MPSK profile name.	string	
<string>	MPSK group name.	string	

Parameter	Description	Type	Size
<string>	Key prefix.	string	
<int>	Key count.	string	
<int>	Key length.	string	

execute wireless-controller push-wtp-image

Push WTP image to a managed WTP.

```
execute wireless-controller push-wtp-image <vdom> <wtp-id> <filename>
```

Parameter	Description	Type	Size
<vdom>	WTP session VDOM.	string	
<wtp-id>	WTP ID.	string	
<filename>	WTP image filename.	string	

execute wireless-controller reset-wtp

Restart managed WTP.

```
execute wireless-controller reset-wtp <all>|<SN>|<wtp-group>
```

Parameter	Description	Type	Size
<all> <SN> <wtp-group>	WTP serial number or WTP group.	string	

execute wireless-controller restart-acd

Restart wireless controller daemon.

```
execute wireless-controller restart-acd
```

execute wireless-controller restart-stad

Restart sta daemon.

```
execute wireless-controller restart-stad
```


execute wireless-controller restart-wtpd

Restart local WTP daemon.

```
execute wireless-controller restart-wtpd
```

execute wireless-controller spectral-scan

Enable/disable spectral scan.

```
execute wireless-controller spectral-scan <wtp-id> <radio-id> <mode> <duration> <channel> <report-interval>
```

Parameter	Description	Type	Size
<wtp-id>	WTP ID.	string	
<radio-id>	Radio ID	string	
<mode>	[on off scan-only keep-alive clear]	string	
<duration>	Spectrum scan duration in seconds (0 = unlimited).	string	
<channel>	Spectrum scan channels separated by commas. (0 or empty = all supported channels).	string	
<report-interval>	Time between two spectral reports from the AP in millisecond (<min> - <max>, 0 or empty = 1000ms).	string	

execute wireless-controller upload-wtp-image ftp

Upload a WTP image from FTP server.

```
execute wireless-controller upload-wtp-image ftp <string> <ftp server>[:ftp port] <Enter>|<user> <passwd>
```

Parameter	Description	Type	Size
<string>	WTP image file name on the remote server.	string	
<ftp server>[:ftp port]	FTP server IPv4, IPv6, or FQDN can be attached with port.	string	
<Enter> <user>	FTP username may be needed.	string	
<passwd>	FTP password.	string	

execute wireless-controller upload-wtp-image tftp

Upload a WTP image from TFTP server.

```
execute wireless-controller upload-wtp-image tftp <string> <tftp server>
```

Parameter	Description	Type	Size
<string>	File name on the TFTP server.	string	
<tftp server>	TFTP server IPv4, IPv6, or FQDN.	string	

Included devices

This reference includes commands from the following FortiGate model:

- FortiGate-1000D
- FortiGate-1000F
- FortiGate-1001F
- FortiGate-100EF
- FortiGate-100E
- FortiGate-100F
- FortiGate-101F
- FortiGate-1100E
- FortiGate-1101E
- FortiGate-140E-POE
- FortiGate-140E
- FortiGate-1500DT
- FortiGate-1500D
- FortiGate-1800F
- FortiGate-1801F
- FortiGate-2000E
- FortiGate-200E
- FortiGate-200F
- FortiGate-201E
- FortiGate-201F
- FortiGate-2201E
- FortiGate-2500E
- FortiGate-2600F
- FortiGate-2601F
- FortiGate-3000D
- FortiGate-3000F
- FortiGate-3001F
- FortiGate-300E
- FortiGate-301E
- FortiGate-3100D
- FortiGate-3200D
- FortiGate-3200F
- FortiGate-3201F
- FortiGate-3300E
- FortiGate-3301E
- FortiGate-3400E
- FortiGate-3401E
- FortiGate-3501F
- FortiGate-3600E
- FortiGate-3601E
- FortiGate-3700D
- FortiGate-3700F
- FortiGate-3701F
- FortiGate-3960E
- FortiGate-3980E
- FortiGate-400E-Bypass
- FortiGate-400E
- FortiGate-400F
- FortiGate-401E
- FortiGate-401F
- FortiGate-40F-3G4G
- FortiGate-4200F
- FortiGate-4201F
- FortiGate-4400F
- FortiGate-4401F
- FortiGate-5001E1
- FortiGate-5001E
- FortiGate-500E
- FortiGate-501E
- FortiGate-600E
- FortiGate-601E
- FortiGate-60E-POE
- FortiGate-60E
- FortiGate-60F
- FortiGate-61E
- FortiGate-70F
- FortiGate-71F
- FortiGate-800D
- FortiGate-80E-POE
- FortiGate-80E
- FortiGate-80F-Bypass
- FortiGate-80F-DSL
- FortiGate-80F-POE
- FortiGate-80F
- FortiGate-81E-POE
- FortiGate-81E
- FortiGate-81F-POE
- FortiGate-81F
- FortiGate-900D
- FortiGate-90E
- FortiGate-91E
- FortiGate-VM64-Aliyun
- FortiGate-VM64-AWS
- FortiGate-VM64-Azure
- FortiGate-VM64-GCP
- FortiGate-VM64-OPC
- FortiGate-VM64
- FortiGateRugged-60F-3G4G
- FortiGateRugged-60F
- FortiGateRugged-70F-3G4G
- FortiGateRugged-70F
- FortiWiFi-40F-3G4G
- FortiWiFi-40F
- FortiWiFi-60E
- FortiWiFi-60F
- FortiWiFi-61E
- FortiWiFi-61F
- FortiWiFi-80F-2R-3G4G-DSL
- FortiWiFi-81F-2R-3G4G-DSL
- FortiWiFi-81F-2R-3G4G-POE
- FortiWiFi-81F-2R-POE
- FortiWiFi-81F-2R



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