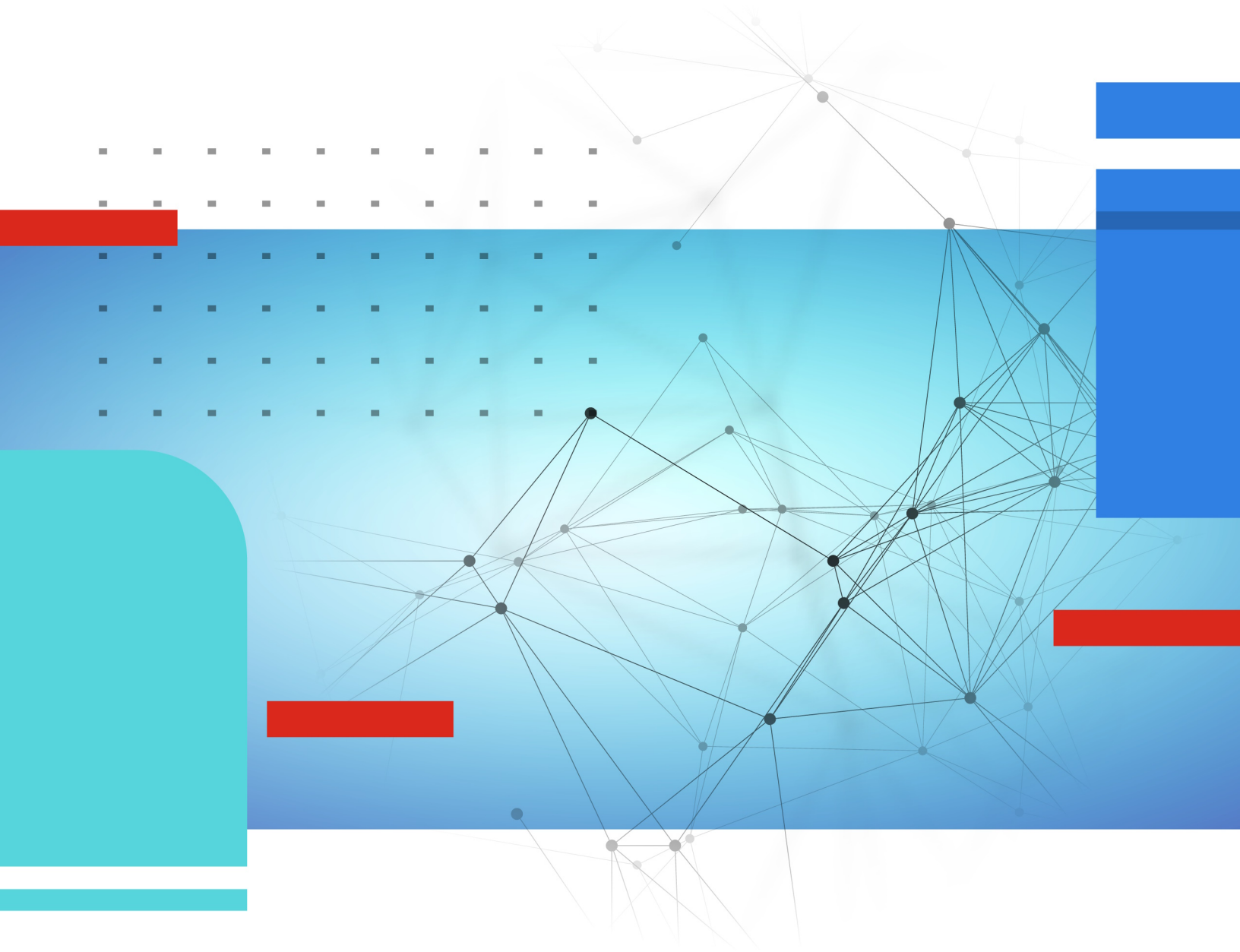
CLI Reference

FortiAnalyzer 7.6.3



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FortiAnalyzer 7.6.3 CLI Reference
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Change Log

Date	Change Description
2025-04-22	Initial release.

Introduction

FortiAnalyzer offers centralized network security logging and reporting for the Fortinet Security Fabric. It provides a consolidated view across Fortinet devices throughout your organization with real-time alerts that expedite the discovery, investigation, and response to incidents even as they're happening. With action-oriented views and deep drill-down capabilities, FortiAnalyzer gives organizations critical insight into threats across the entire attack surface. It also provides real-time threat intelligence and actionable analytics via global IOC feeds to check for emerging and recent threats throughout the organization.

FortiAnalyzer includes:

- Centralized logging, reporting and event correlation
- Powerful NOC/SOC dashboard
- Automated indicators of compromise (IOC)
- Real-time and historical views into network activity

FortiAnalyzer documentation

The following FortiAnalyzer product documentation is available:

- *FortiAnalyzer Administration Guide*
  This document describes how to set up the FortiAnalyzer system and use it with supported Fortinet units.
- *FortiAnalyzer device QuickStart Guides*
  These documents are included with your FortiAnalyzer system package. Use this document to install and begin working with the FortiAnalyzer system and FortiAnalyzer GUI.
- *FortiAnalyzer Online Help*
  You can get online help from the FortiAnalyzer GUI. FortiAnalyzer online help contains detailed procedures for using the FortiAnalyzer GUI to configure and manage FortiGate units.
- *FortiAnalyzer CLI Reference*
  This document describes how to use the FortiAnalyzer Command Line Interface (CLI) and contains references for all FortiAnalyzer CLI commands.
- *FortiAnalyzer Release Notes*
  This document describes new features and enhancements in the FortiAnalyzer system for the release, and lists resolved and known issues. This document also defines supported platforms and firmware versions.
- *FortiAnalyzer VM Install Guide*
  This document describes installing FortiAnalyzer VM in your virtual environment.

What's New in FortiAnalyzer 7.6

The following tables list the commands and variables that have changed in the CLI.

FortiAnalyzer 7.6.3

The table below lists commands that have changed in version 7.6.3.

Command	Change
`config fmupdate fgd-setting`	Command added.
`config fmupdate server-access-priorities`	Variable removed: • web-spam
`config system admin setting`	Variable added: • show-sdwan-manager
`config system docker`	Variables removed: • fortisoar • fsmcollector
`config system global`	Variables added: • auth-dev-restapi-allowlist • fmg-fabric-port • rpc-log
`config system log-forward`	Variable added: • fwd-syslog-decode-b64
`config system log-forward-service`	Variable added: • collector-auth
`config system log device-disable`	Command removed.
`config system log device-selector`	Command added.
`config system log settings`	Variables added: • FFW-custom-field1 • legacy-auth-mode • unencrypted-logging-tcp • unencrypted-logging-udp Variable removed: • unencrypted-logging
`config system password-policy`	Variable added:

Command	Change
	• login-lockout-upon-downgrade
`diagnose debug filter`	Command added.
`diagnose debug raw-elog`	Command updated.
`diagnose docker reset`	Command updated.
`diagnose docker upgrade`	Command updated.
`diagnose dvm adom lockinfo`	Command added.
`diagnose dvm device lockinfo`	Command added.
`diagnose dvm lock`	Command removed.
`diagnose dvm lockinfo`	Command added.
`diagnose dvm psirt`	Command added.
`diagnose dvm task lockinfo`	Command added.
`diagnose ha force-vrrp-election`	Command removed.
`diagnose ha restore-preemption`	Command added.
`diagnose siem config`	Command added.
`diagnose system export rpclog`	Command added.
`diagnose system filesystem`	Command added.
`diagnose system print ipcs`	Command added.
`diagnose system process list`	Command updated.
`diagnose test application vmd`	Command added.
`execute backup task`	Command added.

FortiAnalyzer 7.6.2

The table below lists commands that have changed in version 7.6.2.

Command	Change
`config fmupdate fwm-setting`	Variable added: • send-image-retry
`config fmupdate publicnetwork`	Variable added: • update-server-location
`config system admin ldap`	Variable added: • ssl-protocol

Command	Change
`config system admin radius`	Variables added: • ca-cert • client-cert • message-authenticator • protocol
`config system admin setting`	Variables added: • object-threshold-limit • object-threshold-limit-value
`config system connector`	Variable added: • conn-ssl-protocol
`config system csf`	Variable added: • ssl-protocol
`config system fortiview setting`	Variable added: • query-run-mode
`config system global`	Variable removed: • ssl-protocol Variables added: • apache-wsgi-processes • global-ssl-protocol • gui-feature-visibility-mode • httpd-ssl-protocol • mapclient-ssl-protocol • storage-age-limit • fmg-fabric-port
`config system log-forward`	Variable added: • fwd-syslog-enrich-cve
`config system log device-disable`	Variable removed: • TTL Variable added: • expire
`config system log ueba`	Variable added: • hostname-ep-unifier
`config system mail`	Variable added: • ssl-protocol
`config system snmp user`	Variable added: • notify-port
`config system syslog`	Variable added: • ssl-protocol

Command	Change
`diagnose debug service cluster`	Command added.
`diagnose debug service fgfm-cluster`	Command added.
`diagnose fmupdate test`	Command updated.
`diagnose sql debug chlog show`	Command added.
`diagnose sql debug chlog upload`	Command added.
`diagnose system aiserver test`	Command added.
`diagnose system process kill`	Command updated.
`diagnose system process killall`	Command updated.
`execute backup ha`	Command added.
`execute sql-local rebuild-skipidx`	Command removed.
`execute sql-query-siem`	Command added.
`execute ssh-list-keys`	Command added.

FortiAnalyzer 7.6.1

The table below lists commands that have changed in version 7.6.1.

Command	Change
`diagnose fgfm session-list`	Command added.

FortiAnalyzer 7.6.0

The table below lists commands that have changed in version 7.6.0.

Command	Change
`config fmupdate fds-setting`	Variable added: • system-support-fai
`config system admin profile`	Variable added: • adom-admin
`config system admin setting`	Variables removed: • shell-access • shell-password

Command	Change
config system admin user	Variable added: • fortiai
config system global	Variables added: • admin-host • admin-ssh-grace-time • fabric-storage-pool-quota • fabric-storage-pool-size • fcp-cfg-service • jsonapi-log
config system ha	Subcommand updated: • config peer
config system password-policy	Variable added: • password-history
diagnose debug application fazincid	Command added.
diagnose dvm device object-reference	Command updated.
diagnose dvm device reload	Command added.
diagnose dvm remove	Command added.
diagnose dvm remove unused-ips-packages	Command removed.
diagnose siem merges list	Command added.
diagnose siem mutations list	Command added.
diagnose siem parts list	Command added.
diagnose siem remove database	Command removed.
diagnose sql hcache	Command updated.
diagnose sql remove	Command updated.
diagnose sql status	Command updated.
diagnose system aiserver	Command added.
diagnose system mapserver clearcache	Command added.
diagnose test application fazincid	Command added.
execute backup fds	Command added.
execute backup fgd	Command added.
execute backup fmg-logs	Command added.
execute backup fwm	Command added.
execute backup rtm	Command added.

Command	Change
`execute sql-local rebuild-adom`	Command removed.
`execute sql-local rebuild-metadb`	Command added.
`execute sql-local rebuild-siemdb`	Command removed.

Using the Command Line Interface

This chapter explains how to connect to the CLI and describes the basics of using the CLI. You can use CLI commands to view all system information and to change all system configuration settings.

This chapter describes:

CLI command syntax

This guide uses the following conventions to describe command syntax.

- Angle brackets < > indicate variables.
- Vertical bar and curly brackets { | } separate alternative, mutually exclusive required keywords.
  For example:
  ```
  set protocol {ftp | sftp}
  ```
  You can enter `set protocol ftp` or `set protocol sftp`.
- Square brackets [ ] indicate that a variable is optional.
  For example:
  ```
  show system interface [<name_str>]
  ```
  To show the settings for all interfaces, you can enter `show system interface`. To show the settings for the Port1 interface, you can enter `show system interface port1`.
- A space separates options that can be entered in any combination and must be separated by spaces.
  For example:
  ```
  set allowaccess {fgfm http https https-logging ping snmp soc-fabric ssh webservice}
  ```
  You can enter any of the following:
  ```
  set allowaccess ping
  set allowaccess https ping
  set allowaccess fgfm http https https-logging ping snmp soc-fabric ssh webservice
  ```
  In most cases to make changes to lists that contain options separated by spaces, you need to retype the whole list including all the options you want to apply and excluding all the options you want to remove.
- Special characters:
  - The \ is supported to escape spaces or as a line continuation character.
  - The single quotation mark ' and the double quotation mark " are supported, but must be used in pairs.
  - If there are spaces in a string, you must precede the spaces with the \ escape character or put the string in a pair of quotation marks.

Connecting to the CLI

You can use a direct console connection, SSH, or the CLI console widget in the GUI to connect to the FortiAnalyzer CLI. For more information, see the FortiAnalyzer Administration Guide and your device's QuickStart Guide.

- Connecting to the FortiAnalyzer console
- Setting administrative access on an interface
- Connecting to the FortiAnalyzer CLI using SSH
- Connecting to the FortiAnalyzer CLI using the GUI

Connecting to the FortiAnalyzer console

To connect to the FortiAnalyzer console, you need:

- a computer with an available communications port
- a console cable, provided with your FortiAnalyzer unit, to connect the FortiAnalyzer console port to a communications port on your computer
- terminal emulation software, such as HyperTerminal for Windows.

The following procedure describes how to connect to the FortiAnalyzer CLI using Windows HyperTerminal software. You can use any terminal emulation program.

To connect to the CLI:

1. Connect the FortiAnalyzer console port to the available communications port on your computer.
2. Make sure that the FortiAnalyzer unit is powered on.
3. Start a terminal emulation program on the management computer, select the COM port, and use the following settings:

COM port	**COM1**
Baud rate	**9600**
Data bits	**8**
Parity	**None**
Stop bits	**1**
Flow control	**None**

4. Press `Enter` to connect to the FortiAnalyzer CLI.
5. In the log in prompt, enter the username and password.
   The default log in is username: `admin`, and no password.
   You have connected to the FortiAnalyzer CLI, and you can enter CLI commands.

Setting administrative access on an interface

To perform administrative functions through a FortiAnalyzer network interface, you must enable the required types of administrative access on the interface to which your management computer connects. Access to the CLI requires Secure Shell (SSH) access. If you want to use the GUI, you need HTTPS access.

To use the GUI to configure FortiAnalyzer interfaces for SSH access, see the FortiAnalyzer Administration Guide.

To use the CLI to configure SSH access:

1. Connect and log into the CLI using the FortiAnalyzer console port and your terminal emulation software.
2. Use the following command to configure an interface to accept SSH connections:
   ```
   config system interface
      edit <interface_name>
         set allowaccess <access_types>
      end
   ```
   Where `<interface_name>` is the name of the FortiAnalyzer interface to be configured to allow administrative access, and `<access_types>` is a whitespace-separated list of access types to enable.
   For example, to configure port1 to accept HTTPS and SSH connections, enter:
   ```
   config system interface
      edit port1
         set allowaccess https ssh
      end
   ```

   

   Remember to press `Enter` at the end of each line in the command example. Also, type `end` and press `Enter` to commit the changes to the FortiAnalyzer configuration.
3. To confirm that you have configured SSH access correctly, enter the following command to view the access settings for the interface:
   ```
   get system interface <interface_name>
   ```
   The CLI displays the settings, including the management access settings, for the named interface.

Connecting to the FortiAnalyzer CLI using SSH

SSH provides strong secure authentication and secure communications to the FortiAnalyzer CLI from your internal network or the internet. Once the FortiAnalyzer unit is configured to accept SSH connections, you can run an SSH client on your management computer and use this client to connect to the FortiAnalyzer CLI.

To connect to the CLI using SSH:

1. Install and start an SSH client.
2. Connect to a FortiAnalyzer interface that is configured for SSH connections.
3. Type a valid administrator name and press `Enter`.
4. Type the password for this administrator and press `Enter`.
   The FortiAnalyzer model name followed by a # is displayed.

You have connected to the FortiAnalyzer CLI, and you can enter CLI commands.

Connecting to the FortiAnalyzer CLI using the GUI

The GUI also provides a CLI console widget.

To connect to the CLI using the GUI:

1. Connect to the GUI and log in.
   For information about how to do this, see the FortiAnalyzer Administration Guide.
2. In the banner, click >_.
   The *CLI Console* widget opens.

CLI objects

The FortiAnalyzer CLI is based on configurable objects. The top-level object are the basic components of FortiAnalyzer functionality.

system	Configuration options related to the overall operation of the FortiAnalyzer unit, such as interfaces, virtual domains, and administrators.
fmupdate	Configures settings related to FortiGuard service updates and the unit's built-in FDS.

This object contains more specific lower level objects. For example, the system object contains objects for administrators, DNS, interfaces and so on.

CLI command branches

The FortiAnalyzer CLI consists of the following command branches:

config branch	execute branch
get branch	diagnose branch
show branch	

Examples showing how to enter command sequences within each branch are provided in the following sections.

config branch

The config commands configure objects of FortiAnalyzer functionality. Top-level objects are not configurable, they are containers for more specific lower level objects. For example, the system object contains administrators, DNS addresses, interfaces, routes, and so on. When these objects have multiple sub-objects, such as administrators or routes, they are organized in the form of a table. You can add, delete, or edit the entries in the table. Table entries each consist of variables that you can set to particular values. Simpler objects, such as system DNS, are a single set of variables.

To configure an object, you use the config command to navigate to the object's command "shell". For example, to configure administrators, you enter the command

```
config system admin user
```

The command prompt changes to show that you are in the admin shell.

```
(user)#
```

This is a table shell. You can use any of the following commands:

edit	Add an entry to the FortiAnalyzer configuration or edit an existing entry. For example in the config system admin shell: • Type edit admin and press Enter to edit the settings for the default admin administrator account. • Type edit newadmin and press Enter to create a new administrator account with the name newadmin and to edit the default settings for the new administrator account.
delete	Remove an entry from the FortiAnalyzer configuration. For example in the config system admin shell, type delete newadmin and press Enter to delete the administrator account named newadmin.
purge	Remove all entries configured in the current shell. For example in the config user local shell: • Type get to see the list of user names added to the FortiAnalyzer configuration, • Type purge and then y to confirm that you want to purge all the user names, • Type get again to confirm that no user names are displayed.
get	List the configuration. In a table shell, get lists the table members. In an edit shell, get lists the variables and their values.
show	Show changes to the default configuration as configuration commands.
end	Save the changes you have made in the current shell and leave the shell. Every config command must be paired with an end command. You will return to the root FortiAnalyzer CLI prompt. The end command is also used to save set command changes and leave the shell.

If you enter the get command, you see a list of the entries in the table of administrators. To add a new administrator, you enter the edit command with a new administrator name:

```
edit admin_1
```

The FortiAnalyzer unit acknowledges the new table entry and changes the command prompt to show that you are now editing the new entry:

```
new entry 'admin_1' added
```

```
(admin_1)#
```

From this prompt, you can use any of the following commands:

config	In a few cases, there are subcommands that you access using a second config command while editing a table entry. An example of this is the command to add restrict the user to specific devices or VDOMs.
set	Assign values. For example from the `edit admin` command shell, typing `set password newpass` changes the password of the admin administrator account to `newpass`. When using a set command to make changes to lists that contain options separated by spaces, you need to retype the whole list including all the options you want to apply and excluding all the options you want to remove.
unset	Reset values to defaults. For example from the `edit admin` command shell, typing `unset password` resets the password of the admin administrator account to the default of no password.
get	List the configuration. In a table shell, `get` lists the table members. In an edit shell, `get` lists the variables and their values.
show	Show changes to the default configuration in the form of configuration commands.
next	Save the changes you have made in the current shell and continue working in the shell. For example if you want to add several new admin user accounts enter the `config system admin user` shell. • Type `edit User1` and press `Enter`. • Use the `set` commands to configure the values for the new admin account. • Type `next` to save the configuration for User1 without leaving the `config system admin user` shell. • Continue using the `edit`, `set`, and `next` commands to continue adding admin user accounts. • Type `end` and press `Enter` to save the last configuration and leave the shell.
abort	Exit an edit shell without saving the configuration.
end	Save the changes you have made in the current shell and leave the shell. Every `config` command must be paired with an `end` command. The `end` command is also used to save `set` command changes and leave the shell.

The `config` branch is organized into configuration shells. You can complete and save the configuration within each shell for that shell, or you can leave the shell without saving the configuration. You can only use the configuration commands for the shell that you are working in. To use the configuration commands for another shell you must leave the shell you are working in and enter the other shell.

get branch

Use `get` to display settings. You can use `get` within a `config` shell to display the settings for that shell, or you can use `get` with a full path to display the settings for the specified shell.

To use `get` from the root prompt, you must include a path to a shell.

The root prompt is the FortiAnalyzer host or model name followed by a number sign (#).

Example 1

When you type `get` in the `config system admin user` shell, the list of administrators is displayed.

At the `(user)#` prompt, type:

```
get
```

The screen displays:

```
== [ admin ]
userid: admin
== [ admin2 ]
userid: admin2
== [ admin3 ]
userid: admin3
```

Example 2

When you type `get` in the `admin` user shell, the configuration values for the admin administrator account are displayed.

```
edit admin
```

At the `(admin)#` prompt, type:

```
get
```

The screen displays:

```
userid : admin password : * change-password : disable trusthost1 : 0.0.0.0 0.0.0.0 trusthost2
: 255.255.255.255 255.255.255.255 trusthost3 : 255.255.255.255 255.255.255.255 trusthost4 :
255.255.255.255 255.255.255.255 trusthost5 : 255.255.255.255 255.255.255.255 trusthost6 :
255.255.255.255 255.255.255.255 trusthost7 : 255.255.255.255 255.255.255.255 trusthost8 :
255.255.255.255 255.255.255.255 trusthost9 : 255.255.255.255 255.255.255.255 trusthost10 :
255.255.255.255 255.255.255.255 ipv6_trusthost1 : ::/0 ipv6_trusthost2 :
ffff:ffff:ffff:ffff:ffff:ffff:ffff:ffff/128 ipv6_trusthost3 :
ffff:ffff:ffff:ffff:ffff:ffff:ffff:ffff/128 ipv6_trusthost4 :
ffff:ffff:ffff:ffff:ffff:ffff:ffff:ffff/128 ipv6_trusthost5 :
ffff:ffff:ffff:ffff:ffff:ffff:ffff:ffff/128 ipv6_trusthost6 :
ffff:ffff:ffff:ffff:ffff:ffff:ffff:ffff/128 ipv6_trusthost7 :
ffff:ffff:ffff:ffff:ffff:ffff:ffff:ffff/128 ipv6_trusthost8 :
ffff:ffff:ffff:ffff:ffff:ffff:ffff:ffff/128 ipv6_trusthost9 :
ffff:ffff:ffff:ffff:ffff:ffff:ffff:ffff/128 ipv6_trusthost10 :
ffff:ffff:ffff:ffff:ffff:ffff:ffff:ffff/128 profileid : Super_User adom: == [ all_adoms ]
adom-name: all_adoms dev-group : (null) adom-exclude: policy-package: == [ all_policy_packages
] policy-package-name: all_policy_packages restrict-access : disable restrict-dev-vdom:
description : (null) user_type : local ssh-public-key1 : ssh-public-key2 : ssh-public-key3 :
avatar : (null) meta-data: == [ Contact Email ] fieldname: Contact Email == [ Contact Phone ]
fieldname: Contact Phone rpc-permit : none last-name : (null) first-name : (null) email-
address : (null) phone-number : (null) mobile-number : (null) pager-number : (null) hidden : 0
dashboard-tabs: dashboard: == [ 1 ] moduleid: 1 == [ 3 ] moduleid: 3 == [ 2 ] moduleid: 2 == [
7 ] moduleid: 7 == [ 10 ] moduleid: 10 == [ 4 ] moduleid: 4 == [ 5 ] moduleid: 5 == [ 6 ]
moduleid: 6 == [ 8 ] moduleid: 8 == [ 9 ] moduleid: 9 == [ 11 ] moduleid: 11
```

Example 3

You want to confirm the IP address and netmask of the port1 interface from the root prompt.

At the (command) # prompt, type:

```
get system interface port1
```

The screen displays:

```
name : port1
status : enable
mode : static
ip : 10.10.10.10 255.255.255.0
allowaccess : ping https ssh snmp http webservice fgfm https-logging
serviceaccess :
lldp : disable
speed : auto
description : (null)
alias : (null)
mtu : 1500
type : physical
ipv6:
   ip6-address: ::/0 ip6-allowaccess: ip6-autoconf: enable
```

show branch

Use `show` to display the FortiAnalyzer unit configuration. Only changes to the default configuration are displayed. You can use `show` within a `config` shell to display the configuration of that shell, or you can use `show` with a full path to display the configuration of the specified shell.

To display the configuration of all `config` shells, you can use `show` from the root prompt. The root prompt is the FortiAnalyzer host or model name followed by a number sign (#).

Example 1

When you type `show` and press `Enter` within the `port1` interface shell, the changes to the default interface configuration are displayed.

At the `(port1)#` prompt, type:

```
show
```

The screen displays:

```
config system interface
   edit "port1"
      set ip 172.16.151.67 255.255.255.0
      set allowaccess https ssh
      set type physical
   next
end
```

Example 2

You are working in the `port1` interface shell and want to see the `system dns` configuration. At the `(port1)#` prompt, type:

```
show system dns
```

The screen displays:

```
config system dns
   set primary 65.39.139.53
   set secondary 65.39.139.63
end
```

execute branch

Use `execute` to run static commands, to reset the FortiAnalyzer unit to factory defaults, or to back up or restore the FortiAnalyzer configuration. The execute commands are available only from the root prompt.

The root prompt is the FortiAnalyzer host or model name followed by a number sign (#).

Example

At the root prompt, type:

```
execute reboot
The system will be rebooted.
Do you want to continue? (y/n)
```

and press `Enter` to restart the FortiAnalyzer unit.

diagnose branch

Commands in the `diagnose` branch are used for debugging the operation of the FortiAnalyzer unit and to set parameters for displaying different levels of diagnostic information.

Diagnose commands are intended for advanced users only. Contact Fortinet Technical Support before using these commands.

Example command sequences

The command prompt changes for each shell.

To configure the primary and secondary DNS server addresses:

1. Starting at the root prompt, type:
   ```
   config system dns
   ```
   and press `Enter`. The prompt changes to `(dns)#`.
2. At the `(dns)#` prompt, type (question mark) `?`
   The following options are displayed.
   ```
   set
   unset
   get
   show
   abort
   end
   ```
3. Type `set (question mark)?`
   The following options are displayed:
   ```
   primary
   secondary
   ```
4. To set the primary DNS server address to `172.16.100.100`, type:
   ```
   set primary 172.16.100.100
   ```
   and press `Enter`.
5. To set the secondary DNS server address to `207.104.200.1`, type:
   ```
   set secondary 207.104.200.1
   ```
   and press `Enter`.
6. To restore the primary DNS server address to the default address, type `unset primary` and press `Enter`.
7. If you want to leave the `config system dns` shell without saving your changes, type `abort` and press `Enter`.
8. To save your changes and exit the `dns` sub-shell, type `end` and press `Enter`.
9. To confirm your changes have taken effect after leaving the `dns` sub-shell, type `get system dns` and press `Enter`.

CLI basics

This section covers command line interface basic information.

Command help

You can press the question mark (?) key to display command help.

- Press the question mark (?) key at the command prompt to display a list of the commands available and a description of each command.
- Enter a command followed by a space and press the question mark (?) key to display a list of the options available for that command and a description of each option.
- Enter a command followed by an option and press the question mark (?) key to display a list of additional options available for that command option combination and a description of each option.

Command tree

Enter `tree` to display the FortiAnalyzer 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. For `config` commands, use the `tree` command to view all available variables and sub-commands.

Command completion

You can use the tab key or the question mark (?) key to complete commands.

- You can press the tab key at any prompt to scroll through the options available for that prompt.
- You can type the first characters of any command and press the tab key or the question mark (?) key to complete the command or to scroll through the options that are available at the current cursor position.
- After completing the first word of a command, you can press the space bar and then the tab key to scroll through the options available at the current cursor position.

Recalling commands

You can recall previously entered commands by using the Up and Down arrow keys to scroll through commands you have entered.

Editing commands

Use the left and right arrow keys to move the cursor back and forth in a recalled command. You can also use Backspace and Delete keys, and the control keys listed in the following table to edit the command.

Function	Key combination
Beginning of line	Control key + A
End of line	Control key + E
Back one word	Control key + B
Forward one word	Control key + F
Delete current character	Control key + D
Previous command	Control key + P
Next command	Control key + N
Abort the command	Control key + C
If used at the root prompt, exit the CLI	Control key + C

Line continuation

To break a long command over multiple lines, use a \ at the end of each line.

Command abbreviation

You can abbreviate commands and command options to the smallest number of non-ambiguous characters. For example, the command `get system status` can be abbreviated to `g sy st`.

Environment variables

The FortiAnalyzer CLI supports several environment variables.

$USERFROM	The management access type (SSH, Telnet and so on) and the IPv4 address of the logged in administrator.
$USERNAME	The user account name of the logged in administrator.
$SerialNum	The serial number of the FortiAnalyzer unit.

Variable names are case sensitive. In the following example, when entering the variable, you can type $ followed by a tab to auto-complete the variable to ensure that you have the exact spelling and case. Continue pressing tab until the variable you want to use is displayed.

```
config system global
   set hostname $SerialNum
end
```

Encrypted password support

After you enter a clear text password using the CLI, the FortiAnalyzer unit encrypts the password and stores it in the configuration file with the prefix ENC. For example:

```
show system admin user user1
config system admin user
   edit "user1"
      set password ENC
           UAGUDZ1yEaG30620s6afD3Gac1FnOT0BC1rVJmMFc9ubLlW4wEvHcqGVq+ZnrgbudK7aryyf1scXcXdnQxskR
           cU3E9XqOit82PgScwzGzGuJ5a9f
      set profileid "Standard_User"
   next
end
```

It is also possible to enter an already encrypted password. For example, type:

```
config system admin
```

then press `Enter`.

Enter:

```
edit user1
```

then press `Enter`.

Enter:

```
set password ENC
      UAGUDZ1yEaG30620s6afD3Gac1FnOT0BC1rVJmMFc9ubLlW4wEvHcqGVq+ZnrgbudK7aryyf1scXcXdnQxskRcU3E9X
      qOit82PgScwzGzGuJ5a9f
```

then press `Enter`.

Enter:

```
end
```

then press `Enter`.

Entering spaces in strings

When a string value contains a space, do one of the following:

- Enclose the string in quotation marks, `"Security Administrator"`, for example.
- Enclose the string in single quotes, `'Security Administrator'`, for example.
- Use a backslash (“\”) preceding the space, `Security\ Administrator`, for example.

Entering quotation marks in strings

If you want to include a quotation mark, single quote, or apostrophe in a string, you must precede the character with a backslash character. To include a backslash, enter two backslashes.

Entering a question mark (?) in a string

If you want to include a question mark (?) in a string, you must precede the question mark with CTRL-V. Entering a question mark without first entering CTRL-V causes the CLI to display possible command completions, terminating the string.

International characters

The CLI supports international characters in strings.

Special characters

The characters <, >, (,), #, ’, and " are not permitted in most CLI fields, but you can use them in passwords. If you use the apostrophe (’) or quote (") character, you must precede it with a backslash (\) character when entering it in the CLI `set` command.

IPv4 address formats

You can enter an IPv4 address and subnet using either dotted decimal or slash-bit format. For example you can type either:

```
set ip 192.168.1.1 255.255.255.0
```

or

```
set ip 192.168.1.1/24
```

The IPv4 address is displayed in the configuration file in dotted decimal format.

Changing the baud rate

Using `execute console baudrate`, you can change the default console connection baud rate.

Changing the default baud rate is not available on all models.

Debug log levels

The following table lists available debug log levels on your FortiAnalyzer.

0	Emergency	The system has become unusable.
1	Alert	Immediate action is required.
2	Critical	Functionality is affected.
3	Error	An erroneous condition exists and functionality is probably affected.
4	Warning	Function might be affected.
5	Notice	Notification of normal events.
6	Information	General information about system operations.
7	Debug	Detailed information useful for debugging purposes.
8	Maximum	Maximum log level.

Administrative Domains

Administrative domains (ADOMs) enable the admin administrator to constrain other Fortinet unit administrators' access privileges to a subset of devices in the device list. For FortiGate devices with virtual domains (VDOMs), ADOMs can further restrict access to only data from a specific FortiGate VDOM.

About ADOMs

Enabling ADOMs alters the structure and available functionality of the GUI and CLI according to whether you are logging in as the `admin` administrator, and, if you are not logging in as the `admin` administrator, the administrator account's assigned access profile.

The `admin` administrator can further restrict other administrators' access to specific configuration areas within their ADOM by using access profiles .

Characteristics of the CLI and GUI when ADOMs are enabled

	Admin administrator account	Other administrators
Access to config system global	Yes	No
Can create administrator accounts	Yes	No
Can enter all ADOMs	Yes	No

- If ADOMs are enabled and you log in as `admin`, a superset of the typical CLI commands appear, allowing unrestricted access and ADOM configuration.
  `config system global` contains settings used by the FortiAnalyzer unit itself and settings shared by ADOMs, such as the device list, RAID, and administrator accounts. It does not include ADOM-specific settings or data, such as logs and reports. When configuring other administrator accounts, an additional option appears allowing you to restrict other administrators to an ADOM.
- If ADOMs are enabled and you log in as any other administrator, you enter the ADOM assigned to your account. A subset of the typical menus or CLI commands appear, allowing access only to only logs, reports, quarantine files, content archives, IP aliases, and LDAP queries specific to your ADOM. You cannot access Global Configuration, or enter other ADOMs.
  By default, administrator accounts other than the `admin` account are assigned to the `root` ADOM, which includes all devices in the device list. By creating ADOMs that contain a subset of devices in the device list, and assigning them to administrator accounts, you can restrict other administrator accounts to a subset of the FortiAnalyzer unit's total devices or VDOMs.

The admin administrator account cannot be restricted to an ADOM. Other administrators are restricted to their ADOM, and cannot configure ADOMs or Global Configuration.

The maximum number of ADOMs varies by FortiAnalyzer model.

Configuring ADOMs

To use administrative domains, the admin administrator must first enable the feature, create ADOMs, and assign existing FortiAnalyzer administrators to ADOMs.

Enabling ADOMs moves non-global configuration items to the root ADOM. Back up the FortiAnalyzer unit configuration before enabling ADOMs.

Within the CLI, you can enable ADOMs and set the administrator ADOM. To configure the ADOMs, you must use the GUI.

To enable or disable ADOMs:

Enter the following CLI command:

```
config system global
   set adom-status {enable | disable}
end
```

An administrative domain has two modes: normal and advanced. Normal mode is the default device mode. In normal mode, a FortiGate unit can only be added to a single administrative domain. In advanced mode, you can assign different VDOMs from the same FortiGate to multiple administrative domains.

Enabling the advanced mode option will result in more complicated management scenarios. It is recommended only for advanced users.

To change ADOM device modes:

Enter the following CLI command:

```
config system global
   set adom-mode {advanced | normal}
end
```

To assign an administrator to an ADOM:

Enter the following CLI command:

```
config system admin user
   edit <name>
      set adom <adom_name>
   next
end
```

where <name> is the administrator user name and <adom_name> is the ADOM name.

system

Use system commands to configure options related to the overall operation of the FortiAnalyzer unit.

FortiAnalyzer CLI commands and variables are case sensitive.

admin	dns	locallog	report	web-proxy
alert-console	docker	log	route	
alertemail	fips	log-fetch	route6	
alert-event	fortiview	log-forward	saml	
auto-delete	global	log-forward-service	sniffer	
backup all-settings	ha	mail	snmp	
central-management	interface	metadata	soc-fabric	
certificate	local-in-policy	ntp	sql	
connector	local-in-policy6	password-policy	syslog	

TCP port numbers cannot be used by multiple services at the same time with the same IP address. If a port is already in use, it cannot be assigned to another service. For example, HTTPS and HTTP cannot have the same port number.

admin

Use the following commands to configure admin related settings.

admin group

Use this command to add, edit, and delete admin user groups.

Syntax

```
config system admin group
```

```
   edit <name>
      set member <string>
end
```

Variable	Description
<name>	Enter the name of the group you are editing or enter a new name to create an entry (character limit = 63).
member <string>	Add group members.

admin ldap

Use this command to add, edit, and delete Lightweight Directory Access Protocol (LDAP) users.

Syntax

```
config system admin ldap
   edit <server>
      set adom-access {all | specify}
      set adom-attr <string>
      set adom <adom-name>
      set attributes <filter>
      set ca-cert <string>
      set cnid <string>
      set dn <string>
      set filter <string>
      set group <string>
      set memberof-attr <string>
      set password <passwd>
      set port <integer>
      set profile-attr <string>
      set secondary-server <string>
      set secure {disable | ldaps | starttls}
      set server <string>
      set ssl-protocol {follow-global-ssl-portocol | sslv3 | tlsv1.0 | tlsv1.1 | tlsv1.2 |
          tlsv1.3}
      set tertiary-server <string>
      set type {anonymous | regular | simple}
      set username <string>
end
```

Variable	Description
adom-access {all | specify}	Set all or specify the ADOM access type (default = all).
<server>	Enter the name of the LDAP server or enter a new name to create an entry (character limit = 63).
adom-attr <string>	The attribute used to retrieve ADOM.
adom <adom-name>	Set the ADOM name to link to the LDAP configuration.

Variable	Description
attributes <filter>	Attributes used for group searching (for multi-attributes, a use comma as a separator). For example: • `member` • `uniquemember` • `member,uniquemember`
ca-cert <string>	CA certificate name. This variable appears only when `secure` is set to `ldaps` or `starttls`.
cnid <string>	Enter the common name identifier (character limit = 20, default = cn).
dn <string>	Enter the distinguished name.

filter <string>	Enter content for group searching. For example:
	`(&(objectcategory=group)(member=*))`
	`(&(objectclass=groupofnames)(member=*))`
	`(&(objectclass=groupofuniquenames)(uniquemember=*))`
	`(&(objectclass=posixgroup)(memberuid=*))`

group <string>	Enter an authorization group. The authentication user must be a member of this group (full DN) on the server.
memberof-attr <string>	The attribute used to retrieve memeberof.
password <passwd>	Enter a password for the username above. This variable appears only when `type` is set to `regular`.
port <integer>	Enter the port number for LDAP server communication (1 - 65535, default = 389).
profile-attr <string>	The attribute used to retrieve admin profile.
secondary-server <string>	Enter the secondary LDAP server domain name or IPv4 address. Enter a new name to create a new entry.
secure {disable | ldaps | starttls}	Set the SSL connection type: • `disable`: no SSL (default). • `ldaps`: use LDAPS • `starttls`: use STARTTLS
server <string>	Enter the LDAP server domain name or IPv4 address. Enter a new name to create a new entry.

ssl-protocol {follow-global-ssl-portocol | sslv3 | tlsv1.0 | tlsv1.1 | tlsv1.2 | tlsv1.3}	Set the lowest SSL protocol version for connection to LDAP server (default = follow-global-ssl-portocol). This option is not available when `secure` is set to `disable`.
	The follow-global-ssl-portocol setting follows the setting for:
	`config system global`
	`set global-ssl-protocol {sslv3 | tlsv1.0 | tlsv1.1 | tlsv1.2 | tlsv1.3}`

tertiary-server <string>	Enter the tertiary LDAP server domain name or IPv4 address. Enter a new name to create a new entry.

Variable	Description
type {anonymous | regular | simple}	Set a binding type: • anonymous: Bind using anonymous user search • regular: Bind using username/password and then search • simple: Simple password authentication without search (default)
username <string>	Enter a username. This variable appears only when type is set to regular.

Example

This example shows how to add the LDAP user user1 at the IPv4 address 206.205.204.203.

```
config system admin ldap
   edit user1
      set server 206.205.204.203
      set dn techdoc
      set type regular
      set username auth1
      set password auth1_pwd
      set group techdoc
   end
```

admin profile

Use this command to configure access profiles. In a newly-created access profile, no access is enabled. Setting an option to none hides it from administrators with that profile assigned.

Syntax

```
config system admin profile
   edit <profile_name>
      set adom-admin {enable | disable}
      set adom-lock {none | read | read-write}
      set adom-switch {none | read | read-write}
      set allow-to-install {enable | disable}
      set change-password {enable | disable}
      set datamask {enable | disable}
      set datamask-custom-priority {enable | disable}
      set datamask-fields <fields>
      set datamask-key <passwd>
      set datamask-unmasked-time <integer>
      set description <text>
      set device-ap {none | read | read-write}
      set device-fortiextender {none | read | read-write}
      set device-fortiswitch {none | read | read-write}
      set device-manager {none | read | read-write}
      set device-op {none | read | read-write}
      set device-policy-package-lock {none | read | read-write}
      set device-wan-link-load-balance {none | read | read-write}
      set event-management {none | read | read-write}
```

```
        set execute-playbook {none | read | read-write}
        set extension-access {none | read | read-write}
        set fabric-viewer {none | read | read-write}
        set fgt-gui-proxy {enable | disable}
        set ips-lock {none | read | read-write}
        set ipv6_trusthost1 <IPv6 prefix>
        set ipv6_trusthost2 <IPv6 prefix>
        set ipv6_trusthost3 <IPv6 prefix>
        .
        .
        .
        set ipv6_trusthost10 <IPv6 prefix>
        set log-viewer {none | read | read-write}
        set report-viewer {none | read | read-write}
        set rpc-permit {none | read | read-write}
        set run-report {none | read | read-write}
        set scope {adom | global}
        set script-access {none | read | read-write}
        set super-user-profile {enable | disable}
        set system-setting {none | read | read-write}
        set triage-events {none | read | read-write}
        set trusthost1 <ip&netmask>
        set trusthost2 <ip&netmask>
        set trusthost3 <ip&netmask>
        .
        .
        .
        set trusthost10 <ip&netmask>
        set update-incidents {none | read | read-write}
        set write-passwd-access {all | specify-by-profile | specify-by-user}
        set write-passwd-profiles <profile list>
        set write-passwd-user-list <user list>
        config datamask-custom-fields
            edit <field>
                set field-category {alert | all | fortiview | log | euba}
                set field-status {enable | disable}
                set field-type {email | ip | mac | string}
            next
    end
```

When creating a new admin profile, the default for all permissions is none.

Variable	Description
<profile>	Edit the access profile. Enter a new name to create a new profile (character limit = 35). The pre-defined access profiles are *No_Permission_User*, *Password_Change_User*, *Super_User*, *Standard_User*, and *Restricted_User*.
adom-admin {enable | disable}	Enable/disable Adom Admin (default = disable). Users with an ADOM Admin profile can only manage administrators within their own ADOM. This admin profile can only be assigned to users with a single specified ADOM.

Variable	Description
adom-lock {none | read | read-write}	Configure ADOM locking permissions for profile: • `none`: No permission (default). • `read`: Read permission. • `read-write`: Read-write permission. Controlled functions: ADOM locking.
adom-switch {none | read | read-write}	Configure administrative domain (ADOM) permissions for this profile. Controlled functions: ADOM settings in DVM, ADOM settings in All ADOMs page (under System Settings tab) Dependencies: If `system-setting` is none, the All ADOMs page is not accessible.
allow-to-install {enable | disable}	Enable/disable allowing restricting users to install objects to the devices (default = enable).
change-password {enable | disable}	Enable/disable allowing restricted users to change their password (default = disable).
datamask {enable | disable}	Enable/disable data masking (default = disable).
datamask-custom-priority {enable | disable}	Enable/disable custom field search priority.
datamask-fields <fields>	Enter that data masking fields, separated by spaces. • *dstip*: Destination IP • *dstname*: Destination name • *email*: Email • *message*: Message • *srcip*: Source IP • *srcmac*: Source MAC • *srcname*: Source name • *user*: User name
datamask-key <passwd>	Enter the data masking encryption key.
datamask-unmasked-time <integer>	Enter the time without data masking, in days (default = 0).
description <string>	Enter a description for this access profile (character limit = 1023). Enclose the description in quotes if it contains spaces.
device-ap {none | read | read-write}	Set the AP Manager permissions.
device-fortiextender {none | read | read-write}	Set the FortiExtender Manager permissions.
device-fortiswitch {none | read | read-write}	Set the FortiSwitch Manager permissions.
device-manager {none | read | read-write}	Enter the level of access to Device Manager settings for this profile.

Variable	Description
	This command corresponds to the Device Manager option in the GUI administrator profile. Controlled functions: Device Manager
device-op {none | read | read-write}	Add the capability to add, delete, and edit devices to this profile. This command corresponds to the Add/Delete Devices/Groups option in the GUI administrator profile. This is a sub-setting of `device-manager`. Controlled functions: Add or delete devices or groups
device-policy-package-lock {none | read | read-write}	Configure device policy package locking permissions for this profile. Controlled functions: Policy package locking.
device-wan-link-load-balance {none | read | read-write}	Set the SD-WAN permissions.
event-management {none | read | read-write}	Set the Event Management permissions. This command corresponds to the Event Management option in the GUI administrator profile. Controlled functions: Event Management tab and all its operations
execute-playbook {none | read | read-write}	Configure execute playbook permissions.
extension-access {none | read | read-write}	Manage extension access.
fabric-viewer {none | read | read-write}	Configure Fabric Viewer permissions.
fgt-gui-proxy {enable | disable}	Enable/disable the FortiGate GUI proxy (default = disable).
ips-lock {none | read | read-write}	Set the IPS locking permission.
ipv6_trusthost1 <IPv6 prefix> ipv6_trusthost2 <IPv6 prefix> ipv6_trusthost3 <IPv6 prefix> ... ipv6_trusthost10 <IPv6 prefix>	The admin user trusted host IPv6 address. Defaults = `ipv6_trusthost1: ::/0` for all others: `ffff:ffff:ffff:ffff:ffff:ffff:ffff:ffff/128` for none
log-viewer {none | read | read-write}	Set the Log View permissions. This command corresponds to the Log View option in the GUI administrator profile. Controlled functions: Log View and all its operations
report-viewer {none | read | read-write}	Set the Reports permissions. This command corresponds to the Reports option in the GUI administrator profile. Controlled functions: Reports tab and all its operations

Variable	Description
rpc-permit {none | read | read-write}	Set the rpc-permission
run-report {none | read | read-write}	Configure run reports permission for this profile.
scope (Not Applicable)	CLI command is not in use.
script-access {none | read | read-write}	Configure script access.
super-user-profile {enable | disable}	Enable/disable the super user profile (default = disable).
system-setting {none | read | read-write}	Configure System Settings permissions for this profile. This command corresponds to the System Settings option in the GUI administrator profile. Controlled functions: System Settings tab, all the settings under System setting, and CLI access
triage-events {none | read | read-write}	Set the triage events permissions for this profile.
trusthost1 <ip&netmask> trusthost2 <ip&netmask> trusthost2 <ip&netmask> ... trusthost10 <ip&netmask>	The admin user trusted host IP address. Defaults : `trusthost1: 0.0.0.0.0.0.0.0` for all others: `255.255.255.255.255.255.255.255` for none
update-incidents {none | read | read-write}	Create/update incidents.
write-passwd-access {all | specify-by-profile | specify-by-user}	Set the write password access mode. Only available for the default `Password_Change_User` profile. Admin users with this profile can only change admin password. • `all`: Can change password for all users (default). • `specify-by-profile`: Can change password for users with a profile included in the `write-passwd-profiles` profile list. • `specify-by-user`: Can change password for users included in the `write-passwd-user-list` user list.
write-passwd-profiles <profile list>	Enter the profile list. Use a space between each entry in the list; for example, `profile1 profile2 profile3`. Only available for the `Password_Change_User` when `write-passwd-access` is `specify-by-profile`.
write-passwd-user-list <user list>	Enter the user list. Use a space between each entry in the list; for example, `user1 user2 user3`. Only available for the `Password_Change_User` when `write-passwd-access` is `specify-by-profile`.

Variable	Description
Variables for `config datamask-custom-fields` **subcommand**:	
<field>	Enter the custom field name.
field-category {alert | all | fortiview | log | euba}	Enter the field category (default = all).
field-status {enable | disable}	Enable/disable the field (default = enable).
field-type {email | ip | mac | string}	Enter the field type (default = string).

admin radius

Use this command to add, edit, and delete administration RADIUS servers.

Syntax

```
config system admin radius
   edit <server>
      set auth-type {any | chap | mschap2 | pap}
      set ca-cert <string>
      set client-cert <string>
      set message-authenticator {optional | require}
      set nas-ip <ipv4_address>
      set port <integer>
      set protocol {tls | udp}
      set secondary-secret <passwd>
      set secondary-server <string>
      set secret <passwd>
      set server <string>
end
```

Variable	Description
<server>	Enter the name of the RADIUS server or enter a new name to create an entry (character limit = 63).
auth-type {any | chap | mschap2 | pap}	The authentication protocol the RADIUS server will use. • `any`: Use any supported authentication protocol (default). • `mschap2`: Microsoft Challenge Handshake Authentication Protocol version 2 (MS-CHAPv2). • `chap`: Challenge Handshake Authentication Protocol (CHAP). • `pap`: Password Authentication Protocol (PAP).
ca-cert <string>	Enter the CA of server certificate. This option is only available when the `protocol` is `tls`.
client-cert <string>	Enter the Client certificate. This option is only available when the `protocol` is `tls`.

Variable	Description
message-authenticator {optional | require}	Set if the Message-Authenticator attribute is required or optional: • `optional`: Message-Authenticator attribute is optional (default). • `require`: Message-Authenticator attribute is required.
nas-ip <ipv4_address>	The network access server (NAS) IPv4 address and called station ID.
port <integer>	The RADIUS server port number (1 - 65535, default = 1812).
protocol {tls | udp}	Set the transport protocol, TLS over TCP (RadSec) or UDP (default = udp).
secondary-secret <passwd>	The password to access the RADIUS secondary-server (character limit = 64).
secondary-server <string>	The RADIUS secondary-server DNS resolvable domain name or IPv4 address.
secret <passwd>	The password to access the RADIUS server (character limit = 64).
server <string>	The RADIUS server DNS resolvable domain name or IPv4 address.

Example

This example shows how to add the RADIUS server `RAID1` at the IPv4 address `206.205.204.203` and set the shared secret as `R1a2D3i4U5s`.

```
config system admin radius
   edit RAID1
      set server 206.205.204.203
      set secret R1a2D3i4U5s
   end
```

admin setting

Use this command to configure system administration settings, including web administration ports, timeout, and language.

Syntax

```
config system admin setting
   set access-banner {enable | disable}
   set admin-https-redirect {enable | disable}
   set admin-login-max <integer>
   set admin_server_cert <admin_server_certificate>
   set auth-addr <string>
   set auth-port <integer>
   set banner-message <string>
   set fgt-gui-proxy {enable | disable}
   set fgt-gui-proxy-port <integer>
   set firmware-upgrade-check {enable | disable}
   set fsw-ignore-platform-check {enable | disable}
```

```
    set gui-theme <theme>
    set http_port <integer>
    set https_port <integer>
    set idle_timeout <integer>
    set idle_timeout_api <integer>
    set idle_timeout_gui <integer>
    set idle_timeout_sso <integer>
    set object-threshold-limit {enable | disable}
    set object-threshold-limit-value <integer>
    set objects-force-deletion {enable | disable}
    set preferred-fgfm-intf <string>
    set show-add-multiple {enable | disable}
    set show-checkbox-in-table {enable | disable}
    set show-device-import-export {enable | disable}
    set show-fct-manager {enable | disable}
    set show_hostname {enable | disable}
    set show-log-forwarding {enable | disable}
    set show-sdwan-manager {enable | disable}
    set unreg_dev_opt {add_allow_service | add_no_service}
    set webadmin_language {auto_detect | english | french | japanese | korean | simplified_
          chinese | spanish | traditional_chinese}
end
```

Variable	Description
access-banner {enable | disable}	Enable/disable the access banner (default = disable).
admin-https-redirect {enable | disable}	Enable/disable redirection of HTTP admin traffic to HTTPS (default = enable).
admin-login-max <integer>	Set the maximum number of admin users that be logged in at one time (1 - 256, default = 256).
admin_server_cert <admin_server_certificate>	Enter the name of an https server certificate to use for secure connections (default = server.crt). FortiAnalyzer has server.crt and Fortinet_Local certificates pre-loaded.
auth-addr <string>	Enter the IP which is used by FortiGate to authorize FortiAnalyzer.
auth-port <integer>	Set the port which is used by FortiGate to authorize FortiAnalyzer (default = 443).
banner-message <string>	Set the banner messages (character limit = 32768).
fgt-gui-proxy {enable | disable}	Enable/disable FortiGate GUI proxy (default = enable).
fgt-gui-proxy-port <integer>	Enter the FortiGate GUI proxy port (default = 8082).
firmware-upgrade-check {enable | disable}	Enable/disable firmware upgrade check (default = enable).
fsw-ignore-platform-check {enable | disable}	Enable/disable FortiSwitch Manager switch platform support check (default = disable).
gui-theme <theme>	Configure the GUI theme (default = jade).

Variable	Description
http_port <integer>	Enter the HTTP port number for web administration (1 - 65535, default = 80).
https_port <integer>	Enter the HTTPS port number for web administration (1 - 65535, default = 443).
idle_timeout <integer>	Enter the idle timeout value, in seconds (60 - 28800, default = 900). The `idle_timeout_api`, `idle_timeout_gui`, and `idle_timeout_sso` settings control the idle timeout for API, GUI, and SSO. The `idle_timeout` setting controls all other idle timeout, including idle timeout for SSH and console.
idle_timeout_api <integer>	Enter the idle timeout for the API sessions, in seconds (1 - 28800, default = 900).
idle_timeout_gui <integer>	Enter the idle timeout for the GUI sessions, in seconds (60 - 28800, default = 900).
idle_timeout_sso <integer>	Enter the idle timeout for the SSO sessions, in seconds (60 - 28800, default = 900).
object-threshold-limit {enable | disable}	Enable/disable object limit threshold warning (default = disable).
object-threshold-limit-value <integer>	Set the threshold percentage for object limit before warning users (1-100, default = 80). This option is only available when the `object-threshold-limit` is `enable`.
objects-force-deletion {enable | disable}	Enable/disable forced deletion of used objects (default = enable).
preferred-fgfm-intf <string>	Preferred interface for FGFM connection.
show-add-multiple {enable | disable}	Enable/disable show the add multiple button in the GUI (default = disable).
show-checkbox-in-table {enable | disable}	Enable/disable show checkboxes in tables in the GUI (default = disable).
show-device-import-export {enable | disable}	Enable/disable import/export of ADOM, device, and group lists (default = disable).
show-fct-manager {enable | disable}	Enable/disable FCT manager (default = disable).  Although still available in FortiAnalyzer 7.6, this command has no impact on the GUI. This is because the FortiClient module is a FortiManager feature, which are not available in FortiAnalyzer 6.2 and up.
show_hostname {enable | disable}	Enable/disable showing the hostname on the GUI login page (default = disable).

Variable	Description
show-log-forwarding {enable | disable}	Enable/disable show log forwarding tab in analyzer mode (default = enable).
show-sdwan-manager {enable | disable}	Enable/disable the visibility of the SD-WAN Manager on the GUI (default = enable).
unreg_dev_opt {add_allow_service | add_no_service}	Select action to take when an unregistered device connects to FortiAnalyzer: • `add_allow_service`: Add unregistered devices and allow service requests (default). • `add_no_service`: Add unregistered devices and deny service requests.
webadmin_language {auto_detect | english | french | japanese | korean | simplified_chinese | spanish | traditional_chinese}	Enter the language to be used for web administration. The following options are available: • `auto_detect`: Automatically detect language (default) • `english`: English • `french`: French • `japanese`: Japanese • `korean`: Korean • `simplified_chinese`: Simplified Chinese • `spanish`: Spanish • `traditional_chinese`: Traditional Chinese

Use the show command to display the current configuration if it has been changed from its default value:

```
show system admin setting
```

admin tacacs

Use this command to add, edit, and delete administration TACACS+ servers.

Syntax

```
config system admin tacacs
   edit <server>
      set authen-type {ascii | auto |chap | mschap | pap}
      set authorization {enable | disable}
      set key <passwd>
      set port <integer>
      set secondary-key <passwd>
      set secondary-server <string>
      set server <string>
      set tertiary-key <passwd>
      set tertiary-server <string>
end
```

Variable	Description
<server>	Enter the name of the TACACS+ server or enter a new name to create an entry (character limit = 63).
authen-type {ascii | auto |chap | mschap | pap}	Choose which authentication type to use: • `ascii`: ASCII • `auto`: Uses PAP, MSCHAP, and CHAP (in that order) (default). • `chap`: Challenge Handshake Authentication Protocol (CHAP) • `mschap`: Microsoft Challenge Handshake Authentication Protocol (MS-CHAP) • `pap`: Password Authentication Protocol (PAP).
authorization {enable | disable}	Enable/disable TACACS+ authorization (default = disable).
key <passwd>	Key to access the server (character limit = 128).
port <integer>	Port number of the TACACS+ server (1 - 65535, default = 49).
secondary-key <passwd>	Key to access the secondary server (character limit = 128).
secondary-server <string>	Secondary server domain name or IPv4 address.
server <string>	The server domain name or IPv4 address.
tertiary-key <passwd>	Key to access the tertiary server (character limit = 128).
tertiary-server <string>	Tertiary server domain name or IPv4 address.

Example

This example shows how to add the TACACS+ server `TAC1` at the IPv4 address `206.205.204.203` and set the key as `R1a2D3i4U5s`.

```
config system admin tacacs
   edit TAC1
      set server 206.205.204.203
      set key R1a2D3i4U5s
   end
```

admin user

Use this command to add, edit, and delete administrator accounts.

You must use a super user administrator account to add, edit, or delete administrator accounts and control their permission levels. Each administrator account must include a minimum of an access profile. The access profile list is ordered alphabetically, capitals first. If custom profiles are defined, it may change the default profile from Restricted_User. You cannot delete the admin administrator account. You cannot delete an administrator account if that user is logged on.

You can create meta-data fields for administrator accounts. These objects must be created using the FortiAnalyzer GUI. The only information you can add to the object is the value of the field (pre-determined text/numbers). For more information, see *System Settings* in the *FortiAnalyzer Administration Guide*.

Syntax

```
config system admin user
   edit <name_str>
      set login-max <integer>
      set password <passwd>
      set change-password {enable | disable}
      set th-from-profile <integer>
      set th6-from-profile <integer>
      set trusthost1 <ipv4_mask>
      set trusthost2 <ipv4_mask>
      set trusthost3 <ipv4_mask>
      ...
      set trusthost10 <ipv4_mask>
      set ipv6_trusthost1 <ipv6_mask>
      set ipv6_trusthost2 <ipv6_mask>
      set ipv6_trusthost3 <ipv6_mask>
      ...
      set ipv6_trusthost10 <ipv6_mask>
      set profileid <profile-name>
      set adom <adom_name(s)>
      set adom-access {all | exclude | specify}
      set dev-group <group-name>
      set description <string>
      set user_type {api | group | ldap | local | pki-auth | radius | tacacs-plus}
      set group <string>
      set ldap-server <string>
      set radius_server <string>
      set tacacs-plus-server <string>
      set ssh-public-key1 <key-type> <key-value>
      set ssh-public-key2 <key-type>, <key-value>
      set ssh-public-key3 <key-type> <key-value>
      set avatar <string>
      set wildcard <enable | disable>
      set ext-auth-accprofile-override <enable | disable>
      set ext-auth-adom-override <enable | disable>
      set ext-auth-group-match <string>
      set password-expire <yyyy-mm-dd>
      set force-password-change {enable | disable}
      set fingerprint <string>
      set subject <string>
      set ca <string>
      set cors-allow-origin <string>
      set two-factor-auth {disable | ftc-email | ftc-ftm | ftc-sms}
      set rpc-permit {none | read-only | read-write}
      set use-global-theme {enable | disable}
```

```
        set user-theme {astronomy | autumn | binary-tunnel | blue-sea | calla-lily | canyon | cat |
             cave | circuit-board | contrast-dark | dark-matter | fish | forest | graphite | jade |
             mariner | mars | mountain | northern-light | panda | penguin | spring | summer |
             technology | twilight | winter | zebra}
        set fortiai {enable | disable}
        set last-name <string>
        set first-name <string>
        set email-address <string>
        set phone-number <string>
        set mobile-number <string>
        set pager-number <string>
        config meta-data
           edit <fieldname>
              set fieldlength
              set fieldvalue <string>
              set importance
              set status
           end
        config dashboard-tabs
           edit tabid <integer>
              set name <string>
           end
        config dashboard
           edit moduleid
              set name <string>
              set column <column_pos>
              set diskio-content-type
              set diskio-period {1hour | 24hour | 8hour}
              set refresh-inverval <integer>
              set status {close | open}
              set tabid <integer>
              set widget-type <string>
              set log-rate-type {device | log}
              set log-rate-topn {1 | 2 | 3 | 4 | 5}
              set log-rate-period {1hour | 2min | 6hours}
              set res-view-type {history | real-time}
              set res-period {10min | day | hour}
              set res-cpu-display {average | each}
              set num-entries <integer>
              set time-period {1hour | 24hour | 8hour}
           end
end
```

Variable	Description
<name_string>	Enter the name of the admin user or enter a new name to create a new user (character limit = 35).
login-max <integer>	Set the maximum number of login sessions for this user (default = 32).
password <passwd>	Enter a password for the administrator account (character limit = 128). For improved security, the password should be at least 6 characters long. This variable is available only if `user_type` is `local`.
change-password {enable | disable}	Enable/disable allowing restricted users to change their password (default = disable).

Variable	Description
th-from-profile <integer>	
th6-from-profile <integer>	
trusthost1 <ipv4_mask> trusthost2 <ipv4_mask> ... trusthost10 <ipv4_mask>	Optionally, type the trusted host IPv4 address and network mask from which the administrator can log in to the FortiAnalyzer system. You can specify up to ten trusted hosts. Setting trusted hosts for all of your administrators can enhance the security of your system. Defaults: `trusthost1`: `0.0.0.0 0.0.0.0` for all others: `255.255.255.255 255.255.255.255` for none
ipv6_trusthost1 <ipv6_mask> ipv6_trusthost2 <ipv6_mask> ... ipv6_trusthost10 <ipv6_mask>	Optionally, type the trusted host IPv6 address from which the administrator can log in to the FortiAnalyzer system. You can specify up to ten trusted hosts. Setting trusted hosts for all of your administrators can enhance the security of your system. Defaults: `ipv6_trusthost1`: `::/0` for all others: `ffff:ffff:ffff:ffff:ffff:ffff:ffff:ffff/128` for none
profileid <profile-name>	Enter the name of the access profile to assign to this administrator account (character limit = 35, default = Restricted_User). Access profiles control administrator access to FortiAnalyzer features.
adom <adom_name(s)>	Enter the name(s) of the ADOM(s) the administrator belongs to. Any configuration of ADOMs takes place via the FortiAnalyzer GUI.
adom-access {all | exclude | specify}	Set all/specify/exclude ADOM access mode (default = specify).
dev-group <group-name>	Enter the device group that the admin use can access. This option can only be used for administrators with access to only one ADOM.
description <string>	Enter a description for this administrator account (character limit = 127). Enclose the description in quotes if it contains spaces.
user_type {group | ldap | local | pki-auth | radius | tacacs-plus}	Select the administrator type: • `group`: The administratoris a member of a administrator group. • `ldap`: An LDAP server verifies the administrator's password. • `local`: The FortiAnalyzer system verifies the administrator's password (default). • `pki-auth`: The administrator uses PKI. • `radius`: A RADIUS server verifies the administrator's password. • `tacacs-plus`: A TACACS+ server verifies the administrator's password.
group <string>	Enter the group name.
ldap-server <string>	Enter the LDAP server name if the user type is set to LDAP.
radius_server <string>	Enter the RADIUS server name if the user type is set t o RADIUS.

Variable	Description
tacacs-plus-server <string>	Enter the TACACS+ server name if the user type is set to TACACS+.
ssh-public-key1 <key-type> <key-value> ssh-public-key2 <key-type> <key-value> ssh-public-key3 <key-type> <key-value>	You can specify the public keys of up to three SSH clients. These clients are authenticated without being asked for the administrator password. You must create the public-private key pair in the SSH client application. <key type> is ssh-dss for a DSA key, ssh-rsa for an RSA key. <key-value> is the public key string of the SSH client.
avatar <string>	Image file for the administrator's avatar (maximum 4K base64 encode).
wildcard <enable | disable>	Enable/disable wildcard remote authentication (default = disable).
ext-auth-accprofile-override <enable | disable>	Enable/disable allowing the use of the access profile provided by the remote authentication server (default = disable).
ext-auth-adom-override <enable | disable>	Enable/disable allowing the use of the ADOM provided by the remote authentication server (default = disable). In order to support vendor specific attributes (VSA), the authentication server requires a dictionary to define which VSAs to support. The Fortinet RADIUS vendor ID is 12365. The Fortinet-Vdom-Name attribute is used by this command.
ext-auth-group-match <string>	Only admin users that belong to this group are allowed to log in.
password-expire <yyyy-mm-dd>	When enforcing the password policy, enter the date that the current password will expire.
force-password-change {enable | disable}	Enable/disable force password change on next log in.
fingerprint <string>	PKI user certificate fingerprint based on MD5, SHA-1, or SHA-256 hash function. Format the fingerprint by removing spaces or replacing them with ':'. For example, 0123abcd... or 01:23:ab:cd.... This command is available when an API or PKI administrator account is configured.
subject <string>	PKI user certificate name constraints. This command is available when an API or PKI administrator account is configured.
ca <string>	PKI user certificate CA (CA name in local). This command is available when an API or PKI administrator account is configured.
cors-allow-origin <string>	Value for access-control-allow-origin on API responses (default = null). This command is available when an API administrator account is configured.
two-factor-auth {disable | ftc-email | ftc-ftm | ftc-sms}	Enable/disable two-factor authentication (default = disable). You can enable for FortiToken Cloud email, mobile, or SMS.

Variable	Description
	This command is available when a PKI administrator account is configured.
rpc-permit {none | read-only | read-write}	Set the permission level for log in via Remote Procedure Call (RPC) (default = none).
use-global-theme {enable | disable}	Enable/disble global theme for administration GUI (default = enable).
user-theme {astronomy | autumn | binary-tunnel | blue-sea | calla-lily | canyon | cat | cave | circuit-board | contrast-dark | dark-matter | fish | forest | graphite | jade | mariner | mars | mountain | northern-light | panda | penguin | spring | summer | technology | twilight | winter | zebra}	Set the color scheme to use for the admin user GUI (default = jade): • `astronomy`: Astronomy • `autumn`: Autumn • `binary-tunnel`: Binary Tunnel • `blue-sea`: Blue Sea • `calla-lily`: Calla Lily • `canyon`: Canyon • `cat`: Cat • `cave`: Cave • `circuit-board`: Circuit Board • `contrast-dark`: High Contrast Dark • `dark-matter`: Dark Matter • `fish`: Fish • `forest`: Forest • `graphite`: Graphite • `jade`: Jade • `mariner`: Mariner • `mars`: Mars • `mountain`: Mountain • `neutrino`: Neutrino • `northern-light`: Northern Light • `panda`: Panda • `penguin`: Penguin • `spring`: Spring • `summer`: Summer • `technology`: Technology • `twilight`: Twilight • `winter`: Winter • `zebra`: Zebra This command is available when `use-global-theme` is disabled.
fortiai {enable | disable}	Enable/disable FortiAI (default = disabled). If you have already reached the maximum number of users allowed, you will receive an error.

Variable	Description
last-name <string>	Administrator's last name (character limit = 63).
first-name <string>	Administrator's first name (character limit = 63).
email-address <string>	Administrator's email address.
phone-number <string>	Administrator's phone number.
mobile-number <string>	Administrator's mobile phone number.
pager-number <string>	Administrator's pager number.
Variables for `config meta-data` **subcommand**: This subcommand can only change the value of an existing field. To create a new metadata field, use the `config system metadata` command.	
fieldname	The label/name of the field (read-only, default = 50). Enclose the name in quotes if it contains spaces.
fieldlength	The maximum number of characters allowed for this field (read-only, default = 50).
fieldvalue <string>	Enter a pre-determined value for the field. This is the only value that can be changed with the `config meta-data` subcommand (character limit = 255).
importance	Indicates whether the field is compulsory (`required`) or optional (`optional`) (read-only, default = optional).
status	The status of the field (read-only, default = enable).
Variables for `config dashboard-tabs` **subcommand**:	
tabid <integer>	Tab ID.
name <string>	Tab name.
Variables for `config dashboard` **subcommand**:	
moduleid	Widget ID.
name <string>	Widget name (character limit = 63).
column <column_pos>	Widget column ID (default = 0).
diskio-content-type {blks | iops | util}	Set the Disk I/O Monitor widget's chart type. • `blks`: the amount of data of I/O requests. • `iops`: the number of I/O requests. • `util`: bandwidth utilization (default).
diskio-period {1hour | 24hour | 8hour}	Set the Disk I/O Monitor widget's data period (default = 1hour).
refresh-inverval <integer>	Widget refresh interval (default = 300).
status {close | open}	Widget opened/closed status (default = open).
tabid <integer>	ID of the tab where the widget is displayed (default = 0).

Variable	Description
widget-type <string>	Widget type: • `alert`: Alert Message Console • `devsummary`: Device Summary • `disk-io`: Disk I/O • `jsconsole`: CLI Console • `licinfo`: License Information • `log-rcvd-fwd`Receive Rate v. Forwarding Rate • `logdb-lag`: Log Insert Lag Time • `logdb-perf`: Insert Rate vs Receive Rate • `logrecv`: Logs/Data Received (this widget has been deprecated) • `raid`: Disk Monitor • `rpteng`: Report Engine (this widget has been deprecated) • `statistics`: Statistics (this widget has been deprecated) • `sysinfo`: System Information • `sysop`: Unit Operation • `sysres`: System Resources • `top-lograte`: Log Receive Monitor
log-rate-type {device | log}	Log receive monitor widget's statistics breakdown options (default = device).
log-rate-topn {1 | 2 | 3 | 4 | 5}	Log receive monitor widgets's number of top items to display (default = 5).
log-rate-period {1hour | 2min | 6hours}	Log receive monitor widget's data period (default = 2min).
res-view-type {history | real-time}	Widget's data view type (default = history).
res-period {10min | day | hour}	Widget data period: • `10min`: Last 10 minutes (default). • `day`: Last day. • `hour`: Last hour.
res-cpu-display {average | each}	Widget CPU display type: • `average`: Average usage of CPU (default). • `each`: Each usage of CPU.
num-entries <integer>	Number of entries (default = 10).
time-period {1hour | 24hour | 8hour}	Set the Log Database Monitor widget's data period (default = 1hour).

Using trusted hosts

Setting trusted hosts for all of your administrators increases the security of your network by further restricting administrative access. In addition to knowing the password, an administrator must connect only through the subnet or subnets you specify. You can even restrict an administrator to a single IPv4 address if you define only one trusted host IPv4 address with a netmask of 255.255.255.255.

When you set trusted hosts for all administrators, the FortiAnalyzer system does not respond to administrative access attempts from any other hosts. This provides the highest security. If you leave even one administrator unrestricted, the unit accepts administrative access attempts on any interface that has administrative access enabled, potentially exposing the unit to attempts to gain unauthorized access.

The trusted hosts you define apply both to the GUI and to the CLI when accessed through SSH. CLI access through the console connector is not affected.

Example

Use the following commands to add a new administrator account named `admin_2` with the password set to `p8ssw0rd` and the `Super_User` access profile. Administrators that log in to this account will have administrator access to the FortiAnalyzer system from any IPv4 address.

```
config system admin user
   edit admin_2
      set description "Backup administrator"
      set password p8ssw0rd
      set profileid Super_User
   end
```

alert-console

Use this command to configure the alert console options. The alert console appears on the dashboard in the GUI.

Syntax

```
config system alert-console
   set period {1 | 2 | 3 | 4 | 5 | 6 | 7}
   set severity-level {information | notify | warning | error | critical | alert | emergency}
end
```

Variable	Description
period {1 | 2 | 3 | 4 | 5 | 6 | 7}	Enter the number of days to keep the alert console alerts (default = 7).
severity-level {information | notify | warning | error | critical | alert | emergency}	Enter the minimum severity level to display on the alert console on the dashboard: • `emergency`: The unit is unusable (default). • `alert`: Immediate action is required. • `critical`: Functionality is affected. • `error`: Functionality is probably affected. • `warning`: Functionality might be affected. • `notification`: Information about normal events. • `information`: General information about unit operations.

Example

This example sets the alert console message display to warning for a duration of three days.

```
config system alert-console
   set period 3
   set severity-level warning
end
```

alertemail

Use this command to configure alert email settings for your FortiAnalyzer unit.

All variables are required when `authentication` is enabled.

Syntax

```
config system alertemail
   set authentication {enable | disable}
   set fromaddress <email-address_string>
   set fromname <string>
   set smtppassword <passwd>
   set smtpport <integer>
   set smtpserver {<ipv4_address>|<fqdn_string>}
   set smtpuser <username>
end
```

Variable	Description
authentication {enable | disable}	Enable/disable alert email authentication (default = enable).
fromaddress <email-address_string>	The email address the alert message is from. This is a required variable.
fromname <string>	The SMTP name associated with the email address. Enclose the name in quotes if it contains spaces.
smtppassword <passwd>	Set the SMTP server password (character limit = 39).
smtpport <integer>	The SMTP server port (1 - 65535, default = 25).
smtpserver {<ipv4_address>|<fqdn_string>}	The SMTP server address, either a DNS resolvable host name or an IPv4 address.
smtpuser <username>	Set the SMTP server username (character limit= 63).

Example

Here is an example of configuring `alertemail`. Enable authentication, the alert is set in Mr. Customer's name and from his email address, the SMTP server port is the default port(25), and the SMTP server is at IPv4 address of 192.168.10.10.

```
config system alertemail
   set authentication enable
   set fromaddress customer@example.com
   set fromname "Ms. Customer"
   set smtpport 25
   set smtpserver 192.168.10.10
end
```

alert-event

Use `alert-event` commands to configure the FortiAnalyzer unit to monitor logs for log messages with certain severity levels, or information within the logs. If the message appears in the logs, the FortiAnalyzer unit sends an email or SNMP trap to a predefined recipient(s) of the log message encountered. Alert event messages provide immediate notification of issues occurring on the FortiAnalyzer unit.

When configuring an alert email, you must configure at least one DNS server. The FortiGate unit uses the SMTP server name to connect to the mail server and must look up this name on your DNS server.

`alert-event` was removed from the GUI in FortiAnalyzer version 5.0.3. This command has been kept in the CLI for customers who previously configured this function.

Syntax

```
config system alert-event
   edit <name_string>
      set enable-generic-text {enable | disable}
      set enable-severity-filter {enable | disable}
      set event-time-period {0.5 | 1 | 3 | 6 | 12 | 24 | 72 | 168}
      set generic-text <string>
      set num-events {1 | 5 | 10 | 50 | 100}
      set severity-filter {high | low | medium | medium-high | medium-low}
      set severity-level-comp {>= | = | <=}
      set severity-level-logs {no-check | information | notify | warning |error | critical |
            alert | emergency}
      config alert-destination
         edit destination_id <integer>
            set type {mail | snmp | syslog}
            set from <email_address>
            set to <email_address>
            set smtp-name <server_name>
            set snmp-name <server_name>
            set syslog-name <server_name>
```

```
        end
    end
```

Variable	Description
<name_string>	Enter a name for the alert event (character limit = 63).
enable-generic-text {enable | disable}	Enable generic text match (default = disable).
enable-severity-filter {enable | disable}	Enable/disable alert severity filter (default = disable).
event-time-period {0.5 | 1 | 3 | 6 | 12 | 24 | 72 | 168}	The period of time in hours during which if the threshold number is exceeded, the event will be reported: • `0.5`: 30 minutes (default) • `1`: 1 hour • `3`: 3 hours • `6`: 6 hours • `12`: 12 hours • `24`: 1 day • `72`: 3 days • `168`: 1 week
generic-text <string>	Text that must be contained in a log to trigger alert (character limit = 255).
num-events {1 | 5 | 10 | 50 | 100}	Set the minimum number of events that must occur in the given interval before it is reported (default = 1).
severity-filter {high | low | medium | medium-high | medium-low}	Set the required log severity to trigger an alert (default = high).
severity-level-comp {>= | = | <=}	Set the log severity threshold comparison criterion (default = =). Log messages are monitored based on the log level. For example, alerts may be monitored if the messages are greater than or equal to (>=) the Warning log level.
severity-level-logs {no-check | information | notify | warning |error | critical | alert | emergency}	Set the log severity threshold level. That is, the log level the FortiManager looks for when monitoring for alert messages. • `no-check`: Do not check severity level for this log type (default). • `emergency`: The unit is unusable. • `alert`: Immediate action is required. • `critical`: Functionality is affected. • `error`: Functionality is probably affected. • `warning`: Functionality might be affected. • `notification`: Information about normal events. • `information`: General information about unit operations.
Variables for `config alert-destination` **subcommand**:	
destination_id <integer>	Enter the table sequence number, beginning at 1.
type {mail | snmp | syslog}	Select the alert event message method of delivery:

Variable	Description
	• `mail`: Send email alert (default). • `snmp`: Send SNMP trap. • `syslog`: Send syslog message.
from <email_address>	Enter the sender email address to use in alert emails. This is available when `type` is set to `mail`.
to <email_address>	Enter the recipient email address to use in alert emails. This is available when `type` is set to `mail`.
smtp-name <server_name>	Enter the name of the mail server. This is available when `type` is set to `mail`.
snmp-name <server_name>	Enter the snmp server name. This is available when `type` is set to `snmp`.
syslog-name <server_name>	Enter the syslog server name or IPv4 address. This is available when `type` is set to `syslog`.

Example

In the following example, the alert message is set to send an email to the administrator when 5 warning log messages appear over the span of three hours.

```
config system alert-event
   edit warning
      config alert-destination
         edit 1
            set type mail
            set from fmgr@exmample.com
            set to admin@example.com
            set smtp-name mail.example.com
         end
         set enable-severity-filter enable
         set event-time-period 3
         set severity-level-log warning
         set severity-level-comp =
         set severity-filter medium
   end
```

auto-delete

Use this command to automatically delete policies for logs, reports, and archived and quarantined files.

Syntax

```
config system auto-delete
   config dlp-files-auto-deletion
      set retention {days | weeks | months}
      set runat <integer>
```

```
        set status {enable | disable}
        set value <integer>
    end
    config quarantine-files-auto-deletion
        set retention {days | weeks | months}
        set runat <integer>
        set status {enable | disable}
        set value <integer>
    end
    config log-auto-deletion
        set retention {days | weeks | months}
        set runat <integer>
        set status {enable | disable}
        set value <integer>
    end
    config report-auto-deletion
        set retention {days | weeks | months}
        set runat <integer>
        set status {enable | disable}
        set value <integer>
    end
end
```

Variable	Description
dlp-files-auto-deletion	Automatic deletion policy for DLP archives.
quarantine-files-auto-deletion	Automatic deletion policy for quarantined files.
log-auto-deletion	Automatic deletion policy for device logs.
report-auto-deletion	Automatic deletion policy for reports.
retention {days | weeks | months}	Automatic deletion in days, weeks, or months (default = days).
runat <integer>	Automatic deletion run at (0 - 23) o'clock (default = 0).
status {enable | disable}	Enable/disable automatic deletion (default = disable).
value <integer>	Automatic deletion in x days, weeks, or months (default = 0).

backup all-settings

Use this command to set or check the settings for scheduled backups.

An MD5 checksum is automatically generated in the event log when backing up the configuration. You can verify a backup by comparing the checksum in the log entry with that of the backup file.

It is mandatory to set a password for the backup file. See `set crptpasswd <passwd>` below.

Syntax

```
config system backup all-settings
   set status {enable | disable}
   set server {<ipv4_address>|<fqdn_str>}
   set user <username>
   set directory <string>
   set week_days {monday tuesday wednesday thursday friday saturday sunday}
   set time <hh:mm:ss>
   set protocol {ftp | scp | sftp}
   set passwd <passwd>
   set cert <certificate_name>
   set crptpasswd <passwd>
end
```

Variable	Description
status {enable | disable}	Enable/disable scheduled backups (default = disable).
server {<ipv4_ address>|<fqdn_str>}	Enter the IPv4 address or DNS resolvable host name of the backup server.
user <username>	Enter the user account name for the backup server (character limit = 63).
directory <string>	Enter the name of the directory on the backup server in which to save the backup file.
week_days {monday tuesday wednesday thursday friday saturday sunday}	Enter the days of the week on which to perform backups. You may enter multiple days.
time <hh:mm:ss>	Enter the time of day to perform the backup. Time is required in the form <hh:mm:ss>.
protocol {ftp | scp | sftp}	Enter the transfer protocol (default = sftp).
passwd <passwd>	Enter the password for the backup server (character limit = 127).
cert <certificate_name>	SSH certificate for authentication. Only available if the protocol is set to scp. The SSH certificate object must already be configured. See certificate ssh on page 69.
crptpasswd <passwd>	Enter a password to protect backup content (character limit = 63).

central-management

Use this command to set or check the settings for central management.

Syntax

```
config system central-management
```

```
    set acctid <string>
    set allow-monitor {enable | disable}
    set authorized-manager-only {enable | disable}
    set elite-service {enable | disable}
    set enc-alogorithm {default | high | low}
    set fmg <string>
    set mgmtid <integer>
    set serial-number <serial_number_string>
    set type {cloud-management | fortimanager | none}
end
```

Variable	Description
acctid <string>	
allow-monitor {enable | disable}	Enable/disable remote monitoring of the device (default = enable).
authorized-manager-only {enable | disable}	Enable/disable restricted to authorize manager only setting (default = enable).
elite-service {enable | disable}	Enable/disable FortiCare Elite Service. This option is only available when `type = cloud-management`.
enc-alogorithm {default | high | low}	Set the SSL communication encryption algorithms: • `default`: SSL communication with high and medium encryption algorithms (default) • `high`: SSL communication with high encryption algorithms • `low`: SSL communication with low encryption algorithms
fmg <string>	Set the IP address or FQDN of the FortiManager (character limit = 31).
mgmtid <integer>	
serial-number <serial_number_string>	Set the device serial number. You can enter up to 5 serial numbers.
type {cloud-management | fortimanager | none}	Type of management server (default = fortimanager).

Use the show command to display the current configuration if it has been changed from its default value:

```
show system central-management
```

certificate

Use the following commands to configure certificate related settings.

certificate ca

Use this command to install Certificate Authority (CA) root certificates.

When a CA processes your Certificate Signing Request (CSR), it sends you the CA certificate, the signed local certificate and the Certificate Revocation List (CRL).

The process for obtaining and installing certificates is as follows:

1. Use the `execute certificate local generate` command to generate a CSR.
2. Send the CSR to a CA. The CA sends you the CA certificate, the signed local certificate and the CRL.
3. Use the `system certificate local` command to install the signed local certificate.
4. Use the `system certificate ca` command to install the CA certificate. Depending on your terminal software, you can copy the certificate and paste it into the command.

Syntax

```
config system certificate ca
   edit <ca_name>
      set ca <certificate>
      set comment <string>
   end
```

Variable	Description
<ca_name>	Enter a name for the CA certificate (character limit = 35).
ca <certificate>	Enter or retrieve the CA certificate in PEM format.
comment <string>	Optionally, enter a descriptive comment (character limit = 127).

certificate crl

Use this command to configure CRLs.

Syntax

```
config system certificate crl
   edit <name>
      set crl <crl>
      set comment <string>
      set http-url <string>
      set update-interval <integer>
   end
```

Variable	Description
<name>	Enter a name for the CRL (character limit = 35).
crl <crl>	Enter or retrieve the CRL in PEM format.
comment <string>	Optionally, enter a descriptive comment for this CRL (character limit = 127).

Variable	Description
http-url <string>	Set the HTTP server URL for CRL auto-update.
update-interval <integer>	Set the CRL auto-update interval, in minutes (minimum = 3, default = 1440).

certificate local

Use this command to install local certificates. When a CA processes your CSR, it sends you the CA certificate, the signed local certificate and the CRL.

The process for obtaining and installing certificates is as follows:

1. Use the `execute certificate local generate` command to generate a CSR.
2. Send the CSR to a CA. The CA sends you the CA certificate, the signed local certificate and the CRL.
3. Use the `system certificate local` command to install the signed local certificate.
4. Use the `system certificate ca` command to install the CA certificate. Depending on your terminal software, you can copy the certificate and paste it into the command.

Syntax

```
config system certificate local
   edit <cert_name>
      set password <passwd>
      set comment <string>
      set certificate <certificate_PEM>
      set private-key <prkey>
      set csr <csr_PEM>
   next
end
```

Variable	Description
<cert_name>	Enter the local certificate name (character limit = 35).
password <passwd>	Enter the local certificate password (character limit = 67).
comment <string>	Enter any relevant information about the certificate (character limit = 127).
certificate <certificate_PEM>	Enter the signed local certificate in PEM format.
You should not modify the following variables if you generated the CSR on this unit.	
private-key <prkey>	The private key in PEM format.
csr <csr_PEM>	The CSR in PEM format.

certificate oftp

Use this command to install OFTP certificates and keys.

Syntax

```
config system certificate oftp
      set certificate <certificate>
      set comment <string>
      set local {Fortinet_Local | Fortinet_Local2}
      set mode {custom | default | local}
      set password <passwd>
      set private-key <key>
   end
```

Variable	Description
certificate <certificate>	PEM format certificate.
comment <string>	OFTP certificate comment (character limit = 127).
local {Fortinet_Local | Fortinet_Local2}	Choose from the two available local certificates.
mode {custom | default | local}	Mode of certificates used by OFTPD (default = default): • `custom`: Use a custom certificate. • `defualt`: Default mode. • `local`: Use a local certificate.
password <passwd>	Password for encrypted 'private-key', unset for non-encrypted.
private-key <key>	PEM format private key.

certificate remote

Use this command to install remote certificates

Syntax

```
config system certificate remote
   edit <cert_name>
      set cert <certificate>
      set comment <string>
   next
end
```

Variable	Description
<cert_name>	Enter the remote certificate name (character limit = 35).
cert <certificate>	The remote certificate.
comment <string>	Optionally, enter a descriptive comment (character limit = 127).

certificate ssh

Use this command to install SSH certificates and keys.

The process for obtaining and installing certificates is as follows:

1. Use the `execute certificate local generate` command to generate a CSR.
2. Send the CSR to a CA. The CA sends you the CA certificate, the signed local certificate and the CRL.
3. Use the `system certificate local` command to install the signed local certificate.
4. Use the `system certificate ca` command to install the CA certificate.
5. Use the `system certificate SSH` command to install the SSH certificate. Depending on your terminal software, you can copy the certificate and paste it into the command.

Syntax

```
config system certificate ssh
   edit <name>
      set comment <comment_text>
      set certificate <certificate>
      set private-key <key>
   end
```

Variable	Description
<name>	Enter the SSH certificate name (character limit = 63).
comment <comment_text>	Enter any relevant information about the certificate (character limit = 127).
certificate <certificate>	Enter the signed SSH certificate in PEM format.
You should not modify the following variables if you generated the CSR on this unit.	
private-key <key>	The private key in PEM format.

connector

Use this command to configure connector related settings.

Syntax

```
config system connector
   set cloud-orchest-refresh-interval <integer>
   set conn-refresh-interval <integer>
   set conn-ssl-protocol {follow-global-ssl-portocol | sslv3 | tlsv1.0 | tlsv1.1 | tlsv1.2 |
        tlsv1.3}
   set faznotify-msg-queue-max <integer>
   set faznotify-msg-timeout <integer>
```

```
    set fsso-refresh-interval <integer>
    set fsso-sess-timeout <integer>
    set px-svr-timeout <integer>
end
```

Variable	Description
cloud-orchest-refresh-interval <integer>	Set the Cloud Orchestration refresh interval, in seconds (300 - 1800, default = 300).
conn-refresh-interval <integer>	Set the connector refresh interval, in seconds (60 - 1800, default = 300).

conn-ssl-protocol {follow-global-ssl-portocol | sslv3 | tlsv1.0 | tlsv1.1 | tlsv1.2 | tlsv1.3}	Set the lowest SSL protocol version for connector (default = follow-global-ssl-portocol).
	The follow-global-ssl-portocol setting follows the setting for:
	`config system global`
	`set global-ssl-protocol {sslv3 | tlsv1.0 | tlsv1.1 | tlsv1.2 | tlsv1.3}`

faznotify-msg-queue-max <integer>	Set the faznotify max queued message per connector (10 - 10000, default = 1000).
faznotify-msg-timeout <integer>	Set the faznotify message timeout (1 - 720 hours, default = 72).
fsso-refresh-interval <integer>	Set the FSSO refresh interval, in seconds (60 - 1800, default = 180).
fsso-sess-timeout <integer>	Set the FSSO session timeout, in seconds (30 - 600, default = 300).
px-svr-timeout <integer>	Set the pxGrid session timeout, in seconds (30 - 600, default = 300).

csf

Use this command to add this device to a Security Fabric or set up a new Security Fabric on this device.

This syntax is used as part of the fabric connection to FortiManager. For more information about establishing this connection, see the FortiManager Administration Guide.

Syntax

```
config system csf
    set accept-auth-by-cert {enable | disable}
    set authorization-request-type {certificate | serial}
    set certificate <string>
    set downstream-access {enable | disable}
    set downstream-accprofile <string>
    set fabric-workers <integer>
    set ssl-protocol {follow-global-ssl-portocol | sslv3 | tlsv1.0 | tlsv1.1 | tlsv1.2 | tlsv1.3}
    set status {enable | disable}
    set upstream <string>
```

```
    set upstream-confirm
    set upstream-port <integer>
    config trusted-list
       edit <name>
          set action {accept | deny}
          set authorization-type {certificate | serial}
          set certificate <string>
          set ha-members <ha members>
          set index <integer>
          set serial <string>
    end
end
```

Variable	Description
accept-auth-by-cert {enable | disable}	Accept connections with unknown certificates and ask admin for approval (default = enable).
authorization-request-type {certificate | serial}	Authorization request type (default = certificate).
certificate <string>	Certificate (default = Fortinet_Local).
downstream-access {enable | disable}	Enable/disable downstream device access to this device's configuration and data (default = disable).
downstream-accprofile <string>	Default access profile for requests from downstream devices. This option is only available when `downstream-access` is set to `enable`.
fabric-workers <integer>	Number of worker processes for Security Fabric daemon (default = 2).

ssl-protocol {follow-global-ssl-portocol | sslv3 | tlsv1.0 | tlsv1.1 | tlsv1.2 | tlsv1.3}	Set the lowest SSL protocol version for upstream and downstream connections (default = follow-global-ssl-portocol).
	The follow-global-ssl-portocol setting follows the setting for:
	`config system global`
	`set global-ssl-protocol {sslv3 | tlsv1.0 | tlsv1.1 | tlsv1.2 | tlsv1.3}`

status {enable | disable}	Enable/disable Security Fabric (default = disable).
upstream <string>	IP/FQDN of the FortiManager upstream from this FortiAnalyzer in the Security Fabric.
upstream-port <integer>	The port number to use to communicate with the FortiManager upstream from this FortiAnalyzer in the Security Fabric (default = 8013).
Variables for `config trusted-list` subcommand:	
<name>	Name.
action {accept | deny}	Security fabric authorization action (default = accept).
authorization-type {certificate | serial}	Authorization type (default = serial).
certificate <string>	Certificate.
ha-members <ha members>	HA members.
index <integer>	Index of the downstream in tree (default = 0).
serial <string>	Serial.

dns

Use these commands to set the DNS server addresses. Several FortiAnalyzer functions, including sending alert email, use DNS. You can configure both IPv4 and IPv6 DNS server addresses.

Syntax

```
config system dns
   set primary <ipv4_address>
   set secondary <ipv4_address>
   set ip6-primary <ipv6_address>
   set ip6-secondary <ipv6_address>
end
```

Variable	Description
primary <ipv4_address>	Enter the primary DNS server IPv4 address.
secondary <ipv4_address>	Enter the secondary DNS IPv4 server address.
ip6-primary <ipv6_address>	Enter the primary DNS server IPv6 address.
ip6-secondary <ipv6_address>	Enter the secondary DNS IPv6 server address.

Example

This example shows how to set the primary FortiAnalyzer DNS server IPv4 address to `172.20.120.99` and the secondary FortiAnalyzer DNS server IPv4 address to `192.168.1.199`.

```
config system dns
   set primary 172.20.120.99
   set secondary 192.168.1.199
end
```

docker

Use the following command to enable Docker and management extensions.

As of FortiAnalyzer 7.6.3, there are no management extensions supported on FortiAnalyzer.

Syntax

```
config system docker
   set cpu <integer>
   set default-address-pool_base <ip&netmask>
   set default-address-pool_size <integer>
   set docker-user-login-max <integer>
   set mem <integer>
   set status {enable | disable | qa | dev}
end
```

Variable	Description
cpu <integer>	Set the maximum % of CPU usage (10 - 50, default = 50).
default-address-pool_base <ip&netmask>	Set the default-address-pool CIDR. Enter the IP address and the netmask (default = 172.17.0.0 255.255.0.0).
default-address-pool_size <integer>	Set the default-address-pool size (default = 24).
docker-user-login-max <integer>	Set the maximum login sessions for the docker users (default = 32).
mem <integer>	Set the maximum % of RAM usage (10 - 50, default = 50).
status {enable | disable | qa | dev}	Enable/disable Docker and set registry (default = disable): • `enable`: Enable production registry. • `disable`: Disable the docker host service. • `qa`: Enable QA test registry. • `dev`: Enable QA test registry without the signature.

fips

Use this command to set the Federal Information Processing Standards (FIPS) status. FIPS mode is an enhanced security option for some FortiAnalyzer models. Installation of FIPS firmware is required only if the unit was not ordered with this firmware pre-installed.

FIPS mode can only be enabled via console.

Syntax

```
config system fips
   set status enable
   set entropy-token {enable | disable | dynamic}
   set re-seed-interval <integer>
```

```
end
```

Variable	Description
status enable	Enable the FIPS-CC mode of operation. **Note**: enable option is available only via console and when the device is not in FIPS mode.
entropy-token {enable | disable | dynamic}	Configure support for the FortiTRNG entropy token when switching to FIPS mode: • `enable`: The token must be present during boot up and reseeding. If the token is not present, the boot up or reseeding is interrupted until the token is inserted. • `disable`: The current entropy implementation is used to seed the Random Number Generator (RNG) (default). • `dynamic`: The token is used to seed or reseed the RNG if it is present. If the token is not present, the boot process is not blocked and the old entropy implementation is used.
re-seed-interval <integer>	The amount of time between RNG reseeding, in minutes (0 - 1440, default = 1440).

fortiview

fortiview setting

Use this command to configure FortiView settings.

Syntax

```
config system fortiview setting
   set data-source {auto | cache-only | log-and-cache}
   set not-scanned apps {exclude | include}
   set query-run-mode {auto | boost}
   set resolve-ip {enable | disable}
end
```

Variable	Description
data-source {auto | cache-only | log-and-cache}	Data soure of the FortiView query (default = auto): • `auto`: Data from hcache and from logs in a flexible way. • `cache-only`: Data from hcache only. • `log-and-cache`: Data from logs and hcache.

Variable	Description
not-scanned apps {exclude | include}	Include/exclude unscanned applications in FortiView (default = include). Set to `exclude` to filter out never scanned applications.
query-run-mode {auto | boost}	Set the CPU usage mode for running the FortiView query. • `auto`: Adapted CPU usage on FortiView query (default). • `boost`: High CPU usage on FortiView query.
resolve-ip {enable | disable}	Enable/disable resolving the IP address to the hostname in FortiView (default = disable).

fortiview auto-cache

Use this command to view or configure FortiView auto-cache settings.

Syntax

```
config system fortiview auto-cache
   set aggressive-fortiview {enable | disable}
   set incr-fortiview {enable | disable}
   set interval <integer>
   set status {enable | disable}
end
```

Variable	Description
aggressive-fortiview {enable | disable}	Enable/disable aggressive auto-cache on FortiView (default = disable).
incr-fortiview {enable | disable}	Enable/disable FortiView incremental auto-cache (default = disable).
interval <integer>	The time interval for FortiView auto-cache, in hours (default = 168).
status {enable | disable}	Enable/disable FortiView auto-cache (default = enable).

global

Use this command to configure global settings that affect miscellaneous FortiAnalyzer features.

Syntax

```
config system global
   set admin-host <string>
   set admin-lockout-duration <integer>
```

```
set admin-lockout-method {ip | user}
set admin-lockout-threshold <integer>
set admin-ssh-grace-time <integer>
set adom-mode {advanced | normal}
set adom-select {enable | disable}
set adom-status {enable | disable}
set apache-mode {event | prefork}
set apache-wsgi-processes <integer>
set api-ip-binding {enable | disable}
set auth-dev-restapi-allowlist {enable | disable}
set backup-compression {high | low | none | normal}
set backup-to-subfolders {enable | disable}
set clone-name-option {default | keep}
set clt-cert-req {enable | disable}
set console-output {more | standard}
set contentpack-fgt-install {enable | disable}
set country-flag {enable | disable}
set create-revision {enable | disable}
set daylightsavetime {enable | disable}
set default-logview-auto-completion {enable | disable}
set default-search-mode {advanced | filter-based}
set detect-unregistered-log-device {enable | disable}
set device-view-mode {regular | tree}
set disable-module {fortiview-noc | siem | soc | ot-view | none}
set enc-algorithm {custom | high | medium | low}
set event-correlation-cache-size <integer>
set fabric-storage-pool-quota <integer>
set fabric-storage-pool-size <integer>
set fcp-cfg-service {enable | disable}
set fgfm-ca-cert <certificate>
set fgfm-cert-exclusive {enable | disable}
set fgfm-local-cert <certificate>
set fgfm-ssl-protocol {sslv3 | tlsv1.0 | tlsv1.1 | tlsv1.2 | tlsv1.3}
set fmg-status {enable | disable}
set fmg-fabric-port <integer>
set fortiservice-port <integer>
set global-ssl-protocol {sslv3 | tlsv1.0 | tlsv1.1 | tlsv1.2 | tlsv1.3}
set gui-curl-timeout <integer>
set gui-feature-visibility-mode {per-admin | per-adom}
set gui-polling-interval <integer>
set ha-member-auto-grouping {enable | disable}
set hostname <string>
set httpd-ssl-protocol {tlsv1.3 tlsv1.2 tlsv1.1 tlsv1.0 sslv3}
set jsonapi-log {all | disable | request | response}
set language {english | japanese | simch | trach}
set latitude <string>
set ldap-cache-timeout <integer>
set ldapconntimeout <integer>
set lock-preempt {enable | disable}
set log-checksum {md5 | md5-auth | none}
set log-checksum-upload {enable | disable}
set log-forward-cache-size <integer>
set log-forward-plugin-workers <integer>
set log-mode {analyzer | collector}
set longitude <string>
set management-ip <address>
set management-port <integer>
```

```
    set mapclient-ssl-protocol {follow-global-ssl-portocol | sslv3 | tlsv1.0 | tlsv1.1 | tlsv1.2 |
        tlsv1.3}
    set max-aggregation-tasks <integer>
    set max-log-forward <integer>
    set max-running-reports <integer>
    set multiple-steps-upgrade-in-autolink {enable | disable}
    set no-copy-permission-check {enable | disable}
    set no-vip-value-check {enable | disable}
    set normalized-intf-zone-only {enable | disable}
    set object-revision-db-max <integer>
    set object-revision-mandatory-note {enable | disable}
    set object-revision-object-max <integer>
    set object-revision-status {enable | disable}
    set oftp-ssl-protocol {sslv3 | tlsv1.0 | tlsv1.1 | tlsv1.2 | tlsv1.3}
    set policy-object-icon {enable | disable}
    set policy-object-in-dual-pane {enable | disable}
    set pre-login-banner {enable | disable}
    set pre-login-banner-message <string>
    set private-data-encryption {enable | disable}
    set remoteauthtimeout <integer>
    set rpc-log {enable | disable}
    set search-all-adoms {enable | disable}
    set ssh-enc-algo {3des-cbc aes128-cbc aes128-ctr aes128-gcm@openssh.com aes192-cbc aes192-ctr
        aes256-cbc aes256-ctr aes256-gcm@openssh.com arcfour arcfour128 blowfish-cbc cast128-cbc
        chacha20-poly1305@openssh.com rijndael-cbc@lysator.liu.se}
    set ssh-hostkey-algo {ecdsa-sha2-nistp521 rsa-sha2-256 rsa-sha2-512 ssh-ed25519 ssh-rsa}
    set ssh-kex-algo {curve25519-sha256@libssh.org diffie-hellman-group-exchange-sha1 diffie-
        hellman-group-exchange-sha256 diffie-hellman-group14-sha1 diffie-hellman-group14-sha256
        diffie-hellman-group16-sha512 diffie-hellman-group18-sha512 ecdh-sha2-nistp256 ecdh-sha2-
        nistp384 ecdh-sha2-nistp521}
    set ssh-mac-algo {hmac-md5 hmac-md5-96 hmac-md5-96-etm@openssh.com hmac-md5-etm@openssh.com
        hmac-ripemd160 hmac-ripemd160-etm@openssh.com hmac-ripemd160@openssh.com hmac-sha1 hmac-
        sha1-etm@openssh.com hmac-sha2-256 hmac-sha2-256-etm@openssh.com hmac-sha2-512 hmac-sha2-
        512-etm@openssh.com umac-128-etm@openssh.com umac-128@openssh.com umac-64-etm@openssh.com
        umac-64@openssh.com}
    set ssh-strong-crypto {enable | disable}
    config ssl-cipher-suites
        edit <priority>
            set cipher <string>
            set version {tls1.2-or-below | tls1.3}
        end
    set ssl-low-encryption {enable | disable}
    set ssl-static-key-ciphers {enable | disable}
    set storage-age-limit <integer>
    set table-entry-blink {enable | disable}
    set task-list-size <integer>
    set tftp
    set timezone <integer>
    set tunnel-mtu <integer>
    set usg {enable | disable}
    set webservice-proto {tlsv1.3 | tlsv1.2 | tlsv1.1 | tlsv1.0 | sslv3 | sslv2}
    set workflow-max-sessions <integer>
end
```

Variable	Description
admin-host <string>	Administrative host for HTTP and HTTPs. When set, will be used instead of the client's Host header for any redirection (default = null).
admin-lockout-duration <integer>	Set the lockout duration for FortiAnalyzer administration, in seconds (default = 60).
admin-lockout-method {ip | user}	Set the lockout method for FortiAnalyzer administration (default = ip).
admin-lockout-threshold <integer>	Set the lockout threshold for FortiAnalyzer administration (1 - 10, default = 3).
admin-ssh-grace-time <integer>	Maximum time in seconds permitted between making an SSH connection to the FortiManager unit and authenticating (10 - 3600 seconds (one hour), default = 120).
adom-mode {advanced | normal}	Set the ADOM mode (default = normal).
adom-select {enable | disable}	Enable/disable a pop-up window that allows administrators to select an ADOM after logging in (default = enable).
adom-status {enable | disable}	Enable/disable administrative domains (default = disable).
apache-mode {event | prefork}	Set Apache mode to Apache event mode or Apache prefork mode (default = event).
apache-wsgi-processes <integer>	Set Apache wsgi processes (5 - 250, default = 10).
api-ip-binding {enable | disable}	Enable/disable source IP check for JSON API request (default = enable).
auth-dev-restapi-allowlist {enable | disable}	Enable/disable checking the REST API allowlist for authorized client device (default = disable).
backup-compression {high | low | none | normal}	Set the backup compression level: `high` (slowest), `low` (fastest), `none`, or `normal` (default).
backup-to-subfolders {enable | disable}	Enable/disable the creation of subfolders on server for backup storage (default = disable).
clone-name-option {default | keep}	Set the cloned object name option: • `default`: Add a Clone of prefix to the name. • `keep`: Keep the original name for the user to edit.
clt-cert-req {enable | disable}	Enable/disable requiring a client certificate for GUI login (default = disable). When both `clt-cert-req` and `admin-https-pki-required` are enabled, only PKI administrators can connect to the GUI.
console-output {more | standard}	Select how the output is displayed on the console (default = standard). Select `more` to pause the output at each full screen until keypress. Select `standard` for continuous output without pauses.

Variable	Description
contentpack-fgt-install {enable | disable}	Enable/disable auto outbreak auto install for FortiGate ADOMs (default = disable).
country-flag {enable | disable}	Enable/disable a country flag icon beside an IP address (default = enable).
create-revision {enable | disable}	Enable/disable create revision by default (default = disable).
daylightsavetime {enable | disable}	Enable/disable daylight saving time (default = enable). If you enable daylight saving time, the FortiAnalyzer unit automatically adjusts the system time when daylight saving time begins or ends.
default-logview-auto-completion {enable | disable}	Enable/disable log view filter auto-completion (default = enable).
default-search-mode {advanced | filter-based}	Set the default search mode of log view (default = filter-based).
detect-unregistered-log-device {enable | disable}	Enable/disable unregistered log device detection (default = enable).
device-view-mode {regular | tree}	Set the devices/groups view mode (default = regular).
disable-module {fortiview-noc | siem | soc | ot-view | none}	Disable module list (default = none).
enc-algorithm {custom | high | medium | low}	Set SSL communication encryption algorithms: • `custom`: SSL communication using custom encryption algorithms. • `high`: SSL communication using high encryption algorithms (default). • `medium`: SSL communication using high and medium encryption algorithms. • `low`: SSL communication using all available encryption algorithms.
event-correlation-cache-size <integer>	Set maximum event correlation cache size in GB (maximum = 8, minimum = 1, default = 4).
fabric-storage-pool-quota <integer>	Set the disk quota reserved for Fabric Log (MB) (maximum = 50286, default = 50286).
fabric-storage-pool-size <integer>	Set the maximum storage pool size (maximum = 50, minimum = 1, default = 20).
fcp-cfg-service {enable | disable}	Enable/disable FCP service processing configuration requests from web (default = disable).
fgfm-ca-cert <certificate>	Set the extra FGFM CA certificates ("" = default certificate will be used).
fgfm-cert-exclusive {enable | disable}	Enable if the local or CA certificates should be used exclusively (default = disable; certificate is used best-effort).
fgfm-local-cert <certificate>	Set the FGFM local certificate ("" = default certificate will be used).

Variable	Description
fgfm-ssl-protocol {sslv3 | tlsv1.0 | tlsv1.1 | tlsv1.2 | tlsv1.3}	Set the lowest SSL protocols for fgfmsd (default = tlsv1.2).
fmg-status {enable | disable}	Disable FortiManager status. If FortiManager features are enabled in FortiAnalyzer before upgrading to 6.2, it will continue to be available after upgrading, and can be disabled with this variable. This variable is only available on some hardware-based FortiAnalyzer devices.
fmg-fabric-port <integer>	Set the FMG fabric port (1 - 64435, default = 8893). Used for FortiManager Fabric communication between supervisor and members.
fortiservice-port <integer>	Set the FortiService port (1 - 65535, default = 8013). Used by FortiClient endpoint compliance. Older versions of FortiClient used a different port.
global-ssl-protocol {sslv3 | tlsv1.0 | tlsv1.1 | tlsv1.2 | tlsv1.3}	Set the lowest SSL protocol version for all SSL connections (default = tlsv1.2).
gui-curl-timeout <integer>	Set the GUI cURL timeout in seconds (5-300 default = 30).
gui-feature-visibility-mode {per-admin | per-adom}	Set GUI feature visibility mode to one of the following: • `per-admin`: Per-admin control in policy & objects and provisioning templates. • `per-adom`: Per-ADOM control in policy & objects and provisioning templates (default).
gui-polling-interval <integer>	Set the GUI polling interval in seconds (1-288000, default = 5).
ha-member-auto-grouping {enable | disable}	Enable/disable automatically grouping HA members when the group name is unique in your network (default = enable).
hostname <string>	FortiAnalyzer host name.
httpd-ssl-protocol {tlsv1.3 tlsv1.2 tlsv1.1 tlsv1.0 sslv3}	Set SSL protocols for apache daemon (httpd) (default = tlsv1.3 tlsv1.2).
jsonapi-log {all | disable | request | response}	Enable jsonapi log: • `all`: logging both jsonapi request & response. • `disable`: disable jsonapi log (default). • `request`: logging jsonapi request. • `response`: logging jsonapi response.
language {english | japanese | simch | spanish | trach}	GUI language: • `english`: English (default) • `japanese`: Japanese • `simch`: Simplified Chinese • `spanish`: Spanish

Variable	Description
	• `trach`: Traditional Chinese
latitude <string>	Set the FortiAnalyzer device's latitude.
ldap-cache-timeout <integer>	LDAP cache timeout, in seconds (default =86400).
ldapconntimeout <integer>	LDAP connection timeout, in milliseconds (default = 60000).
lock-preempt {enable | disable}	Enable/disable the ADOM lock override (default = disable).
log-checksum {md5 | md5-auth | none}	Record log file hash value, timestamp, and authentication code at transmission or rolling: • `md5`: Record log file's MD5 hash value only. • `md5-auth`: Record log file's MD5 hash value and authentication code. • `none`: Do not record the log file checksum (default).
log-checksum-upload {enable | disable}	Enable/disable upload log checksum with log files (default = disable).
log-forward-cache-size <integer>	Set the log forwarding disk cache size, in gigabytes (default = 15).
log-forward-plugin-workers <integer>	Set the maximum workers for running log forward output plugins. The valid range is 2 to 20 (default = 10).
log-mode {analyzer | collector}	Set the log system operation mode (default = analyzer).
longitude <string>	Set the FortiAnalyzer device's longitude.
management-ip <address>	Set the management IP address of this FortiGate (default = null). Used to log into this FortiGate from another FortiGate in the Security Fabric. Please input the management IP address in IPv4 or FQDN format.
management-port <integer>	Set the overriding port for management connection (overrides admin port) (default = 443).

mapclient-ssl-protocol {follow-global-ssl-portocol | sslv3 | tlsv1.0 | tlsv1.1 | tlsv1.2 | tlsv1.3}	Set the lowest SSL protocol version for connection to mapserver (default = follow-global-ssl-portocol).
	The follow-global-ssl-portocol setting follows the setting for:
	`config system global`
	`set global-ssl-protocol {sslv3 | tlsv1.0 | tlsv1.1 | tlsv1.2 | tlsv1.3}`

max-aggregation-tasks <integer>	Set the maximum number of concurrent tasks of a log aggregation session (1 - 10, default = 0).
max-log-forward <integer>	Set the maximum log forwarding and aggregation number (5 - 20).
max-running-reports <integer>	Maximum running reports number (1 - 10, default = 1).
multiple-steps-upgrade-in-autolink {enable | disable}	Enable/disable multiple steps upgrade in an autolink process (default = disable).

Variable	Description
no-copy-permission-check {enable | disable}	Do not perform permission check to block object changes in different adom during copy and install (default = disable).
no-vip-value-check {enable | disable}	Enable/disable skipping policy instead of throwing error when VIP has no default or dynamic mapping during policy copy (default = disable).
normalized-intf-zone-only {enable | disable}	Allow the normalized interface to be zone only (default = disable).
object-revision-db-max <integer>	Maximum revisions for a single database (10000 - 1000000, default = 100000).
object-revision-mandatory-note {enable | disable}	Enable/disable mandatory note when creating a revision (default = enable).
object-revision-object-max <integer>	Set the maximum revisions for a single object (10 - 1000, default = 100).
object-revision-status {enable | disable}	Enable/disable creating revisions when modifying objects (default = enable).
oftp-ssl-protocol {sslv3 | tlsv1.0 | tlsv1.1 | tlsv1.2 | tlsv1.3}	Set the lowest SSL protocols for oftpd (default = tlsv1.2).
policy-object-icon {enable | disable}	Enable/disable show icons of policy objects (default= disable).
policy-object-in-dual-pane {enable | disable}	Enable/disable show policies and objects in dual pane (default= disable).
pre-login-banner {enable | disable}	Enable/disable pre-login banner (default= disable).
pre-login-banner-message <string>	Set the pre-login banner message.
private-data-encryption {enable | disable}	Enable/disable private data encryption using an AES 128 bit key (default = disable).
remoteauthtimeout <integer>	Remote authentication (RADIUS/LDAP) timeout, in seconds (default = 10).
rpc-log {enable | disable}	Enable/disable incoming/outgoing RPC logs (default = enable).
search-all-adoms {enable | disable}	Enable/disable search all ADOMs for where-used queries (default= disable).

Variable	Description
set ssh-enc-algo {3des-cbc aes128-cbc aes128-ctr aes128-gcm@openssh.com aes192-cbc aes192-ctr aes256-cbc aes256-ctr aes256-gcm@openssh.com arcfour arcfour128 blowfish-cbc cast128-cbc chacha20-poly1305@openssh.com rijndael-cbc@lysator.liu.se}	Select one or more SSH ciphers. • aes256-ctr • aes256-gcm@openssh.com • chacha20-poly1305@openssh.com Note that the following are only available when ssh-strong-crypto is set to disable: • 3des-cbc • aes128-cbc • aes128-ctr • aes128-gcm@openssh.com • aes192-cbc • aes192-ctr • aes256-cbc • arcfour • arcfour128 • arcfour256 • blowfish-cbc • cast128-cbc • rijndael-cbc@lysator.liu.se Default = chacha20-poly1305@openssh.com aes256-ctr aes256-gcm@openssh.com
set ssh-hostkey-algo {ecdsa-sha2-nistp521 rsa-sha2-256 rsa-sha2-512 ssh-ed25519 ssh-rsa}	Select one or more SSH hostkey algorithms. • ecdsa-sha2-nistp521 • rsa-sha2-256 • rsa-sha2-512 • ssh-ed25519 • ssh-rsa (only available when ssh-strong-crypto is set to disable) Default = ecdsa-sha2-nistp521 rsa-sha2-256 rsa-sha2-512 ssh-ed25519
set ssh-kex-algo {curve25519-sha256@libssh.org diffie-hellman-group-exchange-sha1 diffie-hellman-group-exchange-sha256 diffie-hellman-group14-sha1 diffie-hellman-group14-sha256 diffie-hellman-group16-sha512 diffie-hellman-group18-sha512 ecdh-sha2-nistp256 ecdh-sha2-nistp384 ecdh-sha2-nistp521}	Select one or more SSH kex algorithms. • curve25519-sha256@libssh.org • diffie-hellman-group-exchange-sha1 (only available when ssh-strong-crypto is set to disable) • diffie-hellman-group-exchange-sha256 • diffie-hellman-group14-sha1 (only available when ssh-strong-crypto is set to disable) • diffie-hellman-group14-sha256 • diffie-hellman-group16-sha512 • diffie-hellman-group18-sha512 • ecdh-sha2-nistp256 • ecdh-sha2-nistp384 • ecdh-sha2-nistp521

Variable	Description
	Default = `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`
set ssh-mac-algo {hmac-md5 hmac-md5-96 hmac-md5-96-etm@openssh.com hmac-md5-etm@openssh.com hmac-ripemd160 hmac-ripemd160-etm@openssh.com hmac-ripemd160@openssh.com hmac-sha1 hmac-sha1-etm@openssh.com hmac-sha2-256 hmac-sha2-256-etm@openssh.com hmac-sha2-512 hmac-sha2-512-etm@openssh.com umac-128-etm@openssh.com umac-128@openssh.com umac-64-etm@openssh.com umac-64@openssh.com}	Select one or more SSH MAC algorithms. • `hmac-sha2-256` • `hmac-sha2-256-etm@openssh.com` • `hmac-sha2-512` • `hmac-sha2-512-etm@openssh.com` Note that the following are only available when `ssh-strong-crypto` is set to `disable`: • `hmac-md5` • `hmac-md5-96` • `hmac-md5-96-etm@openssh.com` • `hmac-md5-etm@openssh.com` • `hmac-ripemd160` • `hmac-ripemd160-etm@openssh.com` • `hmac-ripemd160@openssh.com` • `hmac-sha1` • `hmac-sha1-etm@openssh.com` • `umac-128-etm@openssh.com` • `umac-128@openssh.com` • `umac-64-etm@openssh.com` • `umac-64@openssh.com` Default = `hmac-sha2-256 hmac-sha2-256-etm@openssh.com hmac-sha2-512 hmac-sha2-512-etm@openssh.com`
set ssh-strong-crypto {enable | disable}	Only allow strong ciphers for SSH when enabled (default = enable).
ssl-low-encryption {enable | disable}	Enable/disable SSL low-grade (40-bit) encryption (default = disable).
ssl-static-key-ciphers {enable | disable}	Enable/disable SSL static key ciphers (default = enable).
storage-age-limit <integer>	Set the storage age limit in number of days (default = 0).
table-entry-blink {enable | disable}	Enable/disable table entry blink in the GUI (default = enable).
task-list-size <integer>	Set the maximum number of completed tasks to keep (default = 2000).
tftp	
timezone <integer>	The time zone for the FortiManager unit (default = Pacific Time). See Time zones on page 85.
tunnel-mtu <integer>	Set the maximum transportation unit (68 - 9000, default = 1500).

Variable	Description
usg {enable | disable}	Enable/disable contacting only FortiGuard servers in the USA (default = enable).
webservice-proto {tlsv1.2 | tlsv1.1 | tlsv1.0 | sslv3 | sslv2}	Web Service connection (default = tlsv1.3 tlsv1.2).
workflow-max-sessions <integer>	This variable does not function on FortiAnalyzer.
ssl-cipher-suites	Configure the ssl-cipher-suites table to enforce the user specified preferred cipher order in the incoming SSL connections. **Note**: This command is only available if `enc-algorithm` is set to `custom`.
Variables for `config ssl-cipher-suites` subcommad:	
<priority>	Set the order of the ciphers in the ssl-cipher-suites table.
cipher <string>	Enter the SSL cipher name from the list.
version {tls1.2-or-below | tls1.3}	Set the SSL/TLS version the cipher suite can be used with (default = tls1.2-or-below).

Example

The following command turns on daylight saving time, sets the FortiAnalyzer unit name to FMG3k, and chooses the Eastern time zone for US & Canada.

```
config system global
   set daylightsavetime enable
   set hostname FMG3k
   set timezone 12
end
```

Time zones

Integer	Time zone	Integer	Time zone
00	(GMT-12:00) Eniwetak, Kwajalein	40	(GMT+3:00) Nairobi
01	(GMT-11:00) Midway Island, Samoa	41	(GMT+3:30) Tehran
02	(GMT-10:00) Hawaii	42	(GMT+4:00) Abu Dhabi, Muscat
03	(GMT-9:00) Alaska	43	(GMT+4:00) Baku
04	(GMT-8:00) Pacific Time (US & Canada)	44	(GMT+4:30) Kabul
05	(GMT-7:00) Arizona	45	(GMT+5:00) Ekaterinburg
06	(GMT-7:00) Mountain Time (US & Canada)	46	(GMT+5:00) Islamabad, Karachi,Tashkent

Integer	Time zone	Integer	Time zone
07	(GMT-6:00) Central America	47	(GMT+5:30) Calcutta, Chennai, Mumbai, New Delhi
08	(GMT-6:00) Central Time (US & Canada)	48	(GMT+5:45) Kathmandu
09	(GMT-6:00) Mexico City	49	(GMT+6:00) Almaty, Novosibirsk
10	(GMT-6:00) Saskatchewan	50	(GMT+6:00) Astana, Dhaka
11	(GMT-5:00) Bogota, Lima, Quito	51	(GMT+6:00) Sri Jayawardenapura
12	(GMT-5:00) Eastern Time (US & Canada)	52	(GMT+6:30) Rangoon
13	(GMT-5:00) Indiana (East)	53	(GMT+7:00) Bangkok, Hanoi, Jakarta
14	(GMT-4:00) Atlantic Time (Canada)	54	(GMT+7:00) Krasnoyarsk
15	(GMT-4:00) La Paz	55	(GMT+8:00) Beijing,ChongQing, HongKong,Urumqi
16	(GMT-4:00) Santiago	56	(GMT+8:00) Irkutsk, Ulaanbaatar
17	(GMT-3:30) Newfoundland	57	(GMT+8:00) Kuala Lumpur, Singapore
18	(GMT-3:00) Brasilia	58	(GMT+8:00) Perth
19	(GMT-3:00) Buenos Aires, Georgetown	59	(GMT+8:00) Taipei
20	(GMT-3:00) Nuuk (Greenland)	60	(GMT+9:00) Osaka, Sapporo, Tokyo, Seoul
21	(GMT-2:00) Mid-Atlantic	61	(GMT+9:00) Yakutsk
22	(GMT-1:00) Azores	62	(GMT+9:30) Adelaide
23	(GMT-1:00) Cape Verde Is	63	(GMT+9:30) Darwin
24	(GMT) Casablanca, Monrovia	64	(GMT+10:00) Brisbane
25	(GMT) Greenwich Mean Time:Dublin, Edinburgh, Lisbon, London	65	(GMT+10:00) Canberra, Melbourne, Sydney
26	(GMT+1:00) Amsterdam, Berlin, Bern, Rome, Stockholm, Vienna	66	(GMT+10:00) Guam, Port Moresby
27	(GMT+1:00) Belgrade, Bratislava, Budapest, Ljubljana, Prague	67	(GMT+10:00) Hobart
28	(GMT+1:00) Brussels, Copenhagen, Madrid, Paris	68	(GMT+10:00) Vladivostok
29	(GMT+1:00) Sarajevo, Skopje, Sofija, Vilnius, Warsaw, Zagreb	69	(GMT+11:00) Magadan
30	(GMT+1:00) West Central Africa	70	(GMT+11:00) Solomon Is., New Caledonia

Integer	Time zone	Integer	Time zone
31	(GMT+2:00) Athens, Istanbul, Minsk	71	(GMT+12:00) Auckland, Wellington
32	(GMT+2:00) Bucharest	72	(GMT+12:00) Fiji, Kamchatka, Marshall Is
33	(GMT+2:00) Cairo	73	(GMT+13:00) Nuku'alofa
34	(GMT+2:00) Harare, Pretoria	74	(GMT-4:30) Caracas
35	(GMT+2:00) Helsinki, Riga,Tallinn	75	(GMT+1:00) Namibia
36	(GMT+2:00) Jerusalem	76	(GMT-5:00) Brazil-Acre)
37	(GMT+3:00) Baghdad	77	(GMT-4:00) Brazil-West
38	(GMT+3:00) Kuwait, Riyadh	78	(GMT-3:00) Brazil-East
39	(GMT+3:00) Moscow, St.Petersburg, Volgograd	79	(GMT-2:00) Brazil-DeNoronha

ha

Use this command to enable and configure FortiAnalyzer high availability (HA).

FortiAnalyzer HA clusters provide real-time redundancy in case a unit fails. Logs, data, and relevant system settings are securely synchronized across multiple FortiAnalyzer devices, and processing tasks can be shared to alleviate the load on the primary unit.

A FortiAnalyzer HA cluster can have a maximum of four units, all of which are visible on the network. All of the units must be from the same product series and in the same operating mode (analyzer or collector). HA is not supported when FortiManager features are enabled.

For more information, see the FortiAnalyzer Administration Guide.

Syntax

```
config system ha
   set cfg-sync-hb-interval <integer>
   set group-id <integer>
   set group-name <name>
   set hb-interface <string>
   set hb-interval <integer>
   set healthcheck {DB | fault-test}
   set initial-sync {enable | disable}
   set initial-sync-threads <integer>
   set load-balance {disable | round-robin}
   set local-cert <certificate>
   set log-sync {enable | disable}
   set mode {a-a | a-p | standalone}
   set password <passwd>
   set preferred-role {primary | secondary}
   set priority <integer>
```

```
    set unicast {enable | disable}
    config peer
       edit <peer_id_int>
          set addr <string>
          set addr-hb <string>
          set serial-number <string>
          set status {enable | disable}
    end
    config vip
       edit <id>
          set status {enable | disable}
          set vip <string>
          set vip-interface <string>
    end
end
```

Variable	Description
cfg-sync-hb-interval <integer>	Configure the sync heartbeat interval (1 - 255, default = 3).
group-id <integer>	Set the HA group ID (1 - 255, default = 0).
group-name <name>	Set the HA group name.
hb-interface <string>	Set the interface for the heartbeat.
hb-interval <integer>	The time, in seconds, that a cluster unit waits between sending heartbeat packets. The heartbeat interval is also the amount of time that a cluster unit waits before expecting to receive a heartbeat packet from the other cluster unit (1 - 20, default = 1).
healthcheck {DB | fault-test}	Set the healthcheck options: • `DB` - Check that the database is running. • `fault-test` - Temp fault test.
initial-sync {enable | disable}	Initial data sync from primary node is required before the node fully functional as an HA member. (default = enable).
initial-sync-threads <integer>	Number of threads used for initial synchronization (1 - 15, default = 4).
load-balance {disable | round-robin}	Configure load balancing to secondary units (default = round-robin).
local-cert <certificate>	Set the local certificate. Note that "" means that the default certificate will be used.
log-sync {enable | disable}	Synchronize logs to backup FortiAnalyzer devices (default = enable).
mode {a-a | a-p | standalone}	Set the HA operating mode: active-active (`a-a`) active-passive mode (`a-p`) or standalone mode (`standalone`) (default = standalone).
password <passwd>	Set the HA group password.
priority <integer>	Set the runtime priority (80 - 120, default = 100).
preferrred-role {primary | secondary}	The preferred role of this unit (default = secondary). The runtime role may be different.

Variable	Description
unicast {enable | disable}	Enable/disable unicast for HA heartbeat (default = disable).
Variables for `config peer` **subcommand**:	
<peer_id_int>	Add a peer and add the peer's IPv4 or IPv6 address and serial number.
addr <string>	Enter the address of peer for management and data.
addr-hb <string>	Enter the IP address of the peer's VIP interface for heartbeat. This only needs to be set if the value is different than the peer's IP address, and is only needed when using unicast.
serial-number <string>	Enter the serial number of the peer FortiAnalyzer unit.
status {enable | disable}	Enter the status of the peer FortiAnalyzer unit (default = enable).
Variables for `config vip` **subcommand**:	
<id>	Set the VIP ID.
status {enable | disable}	Enable/disable VIP status (default = enable).
vip <string>	Virtual IP address for the HA.
vip-interface <string>	Interface for configuring virtual IP address. Enter port1, port2, port3....port10.

interface

Use this command to edit the configuration of a FortiAnalyzer network interface.

Syntax

To configure a physical interface:

```
config system interface
   edit <interface name>
      set status {enable | disable}
      set mode {dhcp | static}
      set ip <ipv4_mask>
      set dhcp-client-identifier <integer>
      set defaultgw {enable | disable}
      set dns-server-override {enable | disable}
      set mtu-override {enable | disable}
      set allowaccess {fgfm http https https-logging ping snmp soc-fabric ssh webservice}
      set lldp {enable | disable}
      set speed {1000full | 100full | 100half | 10full | 10half | auto}
      set description <string>
      set alias <string>
      set mtu <integer>
      set type {aggregate | physical | vlan}
```

```
      config ipv6
         set ip6-address <ipv6 prefix>
         set ip6-allowaccess {fgfm http https https-logging ping snmp ssh webservice}
         set ip6-autoconf {enable | disable}
      end
   end
```

To configure an aggregate interface:

```
config system interface
   edit <interface name>
      set status {enable | disable}
      set mode {dhcp | static}
      set ip <ipv4_mask>
      set dhcp-client-identifier <integer>
      set defaultgw {enable | disable}
      set dns-server-override {enable | disable}
      set mtu-override {enable | disable}
      set allowaccess {fgfm http https https-logging ping snmp soc-fabric ssh webservice}
      set speed {1000full | 100full | 100half | 10full | 10half | auto}
      set description <string>
      set alias <string>
      set mtu <integer>
      set type {aggregate | physical | vlan}
      set lacp-speed {fast | slow}
      set min-links <integer>
      set min-links-down {administrative | operational}
      set link-up-delay <integer>
      config member
         edit <interface-name>
      end
      config ipv6
         set ip6-address <ipv6 prefix>
         set ip6-allowaccess {fgfm http https https-logging ping snmp ssh webservice}
         set ip6-autoconf {enable | disable}
      end
   end
```

To configure a VLAN interface:

```
config system interface
   edit <interface name>
      set status {enable | disable}
      set mode {dhcp | static}
      set ip <ipv4_mask>
      set dhcp-client-identifier <integer>
      set defaultgw {enable | disable}
      set dns-server-override {enable | disable}
      set mtu-override {enable | disable}
      set allowaccess {fgfm http https https-logging ping snmp soc-fabric ssh webservice}
      set speed {1000full | 100full | 100half | 10full | 10half | auto}
      set description <string>
      set alias <string>
      set mtu <integer>
      set type {aggregate | physical | vlan}
      set interface <string>
      set vlanid <integer>
```

```
        set vlan-protocol {8021ad | 8021q}
        config ipv6
           set ip6-address <ipv6 prefix>
           set ip6-allowaccess {fgfm http https https-logging ping snmp ssh webservice}
           set ip6-autoconf {enable | disable}
        end
    end
```

Variable	Description
<interface name>	The interface name. The port can be set to a port number such as `port1`, `port2`, `port3`, or `port4`. Different FortiAnalyzer models have different numbers of ports.
status {enable | disable}	Enable/disable the interface (default = enable). If the interface is disabled it does not accept or send packets. If you disable a physical interface, VLAN interfaces associated with it are also disabled.
mode {dhcp | static}	Set the addressing mode (static setting, or DHCP client mode).
ip <ipv4_mask>	Enter the interface IPv4 address and netmask. The IPv4 address cannot be on the same subnet as any other interface.
dhcp-client-identifier <integer>	Enter the DHCP client identifier (default = (null)). This variable is only available when the `mode` is `dhcp`.
defaultgw {enable | disable}	Enable/disable default gateway (default = enable). This variable is only available when the `mode` is `dhcp`.
dns-server-override {enable | disable}	Enable/disable use DNS acquired by DHCP or PPPoE (default = enable). This variable is only available when the `mode` is `dhcp`.
mtu-override {enable | disable}	Enable/disable use MTU acquired by DHCP or PPPoE (default = enable). This variable is only available when the `mode` is `dhcp`.
allowaccess {fgfm http https https-logging ping snmp soc-fabric ssh webservice}	Enter the types of management access permitted on this interface. Separate multiple selected types with spaces. If you want to add or remove an option from the list, retype the list as required.
lldp {enable | disable}	Enable or disable the link layer discovery protocol (LLDP) (default = disable). This variable is only available when the `type` is `physical`.
speed {1000full | 100full | 100half | 10full | 10half | auto}	Enter the speed and duplexing the network port uses: • `100full`: 100M full-duplex • `100half`: 100M half-duplex • `10full`: 10M full-duplex • `10half`: 10M half-duplex • `auto`: Automatically negotiate the fastest common speed (default)
description <string>	Enter a description of the interface (character limit = 63).
alias <string>	Enter an alias for the interface.
mtu <integer>	Set the maximum transportation unit (68 - 9000, default = 1500).

Variable	Description
type {aggregate | physical | vlan}	Set the type of interface (default = aggregate).
lacp-speed {fast | slow}	Set how often the interface sends LACP messages: • `fast`: Send LACP message every second. • `slow`: Send LACP message every 30 seconds (default). This variable is only available when the `type` is `aggregate`.
min-links <integer>	Set the minimum number of aggregated ports that must be up (default = 1). This variable is only available when the `type` is `aggregate`.
min-links-down {administrative | operational}	Action to take when less than the configured minimum number of links are active: • `administrative`: Set the aggregate administratively down. • `operational`: Set the aggregate operationally down (default). This variable is only available when the `type` is `aggregate`.
link-up-delay <integer>	Set the number of milliseconds to wait before considering a link is up (default = 50). This variable is only available when the `type` is `aggregate`.
interface <string>	Set the underlying interface name for the VLAN interface. This variable is only available when the `type` is `vlan`.
vlanid <integer>	Set the VLAN ID (1 - 4094, default = 0). This variable is only available when the `type` is `vlan`.
vlan-protocol {8021ad | 8021q}	Set the ethernet protocol of the VLAN (IEEE 802.1AD or IEEE 802.1Q, default = IEEE 802.1Q). This variable is only available when the `type` is `vlan`.
Variables for `config member` subcommand: This subcommand is only available when the `type` is `aggregate`.	
<interface-name>	Enter the interface name that belongs to the aggregate or the redundant interface.
Variables for `config ipv6` subcommand:	
ip6-address <ipv6 prefix>	IPv6 address/prefix of interface.
ip6-allowaccess {fgfm http https https-logging ping snmp ssh webservice}	Allow management access to the interface.
ip6-autoconf {enable | disable}	Enable/disable address automatic configuration (SLAAC) (default = enable).

Example

This example shows how to set the FortiAnalyzer port1 interface IPv4 address and network mask to `192.168.100.159` and `255.255.255.0`, and the management access to `ping`, `https`, and `ssh`.

```
config system interface
   edit port1
```

```
      set allowaccess ping https ssh
      set ip 192.168.110.26 255.255.255.0
      set status enable
   end
```

local-in-policy

Use this command to edit the configuration of an IPv4 local-in policy.

Syntax

```
config system local-in-policy
   edit <id>
      set action {accept | drop | reject}
      set dport <integer>
      set dst <ip&netmask>
      set intf <string>
      set protocol {tcp | tcp_udp | udp}
      set src <ip&netmask>
   end
end
```

Variable	Description
<id>	Set the entry number.
action {accept | drop | reject}	Select the action to be performed on the traffic matching this policy: • `accept`: Allow traffic matching this policy. • `drop`: Drop traffic matching this policy (default). • `reject`: Reject traffic matching this policy.
dport <integer>	Enter the destination port number (0 for all, default = 0).
dst <ip&netmask>	Enter the destination IPv4 address and mask (default = 0.0.0.0 0.0.0.0).
intf <string>	Enter a name for the incoming interface. Enter port1, port2, port3....port10.
protocol {tcp | tcp_udp | udp}	Set the traffic protocol: • `tcp`: TCP only. • `tcp_udp`: TCP and UDP (default). • `udp`: UDP only.
src <ip&netmask>	Enter the source IPv6 address and mask (default = 0.0.0.0 0.0.0.0).

local-in-policy6

Use this command to edit the configuration of an IPv6 local-in policy.

Syntax

```
config system local-in-policy6
   edit <id>
      set action {accept | drop | reject}
      set dport <integer>
      set dst <IPv6 prefix>
      set intf <string>
      set protocol {tcp | tcp_udp | udp}
      set src <IPv6 prefix>
   end
end
```

Variable	Description
<id>	Set the entry number.
action {accept | drop | reject}	Select the action to be performed on the traffic matching this policy: • `accept`: Allow traffic matching this policy. • `drop`: Drop traffic matching this policy (default). • `reject`: Reject traffic matching this policy.
dport <integer>	Enter the destination port number (0 for all, default = 0).
dst <IPv6 prefix>	Enter the destination IPv6 address and prefix (default = ::/0).
intf <string>	Enter a name for the incoming interface. Enter port1, port2, port3....port10.
protocol {tcp | tcp_udp | udp}	Set the traffic protocol: • `tcp`: TCP only. • `tcp_udp`: TCP and UDP (default). • `udp`: UDP only.
src <IPv6 prefix>	Enter the source IPv6 address and prefix (default = ::/0).

locallog

Use the following commands to configure local log settings.

locallog setting

Use this command to configure locallog logging settings.

Syntax

```
config system locallog setting
   set log-daemon-crash {enable | disable}
```

```
    set log-interval-adom-perf-stats <integer>
    set log-interval-dev-no-logging <integer>
    set log-interval-disk-full <integer>
    set log-interval-gbday-exceeded <integer>
    set no-log-detection-threshold <integer>
end
```

Variable	Description
log-daemon-crash {enable | disable}	Send a log message when a daemon crashes (default = disable).
log-interval-adom-perf-stats <integer>	Interval for logging the event of adom perf stats, in minutes (default = 5). The range should be `5-2880`. Enter `0` to disable the logs.
log-interval-dev-no-logging <integer>	Interval for logging the event of no logs received from a device, in minutes (default = 1440).
log-interval-disk-full <integer>	Interval for logging the event of disk full, in minutes (default = 5).
log-interval-gbday-exceeded <integer>	Interval for logging the event of the GB/Day license exceeded, in minutes (default = 1440).
no-log-detection-threshold <integer>	Interval to trigger a local event message if no log data is received, in minutes (default = 15).

locallog disk setting

Use this command to configure the disk settings for uploading log files, including configuring the severity of log levels.

- `status` must be enabled to view `diskfull`, `max-log-file-size` and `upload` variables.
- `upload` must be enabled to view/set other `upload*` variables.

Syntax

```
config system locallog disk setting
   set status {enable | disable}
   set severity {emergency | alert | critical | error | warning | notification | information |
        debug}
   set max-log-file-size <integer>
   set max-log-file-num <integer>
   set roll-schedule {none | daily | weekly}
   set roll-day <string>
   set roll-time <hh:mm>
   set diskfull {nolog | overwrite}
   set log-disk-full-percentage <integer>
   set log-disk-quota <integer>
   set upload {enable | disable}
   set uploadip <ipv4_address>
   set server-type {FAZ | FTP | SCP | SFTP}
   set uploadport <integer>
   set uploaduser <string>
```

```
    set uploadpass <passwd>
    set uploaddir <string>
    set uploadtype <event>
    set uploadzip {enable | disable}
    set uploadsched {enable | disable}
    set upload-time <hh:mm>
    set upload-delete-files {enable | disable}
end
```

Variable	Description
status {enable | disable}	Enable/disable logging to the local disk (default = enable)
severity {emergency | alert | critical | error | warning | notification | information | debug }	Select the logging severity level. The FortiAnalyzer unit logs all messages at and above the logging severity level you select. • `emergency`: The unit is unusable. • `alert`: Immediate action is required. • `critical`: Functionality is affected. • `error`: Functionality is probably affected. • `warning`: Functionality might be affected. • `notification`: Information about normal events. • `information`: General information about unit operations (default). • `debug`: Information used for diagnosis or debugging.
max-log-file-size <integer>	Enter the size at which the log is rolled, in megabytes (1 - 1024, default = 100).
max-log-file-num <integer>	Enter the number of log files at which the logs are rolled (10 - 10000, default = 10000).
roll-schedule {none | daily | weekly}	Enter the period for the scheduled rolling of a log file: • `none`: Not scheduled; the log rolls when `max-log-file-size` is reached (default). • `daily`: Every day. • `weekly`: Every week.
roll-day {sunday | monday | tuesday | wednesday | thursday | friday | saturday}	Enter the day for the scheduled rolling of a log file (default = sunday).
roll-time <hh:mm>	Enter the time for the scheduled rolling of a log file.
diskfull {nolog | overwrite}	Enter action to take when the disk is full: • `nolog`: stop logging • `overwrite`: overwrites oldest log entries (default)
log-disk-full-percentage <integer>	Enter the percentage at which the log disk will be considered full (50 - 90, default = 80).
log-disk-quota <integer>	Enter the quota for controlling local log size, in GB (0 - 25, default = 5). **Note:** 0 means no control of local log size.
upload {enable | disable}	Enable/disable uploading of logs when rolling log files (default = disable).

Variable	Description
uploadip <ipv4_address>	Enter IPv4 address of the destination server.
server-type {FTP | SCP | SFTP}	Enter the server type to use to store the logs: • FTP: upload via FTP (default) • SCP: upload via SCP • SFTP: upload via SFTP
uploadport <integer>	Enter the port to use when communicating with the destination server (1 - 65535, default = 0).
uploaduser <string>	Enter the user account on the destination server.
uploadpass <passwd>	Enter the password of the user account on the destination server (character limit = 127).
uploaddir <string>	Enter the destination directory on the remote server.
uploadtype <event>	Enter to upload the event log files (default = event).
uploadzip {enable | disable}	Enable to compress uploaded log files (default = disable).
uploadsched {enable | disable}	Enable to schedule log uploads (default = disable).
upload-time <hh:mm>	Enter to configure when to schedule an upload.
upload-delete-files {enable | disable}	Enable/disable deleting log files after uploading (default = enable).

Example

In this example, the logs are uploaded to an upload server and are not deleted after they are uploaded.

```
config system locallog disk setting
   set status enable
   set severity information
   set max-log-file-size 1000MB
   set roll-schedule daily
   set upload enable
   set uploadip 10.10.10.1
   set uploadport port 443
   set uploaduser myname2
   set uploadpass 12345
   set uploadtype event
   set uploadzip enable
   set uploadsched enable
   set upload-time 06:45
   set upload-delete-file disable
end
```

locallog filter

Use this command to configure filters for local logs. All keywords are visible only when `event` is `enabled`.

Syntax

```
config system locallog [disk | memory | fortianalyzer | fortianalyzer2 | fortianalyzer3 |
      syslogd | syslogd2 | syslogd3] filter
   set controller {enable | disable}
   set devcfg {enable | disable}
   set devops {enable | disable}
   set diskquota {enable | disable}
   set dm {enable | disable}
   set docker {enable | disable}
   set dvm {enable | disable}
   set ediscovery {enable | disable}
   set epmgr {enable | disable}
   set event {enable | disable}
   set eventmgmt {enable | disable}
   set faz {enable | disable}
   set fazha {enable | disable}
   set fazsys {enable | disable}
   set fgd {enable | disable}
   set fgfm {enable | disable}
   set fips {enable | disable}
   set fmgws {enable | disable}
   set fmlmgr {enable | disable}
   set fmwmgr {enable | disable}
   set fortiview {enable | disable}
   set glbcfg {enable | disable}
   set ha {enable | disable}
   set hcache {enable | disable}
   set incident {enable | disable}
   set iolog {enable | disable}
   set logd {enable | disable}
   set logdb {enable | disable}
   set logdev {enable | disable}
   set logfile {enable | disable}
   set logging {enable | disable}
   set lrmgr {enable | disable}
   set objcfg {enable | disable}
   set report {enable | disable}
   set rev {enable | disable}
   set rtmon {enable | disable}
   set scfw {enable | disable}
   set scply {enable | disable}
   set scrmgr {enable | disable}
   set scvpn {enable | disable}
   set system {enable | disable}
   set webport {enable | disable}
end
```

Variable	Description
controller {enable | disable}	Enable/disable controller application generic messages (default = enable).
devcfg {enable | disable}	Enable/disable logging device configuration messages (default = enable).
devops {enable | disable}	Enable/disable managed device's operations messages (default = enable).

Variable	Description
diskquota {enable | disable}	Enable/disable logging FortiAnalyzer disk quota messages (default = enable).
dm {enable | disable}	Enable/disable logging deployment manager messages (default = enable).
docker {enable | disable}	Enable/disable docker application generic messages (default = enable).
dvm {enable | disable}	Enable/disable logging device manager messages (default = enable).
ediscovery {enable | disable}	Enable/disable logging device manager messages (default = enable).
epmgr {enable | disable}	Enable/disable logging endpoint manager messages (default = enable).
event {enable | disable}	Enable/disable configuring log filter messages (default = enable).
eventmgmt {enable | disable}	Enable/disable logging FortiAnalyzer event handler messages (default = enable).
faz {enable | disable}	Enable/disable logging FortiAnalyzer messages (default = enable).
fazha {enable | disable}	Enable/disable logging FortiAnalyzer HA messages (default = enable).
fazsys {enable | disable}	Enable/disable logging FortiAnalyzer system messages (default = enable).
fgd {enable | disable}	Enable/disable logging FortiGuard service messages (default = enable).
fgfm {enable | disable}	Enable/disable logging FortiGate/FortiManager communication protocol messages (default = enable).
fips {enable | disable}	Enable/disable logging FIPS messages (default = enable).
fmgws {enable | disable}	Enable/disable logging web service messages (default = enable).
fmlmgr {enable | disable}	Enable/disable logging FortiMail manager messages (default = enable).
fmwmgr {enable | disable}	Enable/disable logging firmware manager messages (default = enable).
fortiview {enable | disable}	Enable/disable logging FortiAnalyzer FortiView messages (default = enable).
glbcfg {enable | disable}	Enable/disable logging global database messages (default = enable).
ha {enable | disable}	Enable/disable logging high availability activity messages (default = enable).
hcache {enable | disable}	Enable/disable logging hcache messages (default = enable).
incident {enable | disable}	Enable/disable logging FortiAnalyzer incident messages (default = enable).
iolog {enable | disable}	Enable/disable input/output log activity messages (default = enable).
logd {enable | disable}	Enable/disable logd messages (default = enable).
logdb {enable | disable}	Enable/disable logging FortiAnalyzer log DB messages (default = enable).
logdev {enable | disable}	Enable/disable logging FortiAnalyzer log device messages (default = enable).

Variable	Description
logfile {enable | disable}	Enable/disable logging FortiAnalyzer log file messages (default = enable).
logging {enable | disable}	Enable/disable logging FortiAnalyzer logging messages (default = enable).
lrmgr {enable | disable}	Enable/disable logging log and report manager messages (default = enable).
objcfg {enable | disable}	Enable/disable logging object configuration (default = enable).
report {enable | disable}	Enable/disable logging FortiAnalyzer report messages (default = enable).
rev {enable | disable}	Enable/disable logging revision history messages (default = enable).
rtmon {enable | disable}	Enable/disable logging real-time monitor messages (default = enable).
scfw {enable | disable}	Enable/disable logging firewall objects messages (default = enable).
scply {enable | disable}	Enable/disable logging policy console messages (default = enable).
scrmgr {enable | disable}	Enable/disable logging script manager messages (default = enable).
scvpn {enable | disable}	Enable/disable logging VPN console messages (default = enable).
system {enable | disable}	Enable/disable logging system manager messages (default = enable).
webport {enable | disable}	Enable/disable logging web portal messages (default = enable).

Example

In this example, the local log filters are log and report manager, and system settings. Events in these areas of the FortiAnalyzer unit will be logged.

```
config system locallog filter
   set event enable
   set lrmgr enable
   set system enable
end
```

locallog fortianalyzer (fortianalyzer2, fortianalyzer3) setting

Use this command to enable or disable, and select the severity threshold of, remote logging to the FortiAnalyzer units. You can configure up to three FortiAnalyzer devices.

The severity threshold required to forward a log message to the FortiAnalyzer unit is separate from event, syslog, and local logging severity thresholds.

Syntax

```
config system locallog {fortianalyzer | fortianalyzer2 | fortianalyzer3} setting
   set peer-cert-cn <string>
```

```
    set reliable {enable | disable}
    set secure-connection {enable | disable}
    set server <address>
    set severity {emergency | alert | critical | error | warning | notification | information |
      debug}
    set status {disable | realtime | upload}
    set upload-time <hh:mm>
end
```

Variable	Description
peer-cert-cn <string>	Certificate common name for the remote FortiAnalyzer. This variable is available only when the status is upload. **Note**: Null or '-' means no certificate CN for the remote FortiAnalyzer. Multiple CNs are separated by commas. If there is comma in CN, it must follow an escape character.
reliable {enable | disable}	Enable/disable reliable realtime logging (default = disable).
secure-connection {enable | disable}	Enable/disable connection secured by TLS/SSL (default = disable). This variable is available when `status` is `realtime` or `upload`.
server <address>	Remote FortiAnalyzer server IP address, FQDN, or hostname.
severity {emergency | alert | critical | error | warning | notification | information | debug }	Select the logging severity level (default = notification). The FortiAnalyzer unit logs all messages at and above the logging severity level you select.
status {disable | realtime | upload}	Set the log to FortiAnalyzer status: • `disable`: Do not log to FortiAnalyzer (default). • `realtime`: Log to FortiAnalyzer in realtime. • `upload`: Log to FortiAnalyzer at a scheduled time.
upload-time <hh:mm>	Set the time to upload local log files (default = 00:00).

Example

You might enable remote logging to the FortiAnalyzer unit configured. Events at the information level and higher, which is everything except debug level events, would be sent to the FortiAnalyzer unit.

```
config system locallog fortianalyzer setting
    set status enable
    set severity information
end
```

locallog memory setting

Use this command to configure memory settings for local logging purposes.

Syntax

```
config system locallog memory setting
   set diskfull {nolog | overwrite}
   set severity {emergency | alert | critical | error | warning | notification | information |
         debug}
   set status <enable | disable>
end
```

Variable	Description
diskfull {nolog | overwrite}	Enter the action to take when the disk is full: • `nolog`: Stop logging when disk full • `overwrite`: Overwrites oldest log entries
severity {emergency | alert | critical | error | warning | notification | information | debug}	Select the logging severity level (default = notification). The FortiAnalyzer unit logs all messages at and above the logging severity level you select.
status <enable | disable>	Enable/disable logging to the memory buffer (default = disable).

Example

This example shows how to enable logging to memory for all events at the notification level and above. At this level of logging, only information and debug events will not be logged.

```
config system locallog memory
   set severity notification
   set status enable
end
```

locallog syslogd (syslogd2, syslogd3) setting

Use this command to configure the settings for logging to a syslog server. You can configure up to three syslog servers: syslogd, syslogd2 and syslogd3.

Syntax

```
config system locallog {syslogd | syslogd2 | syslogd3} setting
   set csv {enable | disable}
   set facility {alert | audit | auth | authpriv | clock | cron | daemon | ftp | kernel | local0
         | local1 | local2 | local3 | local4 | local5 | local6 | local7 | lpr | mail | news | ntp
         | syslog | user | uucp}
   set severity {emergency | alert | critical | error | warning | notification | information |
         debug}
   set status {enable | disable}
   set syslog-name <string>
end
```

Variable	Description
csv {enable | disable}	Enable/disable producing the log in comma separated value (CSV) format (default = disable). If you do not enable CSV format the FortiAnalyzer unit produces space separated log files.
facility {alert | audit | auth | authpriv | clock | cron | daemon | ftp | kernel | local0 | local1 | local2 | local3 | local4 | local5 | local6 | local7 | lpr | mail | news | ntp | syslog | user | uucp}	Enter the facility type (default = local7). The facility identifies the source of the log message to syslog. Change `facility` to distinguish log messages from different FortiAnalyzer units so you can determine the source of the log messages. `local0` to `local7` are reserved for local use.
severity {emergency | alert | critical | error | warning | notification | information | debug}	Select the logging severity level (default = notification). The FortiAnalyzer unit logs all messages at and above the logging severity level you select.
status {enable | disable}	Enable/disable logging to the remote syslog server (default = disable).
syslog-name <string>	Enter the remote syslog server name. To configure a syslog server, use the `config system syslog` command. See syslog on page 146 for information.

Use the show command to display the current configuration if it has been changed from its default value:

```
show system locallog syslogd setting
```

Example

In this example, the logs are uploaded to a previously configured syslog server named `logstorage`. The FortiAnalyzer unit is identified as facility `local0`.

```
config system locallog syslogd setting
   set facility local0
   set syslog-name logstorage
   set status enable
   set severity information
end
```

log

Use the following commands to configure log settings.

log alert

Use this command to configure log based alert settings.

Syntax

```
config system log alert
   set max-alert-count <integer>
end
```

Variable	Description
max-alert-count <integer>	Maximum number of alerts supported (100 - 50000, default = 10000).

log device-selector

Use this command to accept or reject devices matching specified filter types.

Syntax

```
config system log device-selector
   edit <id>
      set action <exclude | include>
      set comment <string>
      set devid <input>
      set expire <string>
      set srcip <input>
      set srcip-mode <TCP514 | UDP514 | any>
      set type <devid | srcip | unspecified>
end
```

Variable	Description
<id>	The ID for the device selector entry.
action <exclude | include>	Include or exclude devices matching specified filter type (default = include).
comment <string>	Additional comment for the selector. This option is not available when the `type` is `unspecified`.
devid <input>	Enter the device ID to be disabled for logging. Wildcard matching supported.
expire <string>	Set the expiration time of the rule. Leave the field unset for no expiration. Duration or formatted date time string are supported. • Duration example: '`1d5h`', meaning 1 day and 5 hours. • Formatted date time string: %Y-%m-%d %H:%M:%S. Supported units for duration:

Variable	Description
	• d- day. • h- hour. • m- minute. • s- second.
srcip <input>	Enter the source IP or an IP range. This option is only available when the type is srcip.
srcip-mode <TCP514 | UDP514 | any>	Apply the selector to UDP/514, TCP/514, or any mode (default = UDP514).
type <devid | srcip | unspecified>	Set the type of the selector. You can filter devices by Device ID, source IP, or leave unspecified (default = unspecified).

log fos-policy-stats

Use this command to configure FortiOS policy statistics settings.

Syntax

```
config system log fos-policy-stats
   set retention-days <integer>
   set sampling-interval <integer>
   set status{enable | disable}
end
```

Variable	Description
retention-days <integer>	The number of days that FortiOS policy stats are stored (60 - 1825, default = 365).
sampling-interval <integer>	The interval in which policy stats data are received from FortiOS devices, in minutes (5 - 1440, default = 60).
status {enable | disable}	Enable/disable FortiOS policy statistics feature (default = enable).

log interface-stats

Use this command to configure log based interface statistics settings.

Syntax

```
config system log interface-stats
   set billing-report {enable | disable}
```

```
    set retention-days <integer>
    set sampling-interval <integer>
    set status {enable | disable}
end
```

Variable	Description
billing-report {enable | disable}	Enable/disable billing report feature (default = disable).
retention-days <integer>	The number of days that interface data are stored (0 - 2000, default = 100).
sampling-interval <integer>	The interval in which interface data are received from FortiGate devices, in seconds (300 - 86400, default = 1200).
status {enable | disable}	Enable/disable interface statistics (default = enable).

log ioc

Use this command to configure log based IoC (Indicators of Compromise) settings.

Syntax

```
config system log ioc
   set notification {enable | disable}
   set notification-throttle <integer>
   set rescan-max-runner <integer>
   set rescan-run-at <integer>
   set rescan-status {enable | disable}
   set status {enable | disable}
end
```

Variable	Description
notification {enable | disable}	Enable/disable IoC notification (default = enable).
notification-throttle <integer>	Set the minute value for throttling the rate of IoC notifications (1 - 10080, default = 1440).
rescan-max-runner <integer>	Set the maximum number of concurrent IoC rescans (1 to CPU count, default = 8).
rescan-run-at <integer>	Set the hour of the day when IoC rescan runs (1 - 24, 0 = run immediately, default = 24).
rescan-status {enable | disable}	Enable/disable IoC rescan (default = enable).
status {enable | disable}	Enable/disable the IoC feature (default = enable).

log mail-domain

Use this command to configure FortiMail domain settings.

Syntax

```
config system log mail-domain
   edit <id>
      set devices <string>
      set domain <string>
      set vdom <string>
end
```

Variable	Description
<id>	The ID of the FortiMail domain.
devices <string>	The device IDs for domain to VDOM mapping, separated by commas (default = All_FortiMails). For example: `FEVM020000000000,FEVM020000000001`
domain <string>	The FortiMail domain.
vdom <string>	The VDOM name that is mapping to the FortiMail domain.

log pcap-file

Use this command to configure log pcap-file settings.

Syntax

```
config system log pcap-file
   set download-mode {plain | zip | zip-with-password}
end
```

Variable	Description
download-mode {plain | zip | zip-with-password}	Set the download mode for pcap files: • `plain`: Download original file. • `zip`: Download zip file without password. This is the default. • `zip-with-password`: Download zip file with password.

log ratelimit

Use this command to log the rate limit.

Syntax

```
config system log ratelimit
   set device-ratelimit-default <integer>
   set mode {disable | manual}
   set system-ratelimit <integer>
   config ratelimits
      edit id
         set filter <string>
         set filter-type {adom | devid}
         set ratelimit <integer>
   end
end
```

Variable	Description
device-ratelimit-default <integer>	The default maximum device log rate limit (default = 0). **Note**: This command is only available when the mode is set to `manual`.
mode {disable | manual}	The logging rate limit mode (default = disable). In the manual mode, the system rate limit and the device rate limit both are configurable, no limit if not configured.
system-ratelimit <integer>	The maximum system log rate limit (default = 0). **Note**: This command is only available when the mode is set to `manual`.
ratelimits	The device log rate limit.
Variables for `config ratelimits` **subcommand**:	
<id>	The device id.
filter <string>	The device(s) or ADOM filter according to the filter-type setting. **Note**: Wildcard expression is supported.
filter-type { adom | devid}	The device filter type (default = devid): • `adom`: ADOM name. • `devid`: Device ID.
ratelimit <integer>	The maximum device log rate limit (default = 0).

log settings

Use this command to configure settings for logs.

Syntax

```
config system log settings
   set browse-max-logfiles <integer>
   set device-auto-detect {enable | disable}
```

```
    set dns-resolve-dstip {enable | disable}
    set download-max-logs <integer>
    set FAC-custom-field1 <string>
    set FCH-custom-field1 <string>
    set FCT-custom-field1 <string>
    set FDD-custom-field1 <string>
    set FFW-custom-field1 <string>
    set FGT-custom-field1 <string>
    set FML-custom-field1 <string>
    set FPX-custom-field1 <string>
    set FSA-custom-field1 <string>
    set FWB-custom-field1 <string>
    set ha-auto-migrate {enable | disable}
    set import-max-logfiles <integer>
    set keep-dev-logs {enable | disable}
    set legacy-auth-mode {enable | disable}
    set log-file-archive-name {basic | extended}
    set log-interval-dev-no-logging <interger>
    set log-upload-interval-dev-no-logging <interval>
    set sync-search-timeout <integer>
    set unencrypted-logging-tcp {enable | disable}
    set unencrypted-logging-udp {enable | disable}
    config {rolling-regular | rolling-local | rolling-analyzer}
       set days {fri | mon| sat | sun | thu | tue | wed}
       set del-files {enable | disable}
       set directory <string>
       set file-size <integer>
       set gzip-format {enable | disable}
       set hour <integer>
       set log-format {csv | native | text}
       set min <integer>
       set password <passwd>
       set password2 <passwd>
       set password3 <passwd>
       set port <integer>
       set port2 <integer>
       set port3 <integer>
       set rolling-upgrade-status <integer>
       set server <string>
       set server-type {ftp | scp | sftp}
       set server2 <string>
       set server3 <string>
       set upload {enable | disable}
       set upload-hour <integer>
       set upload-mode {backup | mirror}
       set upload-trigger {on-roll | on-schedule}
       set username <string>
       set username2 <string>
       set username3 <string>
       set when {daily | none | weekly}
    end
end
```

Variable	Description
browse-max-logfiles <integer>	Maximum number of log files for each log browse attempt, per ADOM (default = 10000).
device-auto-detect {enable | disable}	Enable/disable looking up device ID in syslog received with no encryption (default = enable).
dns-resolve-stip {enable | disable}	Enable/disable resolving destination IP by DNS (default = disable).
download-max-logs <integer>	Maximum number of logs for each log download attempt (default = 100000).
FAC-custom-field1 <string>	Enter a name of the custom log field to index (character limit = 31).
FCH-custom-field1 <string>	Enter a name of the custom log field to index (character limit = 31).
FCT-custom-field1 <string>	Enter a name of the custom log field to index (character limit = 31).
FDD-custom-field1 <string>	Enter a name of the custom log field to index (character limit = 31).
FFW-custom-field1	Enter a name of the custom log field to index (character limit = 31).
FGT-custom-field1 <string>	Enter a name of the custom log field to index (character limit = 31).
FML-custom-field1 <string>	Enter a name of the custom log field to index (character limit = 31).
FPX-custom-field1 <string>	Enter a name of the custom log field to index (character limit = 31).
FSA-custom-field1 <string>	Enter a name of the custom log field to index (character limit = 31).
FWB-custom-field1 <string>	Enter a name of the custom log field to index (character limit = 31).
ha-auto-migrate {enable | disable}	Enabled/disable automatically merging HA member's logs to HA cluster (default = disable).
import-max-logfiles <integer>	Maximum number of log files for each log import attempt (default = 10000).
keep-dev-logs {enable | disable}	Enable/disable keeping the device logs after the device has been deleted (default = disable).
legacy-auth-mode {enable | disable}	Enable/disable legacy mode of device authentication by username/password (default = enable). When disabled, FortiGate, FortiWeb, FortiMail, and other devices that connect through OFTP connection must send the correct certificate that includes the device serial number in the Common Name field. If the correct certificate is not sent with the serial number, FortiAnalyzer will fail the OFTP connection.
log-file-archive-name {basic | extended}	Log file name format for archiving. • `basic`: Basic format for log archive file name (default), for example: `FGT20C0000000001.tlog.1417797247.log.` • `extended`: Extended format for log archive file name, for example: `FGT20C0000000001.2014-12-05-08:34:58.tlog.1417797247.log.`

Variable	Description
log-interval-dev-no-logging <interger>	Interval in minutes of no log received from a device when considering the device down (default = 15).
log-upload-interval-dev-no-logging <interger>	Interval in minutes of no log uploaded from a device when considering the device down (default = 360).
sync-search-timeout <integer>	The maximum amount of time that a log search session can run in synchronous mode, in seconds (1 - 86400, default = 60).
unencrypted-logging-tcp {enable | disable}	Enable/disable receiving syslog through TCP(514) un-encrypted (default = disable).
unencrypted-logging-udp {enable | disable}	Enable/disable receiving syslog through UDP(514) un-encrypted (default = disable).
Variables for `config {rolling-regular | rolling-local | rolling-analyzer}` **subcommand**:	
days {fri | mon| sat | sun | thu | tue | wed}	Log files rolling schedule (days of the week). When `when` is set to `weekly`, you can configure `days`, `hour`, and `min` values.
del-files {enable | disable}	Enable/disable log file deletion after uploading (default = disable).
directory <string>	The upload server directory (character limit = 127).
file-size <integer>	Roll log files when they reach this size, in megabytes (10 - 1000, default = 200).
gzip-format {enable | disable}	Enable/disable compression of uploaded log files (default = disable).
hour <integer>	The hour of the day that log files are rolled (0 - 23, default = 0).
log-format {csv | native | text}	Format of uploaded log files: • `csv`: CSV (comma-separated value) format. • `native`: Native format (text or compact) (default). • `text`: Text format (convert if necessary).
min <integer>	The minute of the hour that log files are rolled (0 - 59, default = 0).
password <passwd> password2 <passwd> password3 <passwd>	Upload server log in passwords (character limit = 128).
port <integer> port2 <integer> port3 <integer>	Upload server IP port number.
rolling-upgrade-status <integer>	The rolling upgrade status.
server <string> server2 <string> server3 <string>	Upload server FQDN, IPv4, or IPv6 addresses. Configure up to three servers.

Variable	Description
server-type {ftp | scp | sftp}	Upload server type (default = ftp).
upload {enable | disable}	Enable/disable log file uploads (default = disable).
upload-hour <integer>	The hour of the day that log files are uploaded (0 - 23, default = 0).
upload-mode {backup | mirror}	Configure upload mode with multiple servers. Servers are tried then used one after the other upon failure to connect. • `backup`: Servers are attempted and used one after the other upon failure to connect (default). • `mirror`: All configured servers are attempted and used.
upload-trigger {on-roll | on-schedule}	Event triggering log files upload: • `on-roll`: Upload log files after they are rolled (default). • `on-schedule`: Upload log files daily.
username <string> username2 <string> username3 <string>	Upload server log in usernames (character limit = 35).
when {daily | none | weekly}	Roll log files periodically: • `daily`: Roll log files daily. • `none`: Do not roll log files periodically . • `weekly`: Roll log files on certain days of week (default).

log topology

Use this command to configure settings for the logging topology.

Syntax

```
config system log topology
   set max-depth <integer>
   set max-depth-share <integer>
end
```

Variable	Description
max-depth <integer>	Maximum levels to descend from this device to get the logging topology information (0 - 32, default = 5).
max-depth-share <integer>	Maximum levels to descend from this device to share logging topology information with upstream (0 - 32, default = 5).

log ueba

Use this command to configure UEBA settings.

Syntax

```
config system log ueba
   set hostname-ep-unifier {enable | disable}
   set ip-only-ep {enable | disable}
   set ip-unique-scope {adom | vdom}
end
```

Variable	Description
hostname-ep-unifier {enable | disable}	Disable/Enable hostname as endpoint unifier (default = disable).
ip-only-ep {enable | disable}	Disable/Enable IP-only endpoint identification (default = disable).
ip-unique-scope {adom | vdom}	Set the IP unique scope to ADOM or VDOM (default = vdom). This command is only effective when `ip-only-ep` is enabled.

log-fetch

Use the following commands to configure log fetching.

log-fetch client-profile

Use this command to configure the fetching client settings.

Syntax

```
config system log-fetch client-profile
   edit <id>
      set client-adom <string>
      set data-range {custom}
      set data-range-value <integer>
      set end-time <hh:mm> <yyyy/mm/dd>
      set index-fetch-logs {enable | disable}
      set log-filter-status {enable | disable}
      set log-filter-logic {and | or}
      set name <string>
      set password <passwd>
      set peer-cert-cn <string>
      set secure-connection {enable | disable}
      set server-adom <string>
      set server-ip <ip>
      set start-time <hh:mm> <yyyy/mm/dd>
      set sync-adom-config {enable | disable}
      set user <string>
      config device-filter
         edit <id>
```

```
            set adom <string>
            set device <device>
            set vdom <string>
         next
      config log-filter
         edit <id>
            set field <string>
            set oper {= | != | < | > | <= | >= | contain | not-contain | match}
            set value <string>
         next
      next
   end
end
```

Variable	Description
<id>	The log-fetch client profile ID.
client-adom <string>	Log-fetch client side's adom name.
data-range {custom}	The data range settings for the fetched logs, which is always custom.
data-range-value <integer>	An integer representing the data range value.
end-time <hh:mm> <yyyy/mm/dd>	Set the end date and time of the data-range.
index-fetch-logs {enable | disable}	Enable/disable indexing logs automatically after fetching logs (default = enabled).
log-filter-status {enable | disable}	Enable/Disable log-filter (default = disabled).
log-filter-logic {and | or}	Set the logic for the log filters (default = or).
name <string>	The name of log-fetch client profile.
password <passwd>	The log-fetch server password.
peer-cert-cn <string>	Certificate common name for the log-fetch server. **Note:** Null or '-' means no certificate CN for the log-fetch server. Multiple CNs are separated by commas. If there is comma in CN, it must follow an escape character.
secure-connection {enable | disable}	Enable/disable protecting log-fetch connection with TLS/SSL (default = enabled).
server-adom <string>	Log-fetch server side's adom name.
server-ip <ip>	The log fetch server IPv4 address.
start-time <hh:mm> <yyyy/mm/dd>	Set the start date and time of the data-range. The start date should be earlier than the end date.
sync-adom-config {enable | disable}	Enable/disable ADOM configuration synchronization.
user <string>	The log-fetch server username.

Variable	Description
Variables for `config device-filter` **subcommand**:	
<id>	Add or edit a device filter.
adom <string>	Enter the ADOM name.
device <device>	Enter the device name or serial number.
vdom <string>	Enter the VDOM, if required.
Variables for `config log-filter` **subcommand**:	
<id>	The log filter ID.
field <string>	Enter the field name.
oper {= | != | < | > | <= | >= | contain | not-contain | match}	Set the filter operator.
value <string>	Enter the field filter operand or free-text matching expression.

log-fetch server-setting

Use this command to configure the fetching server settings.

Syntax

```
config system log-fetch server-setting
   set max-conn-per-session <integer>
   set max-sessions <integer>
   set user <string>
end
```

Variable	Description
max-conn-per-session <integer>	The maximum number of concurrent file download connections per session (default = 3).
max-sessions <integer>	The maximum number of concurrent fetch sessions (default = 1).
session-timeout <integer>	Set the fetch session timeout period, in minutes (default = 10). This option is only available in server mode.

log-forward

Use the following commands to configure log forwarding.

Syntax

```
config system log-forward
   edit <id>
      set mode {aggregation | disable | forwarding}
      set agg-archive-types {Web_Archive Secure_Web_Archive Email_Archive File_Transfer_Archive
        IM_Archive MMS_Archive AV_Quarantine IPS_Packets}
      set agg-data-end-time <hh:mm yyyy/mm/dd>
      set agg-data-start-time <hh:mm> <yyyy/mm/dd>
      set agg-logtypes {none app-ctrl attack content dlp emailfilter event generic history
        traffic virus webfilter netscan fct-event fct-traffic fct-netscan waf gtp dns ssh}
      set agg-password <passwd>
      set agg-schedule {daily | on-demand}
      set agg-time <integer>
      set agg-user <string>
      set fwd-archives {enable | disable}
      set fwd-archive-types {Web_Archive Email_Archive IM_Archive File_Transfer_Archive MMS_
        Archive AV_Quarantine IPS_Packets EDISC_Archive}
      set fwd-compression {enable | disable}
      set fwd-facility {alert | audit | auth | authpriv | clock | cron | daemon | ftp | kernel |
        local0 | local1 | local2 | local3 | local4 | local5 | local6 | local7 | lpr | mail |
        news | ntp | syslog | user | uucp}
      set fwd-ha-bind-vip {enable | disable}
      set fwd-log-source-ip {local_ip | original_ip}
      set fwd-max-delay {1min | 5min | realtime}
      set fwd-output-plugin-id <name>
      set fwd-reliable {enable | disable}
      set fwd-secure {enable | disable}
      set fwd-server-type {cef | elite-service | fortianalyzer | fwd-via-output-plugin | syslog |
        syslog-pack}
      set fwd-syslog-decode-b64 {enable | disable}
      set fwd-syslog-enrich-cve {enable | disable}
      set fwd-syslog-format {fgt | rfc-5424}
      set fwd-syslog-transparent {enable | disable | faz-enrich}
      set log-field-exclusion-status {enable | disable}
      set log-filter-logic {and | or}
      set log-filter-status {enable | disable}
      set log-masking-custom-priority disable
      set log-masking-fields {domain dstip dstname email message srcip srcmac srcname user}
      set log-masking-key <passwd>
      set log-masking-status {enable | disable}
      set pcapurl-enrich
      set pcapurl-domain-ip
      set peer-cert-cn <string>
      set proxy-service {enable | disable}
      set proxy-service-priority <integer>
      set server-addr <string>
      set server-device <string>
      set server-name <string>
      set server-port <integer>
      set signature <integer>
      set sync-metadata [sf-topology | interface-role | device | endusr-avatar]
      config device-filter
         edit <id>
            set action {include}
            set adom <string>
            set device <string>
```

```
        end
    config log-field-exclusion
        edit <id>
            set dev-type {FortiGate | FortiMail | FortiManager | FortiAnalyzer | FortiWeb |
                FortiCache | FortiSandbox | FortiDDoS | Syslog}
            set field-list <string>
            set log-type {app-ctrl | attack | content | dlp | emailfilter | event | generic |
                history | traffic | virus | voip | webfilter | netscan | waf | gtp | dns | ssh |
                ANY-TYPE}
        end
    config log-filter
        edit <id>
            set field {type | logid | level | devid | vd | srcip | srcintf | srcport | dstip |
                dstintf | dstport | user | group | free-text }
            set oper {= | != | < | > | <= | >= | contain | not-contain | match}
            set value {traffic | event | utm}
        end
    config log-masking-custom
        edit <id>
        set field-name <string>
        set field-type {email | ip | mac | string | unknown}
        end
end
```

Variable	Description
<id>	Enter the log aggregation ID that you want to edit.
mode {aggregation | disable | forwarding}	Log aggregation mode: • `aggregation`: Aggregate logs to FortiAnalyzer • `disable`: Do not forward or aggregate logs (default) • `forwarding`: Forward logs to the FortiAnalyzer
agg-archive-types {Web_ Archive Secure_Web_Archive Email_Archive File_Transfer_ Archive IM_Archive MMS_ Archive AV_Quarantine IPS_ Packets}	Archive type (default = all options). This command is only available when the mode is set to `aggregation`.
agg-data-end-time <hh:mm yyyy/mm/dd>	Enter the end date and time of the data-range `<hh:mm yyyy/mm/dd>`. This command is only available when the mode is set to `aggregation`. **Note**: Use colon to connect hour and minute values. Use slash to connect year, month, and day values.
agg-data-start-time <hh:mm> <yyyy/mm/dd>	Enter the start date and time of the data-range `<hh:mm yyyy/mm/dd>`. This command is only available when the mode is set to `aggregation`. **Note**: Use colon to connect hour and minute values. Use slash to connect year, month, and day values.

Variable	Description
agg-logtypes {none app-ctrl attack content dlp emailfilter event generic history traffic virus webfilter netscan fct-event fct-traffic fct-netscan waf gtp dns ssh}	Log type (default = all options). This command is only available when the mode is set to `aggregation`.
agg-password <passwd>	Log aggregation access password for server. This command is only available when the mode is set to `aggregation`.
agg-schedule {daily | on-demand}	Schedule log aggregation mode (default = daily): • `daily`: Run daily log aggregation. • `on-demand`: Run log aggregation on demand. This command is only available when the mode is set to `aggregation`.
agg-time <integer>	Daily at the selected time (0 - 23, default = 0). This command is only available when the mode is set to `aggregation`.
agg-user <string>	Log aggregation access user name for server. This command is only available when the mode is set to `aggregation`.
fwd-archives {enable | disable}	Enable/disable forwarding archives (default = enable). This command is only available when the mode is set to `forwarding`.
fwd-archive-types {Web_Archive Email_Archive IM_Archive File_Transfer_Archive MMS_Archive AV_Quarantine IPS_Packets EDISC_Archive}	Set the forwarding archive types (default = all options). This command is only available when the mode is set to `forwarding`.
fwd-compression {enable | disable}	Enable/disable compression for better bandwidth efficiency (default = disable). This command is only available when the mode is set to `forwarding`.
fwd-facility {alert | audit | auth | authpriv | clock | cron | daemon | ftp | kernel | local0 | local1 | local2 | local3 | local4 | local5 | local6 | local7 | lpr | mail | news | ntp | syslog | user | uucp}	Facility for remote syslog (default = local7). • `alert`: Log alert • `audit`: Log audit • `auth`: Security/authorization messages • `authpriv`: Security/authorization messages (private) • `clock`: Clock daemon • `cron`: Clock daemon • `daemon`: System daemons • `ftp`: FTP daemon • `kernel`: Kernel messages • `local0`, `local1`, `local2`, `local3`, `local4`, `local5`, `local6`, `local7`: Reserved for local use • `lpr`: Line printer subsystem • `mail`: Mail system • `news`: Network news subsystem

Variable	Description
	• `ntp`: NTP daemon • `syslog`: Messages generated internally by `syslogd` • `user`: Random user level messages • `uucp`: Network news subsystem This command is only available when the `mode` is set to `forwarding` and when the `fwd-server-type` is `syslog`.
fwd-ha-bind-vip {enable | disable}	Always use VIP as the forwarding port when HA is enabled (default = enable). This command is only available when the mode is set to `forwarding`.
fwd-log-source-ip {local_ip | original_ip}	The logs source IP address (default = local_ip). This command is only available when the mode is set to `forwarding`.
fwd-max-delay {1min | 5min | realtime}	The maximum delay for near realtime log forwarding. • `1min`: Near realtime forwarding with up to one minute delay. • `5min`: Near realtime forwarding with up to five minutes delay (default). • `realtime`: Realtime forwarding, no delay. This command is only available when the mode is set to `forwarding`.
fwd-output-plugin-id <name>	Enter the name of the output plugin profile (default = null). This command is only available when the mode is set to `forwarding` and `fwd-server-type` is `fwd-via-output-plugin`.
fwd-reliable {enable | disable}	Enable/disable reliable logging (default = disable). This command is only available when the mode is set to `forwarding`.
fwd-secure {enable | disable}	Enable/disable TLS/SSL secured reliable logging (default = disable). This command is only available when the mode is set to `forwarding`, `fwd-reliable` is enabled, and `fwd-server-type` is set to `cef` or `syslog`.
fwd-server-type {cef | elite-service | fortianalyzer | fwd-via-output-plugin | syslog | syslog-pack}	Forwarding all logs to one of the following server types: • `cef`: CEF (Common Event Format) server • `elite-service`: FortiCare Elite Service • `fortianalyzer`: FortiAnalyzer (this is the default) • `fwd-via-output-plugin`: external destination via an output plugin • `syslog`: generic syslog server • `syslog-pack`: FortiAnalyzer which supports packed syslog message This command is only available when the mode is set to `forwarding`.
fwd-syslog-decode-b64 {enable | disable}	Enable/disable base64 decoding when forwarding logs to syslog server. This command is only available when the mode is set to `forwarding` and `fwd-server-type` is `syslog`.
fwd-syslog-enrich-cve {enable | disable}	Enable/disable adding CVE ID when forwarding logs to syslog server (default = disable). This command is only available when the mode is set to `forwarding` and `fwd-server-type` is `syslog`.

Variable	Description
fwd-syslog-format {fgt | rfc-5424}	Forwarding format for syslog. • `fgt`: FortiGate syslog format (default). • `rfc-5424`: rfc-5424 syslog format. This command is only available when the mode is set to `forwarding` and `fwd-server-type` is `syslog`.
fwd-syslog-transparent {enable | disable | faz-enrich}	Enable/disable syslog transparent forward mode (default = enable). • `enable`: Received syslogs are forwarded without modifications. • `disable`: Received syslogs becomes part of a FortiAnalyzer syslog when forwarded out. • `faz-enrich`: Additional FortiAnalyzer fields are added to the end of syslog.
log-field-exclusion-status {enable | disable}	Enable/disable log field exclusion list (default = disable). This command is only available when the mode is set to `forwarding` and `fwd-server-type` is set to `cef` or `syslog`.
log-filter-logic {and | or}	Logic operator used to connect filters (default = or). This command is only available when `log-filter-status` is enabled.
log-filter-status {enable | disable}	Enable/disable log filtering (default = disable). This command is only available when the mode is set to `forwarding`.
log-masking-custom-priority disable	Disable custom field search priority. This command is only available when the mode is set to `forwarding` and `log-masking-status` is enabled.
log-masking-fields {domain dstip dstname email message srcip srcmac srcname user}	Log field masking fields . This command is only available when the mode is set to `forwarding` and `log-masking-status` is enabled.
log-masking-key <passwd>	Enter the log field masking key. This command is only available when the mode is set to `forwarding` and `log-masking-status` is enabled.
log-masking-status {enable | disable}	Enable/disable log field masking (default = disable). This command is only available when the mode is set to `forwarding`.
pcapurl-enrich	
pcapurl-domain-ip	
peer-cert-cn <string>	
proxy-service {enable | disable}	Enable/disable proxy service under collector mode (default = enable). This command is only available when the mode is set to `forwarding`.
proxy-service-priority <integer>	Proxy service priority from 1 (lowest) to 20 (highest) (default = 10). This command is only available when the mode is set to `forwarding`.
server-addr <string>	Remote server address.

Variable	Description
server-device <id>	Log aggregation server device ID.
server-name <string>	Log aggregation server name.
server-port <integer>	Enter the server listen port (1 - 65535, default = 514). This command is only available when the mode is set to `forwarding`.
signature <integer>	This field is auto-generated and should not be set.
sync-metadata [sf-topology | interface-role | device | endusr-avatar]	Synchronizing metadata types: • `sf-topology`: Security Fabric topology • `interface-role`: Interface Role • `device`: Device information • `endusr-avatar`: End-user avatar This command is only available when the mode is set to `forwarding`.
Variables for `config device-filter` **subcommand**:	
<id>	Enter the device filter ID or enter a number to create a new entry.
action {include}	Include the specified device.
adom <string>	Enter the ADOM name from the following: • `FortiAnalyzer` • `FortiAuthenticator` • `FortiCache` • `FortiCarrier` • `FortiClient` • `FortiDDoS` • `FortiDeceptor` • `FortiFirewall` • `FortiFirewallCarrier` • `FortiMail` • `FortiManager` • `FortiProxy` • `FortiSandbox` • `FortiWeb` • `Syslog` • `Unmanaged_Devices` • `root` Alternatively, enter (null) for all ADOM(s) or a wildcard expression matching ADOM(s).
device <string>	Device ID of log client device, or a wildcard expression matching log client device(s).
Variables for `config log-field-exclusions` **subcommand**:	

Variable	Description
This command is only available when the `mode` is set to `forwarding` and `log-field-exclusions-status` is set to `enable`.	
<id>	Enter a device filter ID or enter a number to create a new entry.
dev-type {FortiGate | FortiMail | FortiManager | FortiAnalyzer | FortiWeb | FortiCache | FortiSandbox | FortiDDoS | Syslog}	The device type (default = FortiGate).
field-list <string>	The field type. Enter a comma separated list from the available fields.
log-type {app-ctrl | attack | content | dlp | emailfilter | event | generic | history | traffic | virus | voip | webfilter | netscan | waf | gtp | dns | ssh | ANY-TYPE}	The log type (default = traffic).
Variables for `config log-filter` **subcommand**: This command is only available when the `mode` is set to `forwarding` and `log-field-status` is set to `enable`.	
<id>	Enter the log filter ID or enter a number to create a new entry.
field {type | logid | level | devid | vd | srcip | srcintf | srcport | dstip | dstintf | dstport | user | group | free-text}	Field name (default = type).
oper {= | != | < | > | <= | >= | contain | not-contain | match}	Field filter operator (default = =).
value {traffic | event | utm}	Field filter operand or free-text matching expression. This variable uses the glibc regex library for values with operators (~,!~), using the POSIX standard. Filter string syntax is parsed by FortiAnalyzer, escape characters must be use when needed, and both upper and lower case characters are supported. For example, the following value can be set as a matching expression for the destination IP range from 17.2.16.0.0/16 - 172.19.0.0/16. `set value "dstip~ 172\\.1[6-9]\\.[\\d]+\\.[\\d]+"`
Variables for `log-masking-custom` **subcommand**: This command is only available when the mode is set to `forwarding` and `log-masking-status` is enabled.	
<id>	Enter the log field masking ID or enter a number to create a new entry.
field-name <string>	Field name.
field-type {email | ip | mac | string | unknown}	Field type (default = unknown).

log-forward-service

Use the following commands to configure log aggregation service.

This command is only available on FortiAnalyzer models 1000E and above. It is also available on all supported FortiAnalyzer-VM.

For a list of supported models in v7.6.3, see the FortiAnalyzer 7.6.3 Release Notes.

Syntax

```
config system log-forward-service
   set accept-aggregation {enable | disable}
   set aggregation-disk-quota <integer>
   set collector-auth {enable | disable}
end
```

Variable	Description
accept-aggregation {enable | disable}	Enable/disable accept log aggregation option (default = disable).
aggregation-disk-quota <integer>	Aggregated device disk quota on the server, in megabytes (default = 2000).
collector-auth {enable | disable}	Enable/disable FortiAnalyzer Collectors to be authenticated before forwarding data (default = disable). When enabled, the Collector must be authorized by an admin in the FortiAnalyzer that is operating in Analyzer mode. The device can be authorized in the FortiAnalyzer GUI *Device Manager*.

mail

Use this command to configure mail servers on your FortiAnalyzer unit.

Syntax

```
config system mail
   edit <id>
      set auth {enable | disable}
      set auth-type {certificate | psk}
      set from <string>
      set local-cert {Fortinet_Local | Fortinet_Local2}
      set passwd <passwd>
      set port <integer>
      set secure-option {default | none | smtps | starttls}
```

```
    set server <string>
    set ssl-protocol {follow-global-ssl-portocol | sslv3 | tlsv1.0 | tlsv1.1 | tlsv1.2 |
         tlsv1.3}
    set user <string>
end
```

Variable	Description
<id>	Enter the mail service ID of the entry you would like to edit or type a new name to create an entry (character limit = 63).
auth {enable | disable}	Enable/disable authentication (default = disable).
auth-type {certificate | psk}	Select the SMTP authentication type (default = psk): • `certificate`: Use local certificate to authenticate. • `psk`: Use username and password to authenticate.
from <string>	Set the SMTP default username for sending.
local-cert {Fortinet_Local | Fortinet_Local2}	Choose from the two available local certificates. This variable is available only when the `auth-type` is `certificate`.
passwd <passwd>	Enter the SMTP account password value (character limit = 127). This variable is available only when the `auth-type` is `psk`.
port <integer>	Enter the SMTP server port (1 - 65535, default = 25).
secure-option {default | none | smtps | starttls}	Select the communication secure option: • `default`: Try STARTTLS, proceed as plain text communication otherwise (default). • `none`: Communication will be in plain text format. • `smtps`: Communication will be protected by SMTPS. • `starttls`: Communication will be protected by STARTTLS.
server <string>	Enter the SMTP server name.

ssl-protocol {follow-global-ssl-portocol | sslv3 | tlsv1.0 | tlsv1.1 | tlsv1.2 | tlsv1.3}	Set the lowest SSL protocol version for connection to mail server (default = follow-global-ssl-portocol).
	The follow-global-ssl-portocol setting follows the setting for:
	`config system global`
	`set global-ssl-protocol {sslv3 | tlsv1.0 | tlsv1.1 | tlsv1.2 | tlsv1.3}`

user <string>	Enter the SMTP account user name. This variable is available only when the `auth-type` is `psk`.

metadata

Use this command to add additional information fields to the administrator accounts of your FortiAnalyzer unit.

This command creates the metadata fields. Use `config system admin user` to add data to the metadata fields.

Syntax

```
config system metadata admins
   edit <fieldname>
      set fieldlength {20 | 255 | 50}
      set importance {optional | required}
      set status {enable | disable}
   end
```

Variable	Description
<fieldname>	Enter the name of the field.
fieldlength {20 | 255 | 50}	Select the maximum number of characters allowed in this field (default = 50).
importance {optional | required}	Select if this field is required or optional when entering standard information (default = required).
status {enable | disable}	Enable/disable the metadata (default = enabled).

ntp

Use this command to configure automatic time setting using a network time protocol (NTP) server.

Syntax

```
config system ntp
   set status {enable | disable}
   config ntpserver
      edit <id>
         set ntpv3 {enable | disable}
         set authentication {enable | disable}
         set key <passwd>
         set key-id <integer>
         set server <string>
         set minpoll <integer>
         set maxpoll <integer>
      end
end
```

Variable	Description
status {enable | disable}	Enable/disable NTP time setting (default = enable).
Variables for `config ntpserver` **subcommand**:	
<id>	Time server ID.
ntpv3 {enable | disable}	Enable/disable NTPv3 (default = disable).
authentication {enable | disable}	Enable/disable MD5 authentication (default = disable).
key <passwd>	The authentication key (character limit = 63).
key-id <integer>	The key ID for authentication (default = 0).
server <string>	Enter the IPv4 or IPv6 address, or fully qualified domain name of the NTP server (default = ntpl.fortinet.com).
minpoll <integer>	Minimum poll interval in seconds as power of 2 (e.g. 6 means 64 seconds, default = 6).
maxpoll <integer>	Maximum poll interval in seconds as power of 2 (e.g. 6 means 64 seconds, default = 10).

password-policy

Use this command to configure access password policies.

Syntax

```
config system password-policy
   set status {enable | disable}
   set minimum-length <integer>
   set must-contain {lower-case-letter non-alphanumeric number upper-case-letter}
   set change-4-characters {enable | disable}
   set expire <integer>
   set password-history <integer>
   set login-lockout-upon-downgrade {enable | disable}
end
```

Variable	Description
status {enable | disable}	Enable/disable the password policy (default = disable).
minimum-length <integer>	Set the password's minimum length (8 - 256, default = 8).
must-contain {lower-case-letter non-alphanumeric number upper-case-letter}	Characters that a password must contain. • `lower-case-letter`: the password must contain at least one lower case letter.

Variable	Description
	• `non-alphanumeric`: the password must contain at least one non-alphanumeric character. • `number`: the password must contain at least one number. • `upper-case-letter`: the password must contain at least one upper case letter.
change-4-characters {enable | disable}	Enable/disable changing at least 4 characters for a new password (default = disable).
expire <integer>	Set the number of days after which admin users' passwords will expire (0 - 3650, 0 = never, default = 0).
password-history <integer>	Set the number of unique new passwords that must be used before old password can be reused (0 - 20, default = 0).
login-lockout-upon-downgrade {enable | disable}	Enable/disable administrative user login lockout upon downgrade (defaut = disable). If enabled, downgrading firmware to a lower version where safer passwords are unsupported will lock out administrative users.

report

Use the following command to configure report related settings.

report auto-cache

Use this command to view or configure report auto-cache settings.

Syntax

```
config system report auto-cache
   set aggressive-schedule {enable | disable}
   set order {latest-first | oldest-first}
   set sche-rpt-only {enable | disable}
   set status {enable | disable}
end
```

Variable	Description
aggressive-schedule {enable | disable}	Enable/disable auto-cache on schedule reports aggressively (default = disable).
order {latest-first | oldest-first}	The order of which SQL log table is processed first: • `latest-first`: The newest SQL log table is processed first.

Variable	Description
	• `oldest-first`: The oldest SQL log table is processed first (default).
sche-rpt-only {enable | disable}	Enable/disable auto-cache on scheduled reports only (default = disable).
status {enable | disable}	Enable/disable the SQL report auto-cache (default = enable).

report est-browse-time

Use this command to view or configure report settings.

Syntax

```
config system report est-browse-time
   set max-read-time <integer>
   set status {enable | disable}
end
```

Variable	Description
max-read-time <integer>	Set the read time threshold for each page view (1 - 3600, default = 180).
status {enable | disable}	Enable/disable estimating browse time (default = enable).

report group

Use these commands to configure report groups.

Syntax

```
config system report group
   edit <group-id>
      set adom <adom-name>
      set case-insensitive {enable | disable}
      set report-like <string>
      config chart-alternative
         edit <chart-name>
            set chart-replace <string>
         end
      config group-by
         edit <var-name>
            set var-expression <string>
            set var-type {enum | integer | ip | string}
         end
   end
```

Variable	Description
<group-id>	The identification number of the group to be edited or created.
adom <adom-name>	The ADOM that contains the report group.
case-insensitive {enable | disable}	Enable/disable case sensitivity (default = enable).
report-like <string>	Report pattern
Variables for `config chart-alternative` **subcommand**:	
<chart-name>	The chart name.
chart-replace <string>	Chart replacement.
Variable for `config group-by` **subcommand**:	
<var-name>	The variable name.
var-expression <string>	Variable expression.
var-type {enum | integer | ip | string}	Variable type (default = string).

report setting

Use these commands to view or configure report settings.

Syntax

```
config system report setting
   set aggregate-report {enable | disable}
   set capwap-port <integer>
   set capwap-service <string>
   set exclude-capwap {by-port | by-service | disable}
   set hcache-lossless {enable | disable}
   set ldap-cache-timeout <integer>
   set max-rpt-pdf-rows <integer>
   set max-table-rows <integer>
   set report-priority {auto | high | low}
   set template-auto-install {default}
   set week-start {mon | sun}
end
```

Variable	Description
aggregate-report {enable | disable}	Enable/disable including a group report along with the per-device reports (default = disable).
capwap-port <integer>	Exclude capwap traffic by port (default = 5246).

Variable	Description
capwap-service <string>	Exclude capwap traffic by service.
exclude-capwap {by-port | by-service | disable}	Exclude capwap traffic (default = by-port).
hcache-lossless {enable | disable}	Enable/disable ready-with-loss hcaches (default = disable).
ldap-cache-timeout <integer>	Set the LDAP cache timeout in minutes (0 = do not use cache, default = 60).
max-rpt-pdf-rows <integer>	Set the maximum number of rows that can be generated in a single PDF (10000 - 1000000, default = 100000).
max-table-rows <integer>	Set the maximum number of rows that can be generated in a single table (10000 - 10000000, default = 1000000).
report-priority {auto | high | low}	Set the Priority of the SQL report (default = auto).
template-auto-install {default}	Set the language used for new ADOMs (default = default).
week-start {mon | sun}	Set the day that the week starts on, either `sun` (Sunday) or `mon` (Monday) (default = sun).

route

Use this command to view or configure static routing table entries on your FortiAnalyzer unit.

Syntax

```
config system route
   edit <seq_int>
      set device <port>
      set dst <dst_ipv4mask>
      set gateway <gateway_ipv4_address>
   end
```

Variable	Description
<seq_int>	Enter an unused routing sequence number to create a new route. Enter an existing route number to edit that route.
device <port>	Enter the port (interface) used for this route.
dst <dst_ipv4mask>	Enter the IPv4 address and mask for the destination network.
gateway <gateway_ipv4_address>	Enter the default gateway IPv4 address for this network.

route6

Use this command to view or configure static IPv6 routing table entries on your FortiAnalyzer unit.

Syntax

```
config system route6
   edit <seq_int>
      set device <string>
      set dst <ipv6_prefix>
      set gateway <ipv6_address>
   end
```

Variable	Description
<seq_int>	Enter an unused routing sequence number to create a new route. Enter an existing route number to edit that route.
device <string>	Enter the port (interface) used for this route.
dst <ipv6_prefix>	Enter the IPv4 address and mask for the destination network.
gateway <ipv6_address>	Enter the default gateway IPv6 address for this network.

saml

Use this command to configure global settings for SAML authentication.

Syntax

```
config system saml
   set auth-request-signed {enable | disable}
   set cert <certificate>
   set default-profile <string>
   set forticloud-sso {enable | disable}
   set idp-cert <string>
   set idp-entity-id <string>
   set idp-single-logout-url <string>
   set idp-single-sign-on-url <string>
   set login-auto-redirect {enable | disable}
   set role {FAB-SP | IDP | SP}
   set server-address <string>
   set status {enable | disable}
   set user-auto-create {enable | disable}
   set want-assertions-signed {enable | disable}
   config service-providers
      edit <name>
```

```
            set idp-entity-id <string>
            set idp-single-logout-url <string>
            set idp-single-sign-on-url <string>
            set prefix <string>
            set sp-adom <string>
            set sp-cert <string>
            set sp-entity-id <string>
            set sp-profile <string>
            set sp-single-logout-url <string>
            set sp-single-sign-on-url <string>
        next
    end
    config fabric-idp
        edit <device-id>
            set idp-cert <string>
            set idp-entity-id <string>
            set idp-single-logout-url <string>
            set idp-single-sign-on-url <string>
            set idp-status {enable | disable}
        next
    end
end
```

Variable	Description
acs-url	The Assertion Consumer Service (acs) URL is set automatically once the `server-address` is configured. You can view the URL using the `get` command. This variable is only available when the `role` is `FAB-SP` or `SP`.
auth-request-signed {enable | disable}	Enable/disable auth request signed (default = disable).
cert <certificate>	The certificate name. This variable is only available when the `status` = `enable` and the `role` = `IDP` or `SP`.
default-profile <string>	The default profile (default = No_Permission_User).
entity-id	The entity ID is set automatically once the `server-address` is configured. You can view the entity ID using the `get` command. This variable is only available when the `role` is `FAB-SP` or `SP`.
forticloud-sso {enable | disable}	Enable/disable FortiCloud SSO (default = disable).
idp-cert <string>	The IDP certificate name. This variable is only available when the `status` = `enable` and the `role` = `SP`.
idp-entity-id <string>	The IDP entity ID. This variable is only available when the `status` = `enable` and the `role` = `SP`.
idp-single-logout-url <string>	The IDP single logout URL. This variable is only available when the `status` = `enable` and the `role` = `SP`.
idp-single-sign-on-url	The IDP single sign-on URL.

Variable	Description
<string>	This variable is only available when the `status` = `enable` and the `role` = `SP`.
login-auto-redirect {enable | disable}	Enable/disable automatic redirect to the IDP login page (default = disable). This variable is only available when the `status` = `enable` and the `role` = `SP`.
role {FAB-SP | IDP | SP}	The SAML role: • `FAB-SP`: Fabric service provider • `IDP`: Identity provider • `SP`: Service provider (default) This variable is only available when the `status` = `enable`.
server-address <string>	The server address.
sls-url	The Single Logout Service (sls) URL is set automatically once the `server-address` is configured. You can view the URL using the `get` command. This variable is only available when the `role` is `FAB-SP` or `SP`.
status {enable | disable}	Enable/disable SAML authentication (default = disable).
user-auto-create {enable | disable}	Enable/disable automatic user creation (default = disable). When SAML is configured with the `FAB-SP` role, the `user-auto-create` setting will default to `enable`. This setting must be enabled to automatically create an SSO admin to be used for the security fabric. This admin is created with the name "`CSF_SSO_FG<serial number`".
want-assertions-signed {enable | disable}	Enable/disable want assertions signed (default = disable).
Variables for `config service-providers` **subcommand**: This command is only available when `role` is `IDP`.	
<name>	Service provide name.
idp-entity-id <string>	The IDP entity ID.
idp-single-logout-url <string>	The IDP single logout URL.
idp-single-sign-on-url <string>	The IDP single sign-on URL.
prefix <string>	The prefix. Can contain only letters and numbers.
sp-adom <string>	The SP ADOM name.
sp-cert <string>	The SP certificate name.
sp-entity-id <string>	The SP entity ID.
sp-profile <string>	The SP profile name.
sp-single-logout-url <string>	The SP single sign-on URL.
sp-single-sign-on-url <string>	The SP single logout URL.
Variables for `config fabric-idp` **subcommand**:	

Variable	Description
This command is only available when `role` is `FAB-SP`.	
<device-id>	Device ID.
idp-cert <string>	The IDP certificate name.
idp-entity-id <string>	The IDP entity ID.
idp-single-logout-url <string>	The IDP single logout URL.
idp-single-sign-on-url <string>	The IDP single sign-on URL.
idp-status {enable | disable}	Enable/disable SAML authentication (default = disable).

To view the service provider IdP information, use the following commands:

```
config system saml
   config service-providers
      edit <name>
         get
```

Output:

```
name : name
prefix : y9jr06vq0k
sp-cert : (null)
sp-entity-id : http://https://172.27.2.225//metadata/
sp-single-sign-on-url: https://https://172.27.2.225//saml/?acs
sp-single-logout-url: https://https://172.27.2.225//saml/?sls
sp-adom: (null)
sp-profile: (null)
idp-entity-id : http://172.27.2.225/saml-idp/y9jr06vq0k/metadata/
idp-single-sign-on-url: https://172.27.2.225/saml-idp/y9jr06vq0k/login/
idp-single-logout-url: https://172.27.2.225/saml-idp/y9jr06vq0k/logout/
```

sniffer

Configure packet sniffing.

Syntax

```
config system sniffer
   edit <id>
      set host <string>
      set interface <interface>
      set ipv6 {enable | disable}
      set max-packet-count <integer>
      set non-ip {enable | disable}
      set port <string>
      set protocol <string>
      set vlan <string>
```

```
    next
end
```

Variable	Description
<id>	Sniffer ID.
host <string>	IP addresses of the hosts to filter for in sniffer traffic. Multiple individual IP addresses and ranges of addresses can be entered.
interface <interface>	The interface to sniff.
ipv6 {enable | disable}	Enable/disable sniffing IPv6 packets.
max-packet-count <integer>	The maximum packet count (1 - 1000000, default - 4000).
non-ip {enable | disable}	Enable/disable sniffing non-IP packets.
port <string>	The ports to sniff. Individual ports or port ranges can be entered.
protocol <string>	Integer value for the protocol type as defined by IANA (0 - 255).
vlan <string>	The VLANs to sniff.

snmp

Use the following commands to configure SNMP related settings.

snmp community

Use this command to configure SNMP communities on your FortiAnalyzer unit.

You add SNMP communities so that SNMP managers, typically applications running on computers to monitor SNMP status information, can connect to the FortiAnalyzer unit (the SNMP agent) to view system information and receive SNMP traps. SNMP traps are triggered when system events happen such as when there is a system restart, or when the log disk is almost full.

You can add up to three SNMP communities, and each community can have a different configuration for SNMP queries and traps. Each community can be configured to monitor the FortiAnalyzer unit for a different set of events.

Hosts are the SNMP managers that make up this SNMP community. Host information includes the IPv4 address and interface that connects it to the FortiAnalyzer unit.

For more information on SNMP traps and variables, see the Fortinet Document Library.

Part of configuring an SNMP manager is to list it as a host in a community on the FortiAnalyzer unit that it will be monitoring. Otherwise that SNMP manager will not receive any traps or events from the FortiAnalyzer unit, and will be unable to query the FortiAnalyzer unit as well.

Syntax

```
config system snmp community
   edit <index_number>
      set events <events_list>
      set name <community_name>
      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-rport <integer>
      set trap-v1-status {enable | disable}
      set trap-v2c-rport <integer>
      set trap-v2c-status {enable | disable}
      config hosts
         edit <host_number>
            set interface <interface_name>
            set ip <ipv4_address>
         end
      config hosts6
         edit <host_number>
            set interface <interface_name>
            set ip <ipv6_address>
         end
   end
```

Variable	Description
<index_number>	Enter the index number of the community in the SNMP communities table. Enter an unused index number to create a new SNMP community.
events <events_list>	Enable the events for which the FortiManager unit should send traps to the SNMP managers in this community (default = All events enabled). The `raid_changed` event is only available for devices that support RAID. • `cpu-high-exclude-nice`: CPU usage exclude NICE threshold. • `cpu_high`: CPU usage too high. • `disk_low`: Disk usage too high. • `ha_switch`: HA switch. • `intf_ip_chg`: Interface IP address changed. • `lic-dev-quota`: High licensed device quota detected. • `lic-gbday`: High licensed log GB/day detected. • `log-alert`: Log base alert message. • `log-data-rate`: High incoming log data rate detected. • `log-rate`: High incoming log rate detected. • `mem_low`: Available memory is low. • `raid_changed`: RAID status changed. • `sys_reboot`: System reboot.
name <community_name>	Enter the name of the SNMP community. Names can be used to distinguish between the roles of the hosts in the groups.

Variable	Description
	For example the Logging and Reporting group would be interested in the `disk_low` events, but likely not the other events. The name is included in SNMPv2c trap packets to the SNMP manager, and is also present in query packets from, the SNMP manager.
query-v1-port <integer>	Enter the SNMPv1 query port number used when SNMP managers query the FortiManager unit (1 - 65535, default = 161).
query-v1-status {enable | disable}	Enable/disable SNMPv1 queries for this SNMP community (default = enable).
query-v2c-port <integer>	Enter the SNMP v2c query port number used when SNMP managers query the FortiManager unit. SNMP v2c queries will include the name of the community (1 - 65535, default = 161).
query-v2c-status {enable | disable}	Enable/disable SNMPv2c queries for this SNMP community (default = enable).
status {enable | disable}	Enable/disable this SNMP community (default = enable).
trap-v1-rport <integer>	Enter the SNMPv1 remote port number used for sending traps to the SNMP managers (1 - 65535, default = 162).
trap-v1-status {enable | disable}	Enable/disable SNMPv1 traps for this SNMP community (default = enable).
trap-v2c-rport <integer>	Enter the SNMPv2c remote port number used for sending traps to the SNMP managers (1 - 65535, default = 162).
trap-v2c-status {enable | disable}	Enable/disable SNMPv2c traps for this SNMP community. SNMP v2c traps sent out to SNMP managers include the community name (default = enable).
Variables for `config hosts` **subcommand**:	
<host_number>	Enter the index number of the host in the table. Enter an unused index number to create a new host.
interface <interface_name>	Enter the name of the FortiAnalyzer unit that connects to the SNMP manager (default = any).
ip <ipv4_address>	Enter the IPv4 address of the SNMP manager.
Variables for `config hosts6` **subcommand**:	
<host_number>	Enter the index number of the host in the table. Enter an unused index number to create a new host.
interface <interface_name>	Enter the name of the FortiAnalyzer unit that connects to the SNMP manager (default = any).
ip <ipv6_address>	Enter the IPv6 address of the SNMP manager.

Example

This example shows how to add a new SNMP community named SNMP_Com1. The default configuration can be used in most cases with only a few modifications. In the example below the community is added, given a name, and then because this community is for an SNMP manager that is SNMP v1 compatible, all v2c functionality is disabled. After the community is configured the SNMP manager, or host, is added. The SNMP manager IPv4 address is 192.168.20.34 and it connects to the FortiAnalyzer unit internal interface.

```
config system snmp community
   edit 1
   set name SNMP_Com1
   set query-v2c-status disable
   set trap-v2c-status disable
      config hosts
         edit 1
         set interface internal
         set ip 192.168.10.34
         end
   end
```

snmp sysinfo

Use this command to enable the FortiAnalyzer SNMP agent and to enter basic system information used by the SNMP agent. Enter information about the FortiAnalyzer unit to identify it. When your SNMP manager receives traps from the FortiAnalyzer unit, you will know which unit sent the information. Some SNMP traps indicate high CPU usage, log full, or low memory.

For more information on SNMP traps and variables, see the Fortinet Document Library.

Syntax

```
config system snmp sysinfo
   set contact-info <string>
   set description <description>
   set engine-id <string>
   set fortianalyzer-legacy-sysoid <string>
   set location <location>
   set status {enable | disable}
   set trap-cpu-high-exclude-nice-threshold <percentage>
   set trap-high-cpu-threshold <percentage>
   set trap-low-memory-threshold <percentage>
end
```

Variable	Description
contact-info <string>	Add the contact information for the person responsible for this FortiAnalyzer unit (character limit = 255).
description <description>	Add a name or description of the FortiManager unit (character limit = 255).

Variable	Description
engine-id <string>	Local SNMP engine ID string (character limit = 24).
fortianalyzer-legacy-sysoid <string>	Enable to switch back to legacy FortiAnalyzer sysObjectOID (default = disable)..
location <location>	Describe the physical location of the FortiAnalyzer unit (character limit = 255).
status {enable | disable}	Enable/disable the FortiAnalyzer SNMP agent (default = disable).
trap-cpu-high-exclude-nice-threshold <percentage>	SNMP trap for CPU usage threshold (excluding NICE processes), in percent (default = 80).
trap-high-cpu-threshold <percentage>	SNMP trap for CPU usage threshold, in percent (default = 80).
trap-low-memory-threshold <percentage>	SNMP trap for memory usage threshold, in percent (default = 80).

Example

This example shows how to enable the FortiAnalyzer SNMP agent and add basic SNMP information.

```
config system snmp sysinfo
   set status enable
   set contact-info 'System Admin ext 245'
   set description 'Internal network unit'
   set location 'Server Room A121'
end
```

snmp user

Use this command to configure SNMPv3 users on your FortiAnalyzer unit. To use SNMPv3, you will first need to enable the FortiAnalyzer SNMP agent. For more information, see snmp sysinfo. There should be a corresponding configuration on the SNMP server in order to query to or receive traps from FortiAnalyzer.

For more information on SNMP traps and variables, see the Fortinet Document Library.

Syntax

```
config system snmp user
   edit <name>
      set auth-proto {md5 | sha | sha224 | sha256 | sha384 | sha512}
      set auth-pwd <passwd>
      set events <events_list>
      set notify-hosts <ipv4_address>
      set notify-hosts6 <ipv6_address>
      set notify-port <integer>
      set priv-proto {aes | aes256 | aes256cisco | des}
      set priv-pwd <passwd>
```

```
        set queries {enable | disable}
        set query-port <integer>
        set security-level {auth-no-priv | auth-priv | no-auth-no-priv}
    end
end
```

Variable	Description
<name>	Enter a SNMPv3 user name to add, edit, or delete.
auth-proto {md5 | sha | sha224 | sha256 | sha384 | sha512}	Authentication protocol. The security level must be set to `auth-no-priv` or `auth-priv` to use this variable: • `md5`: HMAC-MD5-96 authentication protocol. • `sha`: HMAC-SHA-96 authentication protocol (default). • `sha224`: HMAC-SHA224 authentication protocol. • `sha256`: HMAC-SHA256 authentication protocol. • `sha384`: HMAC-SHA384 authentication protocol. • `sha512`: HMAC-SHA512 authentication protocol.
auth-pwd <passwd>	Password for the authentication protocol. The security level must be set to `auth-no-priv` or `auth-priv` to use this variable.
events <events_list>	Enable the events for which the FortiAnalyzer unit should send traps to the SNMPv3 managers in this community (default = All events enabled). The `raid_changed` event is only available for devices which support RAID. • `cpu-high-exclude-nice`: CPU usage exclude nice threshold. • `cpu_high`: The CPU usage is too high. • `disk_low`: The log disk is getting close to being full. • `ha_switch`: A new unit has become the primary HA. • `intf_ip_chg`: An interface IP address has changed. • `lic-dev-quota`: High licensed device quota detected. • `lic-gbday`: High licensed log GB/Day detected. • `log-alert`: Log base alert message. • `log-data-rate`: High incoming log data rate detected. • `log-rate`: High incoming log rate detected. • `mem_low`: The available memory is low. • `raid_changed`: RAID status changed. • `sys_reboot`: The FortiAnalyzer unit has rebooted.
notify-hosts <ipv4_address>	Hosts to send notifications (traps) to.
notify-hosts6 <ipv6_address>	Hosts to send notifications (traps) to.
notify-port <integer>	Set the SNMPv3 trap remote port (default = 162).
priv-proto {aes | aes256 | aes256cisco | des}	Privacy (encryption) protocol. The security level must be set to `auth-priv` to use this variable: • `aes`: CFB128-AES-128 symmetric encryption protocol (default). • `aes256`: CBC-AES-256 symmetric encryption protocol. • `aes256cisco`: CBC-AES-256 symmetric encryption protocol compatible with CISCO.

Variable	Description
	• `des`: CBC-DES symmetric encryption protocol.
priv-pwd <passwd>	Password for the privacy (encryption) protocol. The security level must be set to `auth-priv` to use this variable.
queries {enable | disable}	Enable/disable queries for this user (default = enable)
query-port <integer>	SNMPv3 query port (1 - 65535, default = 161).
security-level {auth-no-priv | auth-priv | no-auth-no-priv}	Security level for message authentication and encryption: • `auth-no-priv`: Message with authentication but no privacy (encryption). • `auth-priv`: Message with authentication and privacy (encryption). • `no-auth-no-priv`: Message with no authentication and no privacy (encryption) (default).

soc-fabric

Use this command to configure the SOC Fabric.

Syntax

```
config system soc-fabric
   set name <string>
   set port <integer>
   set role {member | supervisor}
   set secure-connection {enable | disable}
   set status {enable | disable}
   set supervisor <string>
   config trusted-list
      edit <id>
         set serial <string>
      next
   end
end
```

Variable	Description
<name>	Enter the Fabric name.
port <integer>	Set the communication port (1 - 65535, default = 6443).
role {member | supervisor}	Set the SOC Fabric role (default = member).
secure-connection {enable | disable}	Enable/disable SSL/TLS (default = enable).
status {enable | disable}	Enable/disable SOC Fabric (default = disable).

Variable	Description
supervisor <string>	Enter the IP/FQDN of the supervisor.
Variables for`config trusted-list` **subcommand**:	
<id>	Enter the ID for the trusted-list.
serial <string>	Enter a serial number to add to the `trusted-list`. Wildcard (*) is supported.

sql

Configure Structured Query Language (SQL) settings.

Syntax

```
config system sql
   set background-rebuild {enable | disable}
   set compress-table-min-age <integer>
   set database-type <postgres>
   set device-count-high {enable | disable}
   set event-table-partition-time <integer>
   set fct-table-partition-time <integer>
   set prompt-sql-upgrade {enable | disable}
   set start-time <hh>:<mm> <yyyy>/<mm>/<dd>
   set status {disable | local}
   set text-search-index {enable | disable}
   set traffic-table-partition-time <integer>
   set utm-table-partition-time <integer>
   config custom-index
      edit <id>
         set device-type <device>
         set index-field <string>
         set log-type <log type>
      next
   end
   config custom-skipidx
      edit <id>
         set device-type <device>
         set index-field <string>
         set log-type <log type>
      next
   end
   config ts-index-field
      edit <category>
         set <value> <string>
      next
   end
end
```

Variable	Description
background-rebuild {enable | disable}	Disable/enable rebuilding the SQL database in the background (default = enable).
compress-table-min-age <integer>	Minimum age in days for SQL tables to be compressed (0 - 10000, default = 7). **Note:** 0-day allows you to compress SQL tables with less than one-day of age.
database-type <postgres>	Database type (default = postgres).
device-count-high {enable | disable}	Enable/disable a high device count (default = disable). You must set to enable if the count of registered devices is greater than 8000: • `disable`: Set to disable if device count is less than 8000. • `enable`: Set to enable if device count is equal to or greater than 8000.  Enabling or disabling this command will result in an SQL database rebuild. The time required to rebuild the database is dependent on the size of the database. Please plan a maintenance window to complete the database rebuild. This operation will also result in a device reboot.
event-table-partition-time <integer>	Maximum SQL database table partitioning time range for event logs, in minutes (3 - 1440, 0 = unlimited, default = 0).
fct-table-partition-time <integer>	Maximum SQL database table partitioning time range for FortiClient logs, in minutes (6 - 1440, 0 = unlimited, default = 360).
prompt-sql-upgrade {enable | disable}	Prompt to convert log database into SQL database at start time on GUI (default = enable).
start-time <hh>:<mm> <yyyy>/<mm>/<dd>	The date and time that logs will start to be inserted.
status {disable | local}	SQL database status: • `disable`: Disable SQL database. • `local`: Enable local database (default).
text-search-index {enable | disable}	Enable/disable the creation of a text search index (default = disable).
traffic-table-partition-time <integer>	Maximum SQL database table partitioning time range for traffic logs (1 - 1440, 0 = unlimited, default = 0).

<table>
<tr><th>Variable</th><th>Description</th></tr>
<tr><td>utm-table-partition-time <integer></td><td>Maximum SQL database table partitioning time range in minutes for UTM logs (1 - 1440, 0 = unlimited, default = 0).</td></tr>
<tr><td colspan="2">Variables for<code>config custom-index</code>subcommand:</td></tr>
<tr><td>device-type <device type></td><td>Set the device type.</td></tr>
<tr><td>index-field <string></td><td>Enter a valid field name. Select one of the available field names. The available options for <code>index-field</code> is dependent on the <code>device-type</code> entry.</td></tr>
<tr><td>log-type <log type></td><td>Enter the log type. The available options for <code>log-type</code> is dependent on the <code>device-type</code> entry.</td></tr>
<tr><td colspan="2">Variables for <code>config custom-skipidx</code> subcommand:
List of aditional SQL skip index fields.</td></tr>
<tr><td>device-type <device type></td><td>Set the device type.</td></tr>
<tr><td>index-field <string></td><td>Enter a valid field name. Select one of the available field names. The available options depend on the <code>device-type</code>.</td></tr>
<tr><td>log-type <log type></td><td>Enter the log type. The available options depend on the <code>device-type</code>.</td></tr>
<tr><td colspan="2">Variables for <code>config ts-index-field</code> subcommand:</td></tr>
<tr><td><category></td><td>Category of the text search index fields. The following is the list of categories and their default fields.
<table>
<tr><th>Category</th><th>Value</th></tr>
<tr><td>FGT-app-ctrl</td><td>user,group,srcip,dstip,dstport,service,app,action,hostname</td></tr>
<tr><td>FGT-attack</td><td>severity,srcip,dstip,action,user,attack</td></tr>
<tr><td>FGT-content</td><td>from,to,subject,action,srcip,dstip,hostname,status</td></tr>
<tr><td>FGT-dlp</td><td>user,srcip,service,action,filename</td></tr>
<tr><td>FGT-emailfilter</td><td>user,srcip,from,to,subject</td></tr>
<tr><td>FGT-event</td><td>subtype,ui,action,msg</td></tr>
</table></td></tr>
</table>

Variable	Description	
	Category	**Value**
	FGT-traffic	user,srcip,dstip,service,app,utmaction
	FGT-virus	service,srcip,dstip,action,filename,virus,user
	FGT-voip	action,user,src,dst,from,to
	FGT-webfilter	user,srcip,dstip,service,action,catdesc,hostname
	FGT-netscan	user,dstip,vuln,severity,os
	FGT-fct-event	(null)
	FGT-fct-traffic	(null)
	FGT-fct-netscan	(null)
	FGT-waf	user,srcip,dstip,service,action
	FGT-gtp	msisdn,from,to,status
	FGT-dns	(null)
	FGT-ssh	login,srcip,dstip,direction,action
	FGT-ssl	srcip,dstip,eventtype,service,action,reason
	FGT-file-filter	srcip,dstip,service,proto,group,eventtype,filtertype,direction,filetype,matchfiletype,action
	FGT-protocol	srcip,dstip,service,proto,action
	FGT-security	srcip,dstip,service,proto
	FML-emailfilter	client_name,dst_ip,from,to,subject
	FML-event	subtype,msg
	FML-history	classifier,disposition,from,to,client_name,direction,domain,virus

Variable	Description	
	Category	Value
	FML-virus	src,msg,from,to
	FWB-attack	http_host,http_url,src,dst,msg,action
	FWB-event	ui,action,msg
	FWB-traffic	src,dst,service,http_method,msg
value <string>	Fields of the text search filter. Enter one or more field names separated with a comma.	

syslog

Use this command to configure syslog servers.

Syntax

```
config system syslog
   edit <name>
      set ip <string>
      set local-cert {Fortinet_Local | Fortinet_Local2}
      set peer-cert-cn <string>
      set port <integer>
      set reliable {enable | disable}
      set secure-connection {enable | disable}
      set ssl-protocol {follow-global-ssl-portocol | sslv3 | tlsv1.0 | tlsv1.1 | tlsv1.2 |
           tlsv1.3}
   end
end
```

Variable	Description
<name>	Syslog server name.
ip <string>	Enter the syslog server IPv4 address or hostname.
local-cert {Fortinet_Local | Fortinet_Local2}	Select from the two available local certificates used for secure connection. This variable is only available when `secure-connection` is enabled.
peer-cert-cn <string>	Certificate common name of syslog server. This variable is only available when `secure-connection` is enabled.

Variable	Description
	Note: Null or '-' means no certificate CN for the syslog server.
port <integer>	Enter the syslog server port (1 - 65535, default = 514).
reliable {enable | disable}	Enable/disable reliable connection with syslog server (default = disable).
secure-connection {enable | disable}	Enable/disable connection secured by TLS/SSL (default = disable). This variable is only available when `reliable` is enabled.

ssl-protocol {follow-global-ssl-portocol | sslv3 | tlsv1.0 | tlsv1.1 | tlsv1.2 | tlsv1.3}	Set the lowest SSL protocol version for connection to syslog server (default = follow-global-ssl-portocol).
	This variable is only available when `reliable` and `secure-connection` are enabled.
	The follow-global-ssl-portocol setting follows the setting for:
	`config system global`
	`set global-ssl-protocol {sslv3 | tlsv1.0 | tlsv1.1 | tlsv1.2 | tlsv1.3}`

web-proxy

Use this command to configure the system web proxy.

Syntax

```
config system web-proxy
   set address <string>
   set mode {proxy | tunnel}
   set password <passwd>
   set port <integer>
   set status {enable | disable}
   set username <string>
end
```

Variable	Description
address <string>	Enter the web proxy address.
mode {proxy | tunnel}	Enter the web proxy mode (default = tunnel). • `tunnel` mode uses port TCP/443. • `proxy` mode uses port TCP/80.
password <passwd>	Enter the password for the user name used for authentication (default = *).
port <integer>	Enter the port number of the web proxy (1 - 65535, default = 1080).
status {enable | disable}	Enable/disable system web proxy (default = disable).
username <string>	Enter the user name used for authentication.

workflow approval-matrix

This command does not function on FortiAnalyzer.

fmupdate

Use `fmupdate` to configure settings related to FortiGuard service updates and the FortiAnalyzer unit's built-in FortiGuard Distribution Server (FDS).

CLI commands and variables are case sensitive.

analyzer virusreport	fds-setting	server-override-status
av-ips advanced-log	fgd-setting	service
custom-url-list	fwm-setting	fgd-setting
disk-quota	multilayer	
fct-services	publicnetwork	

TCP port numbers cannot be used by multiple services at the same time with the same IP address. If a port is already in use, it cannot be assigned to another service. For example, HTTPS and HTTP cannot have the same port number.

analyzer virusreport

Use this command to enable or disable notification of virus detection to Fortinet.

Syntax

```
config fmupdate analyzer virusreport
   set status {enable | disable}
end
```

Variables	Description
status {enable | disable}	Enable/disable sending virus detection notification to FortiGuard (default = enable).

Example

This example enables virus detection notifications to Fortinet.

```
config fmupdate analyzer virusreport
   set status enable
end
```

av-ips advanced-log

Use this command to enable logging of FortiGuard Antivirus and IPS update packages received by the FortiAnalyzer unit's built-in FDS from the FortiGuard Distribution Network (FDN).

Syntax

```
config fmupdate av-ips advanced-log
   set log-fortigate {enable | disable}
   set log-server {enable | disable}
end
```

Variables	Description
log-fortigate {enable | disable}	Enable/disable logging of FortiGuard antivirus and IPS service updates of FortiGate devices (default = disable).
log-server {enable | disable}	Enable/disable logging of update packages received by the built-in FDS server (default = enable).

Example

Enable logging of FortiGuard Antivirus updates to FortiClient installations and update packages downloaded by the built-in FDS from the FDN.

```
config fmupdate av-ips advanced-log
   set log-forticlient enable
   set log-server enable
end
```

custom-url-list

Use this command to configure the URL database for rating and filtering. You can select to use the FortiGuard URL database, a custom URL database, or both. When selecting to use a custom URL database, use the `fmupdate {ftp | scp | tftp} import` command to import the custom URL list. When FortiAnalyzer performs the URL rating, it will check the custom URL first. If a match is found, the custom rating is returned. If there is no match, then FortiAnalyzer will check the FortiGuard database.

Syntax

```
config fmupdate custom-url-list
   set db_selection {both | custom-url | fortiguard-db}
end
```

Variable	Description
db_selection {both | custom-url | fortiguard-db}	Manage the FortiGuard URL database: • `both`: Support both custom URL database and the FortiGuard database (default) • `custom-url`: Customer imported URL list. • `fortiguard-db`: Fortinet's FortiGuard database

disk-quota

Use this command to configure the disk space available for use by the Upgrade Manager.

If the Upgrade Manager disk space is full or if there is insufficient space to save an update package to disk, the package will not download and an alert will be sent to notify you.

Syntax

```
config fmupdate disk-quota
   set value <size_int>
end
```

Variable	Description
value <size_int>	Configure the size of the Upgrade Manager disk quota, in megabytes (default = 51200). If you set the disk-quota smaller than the size of an update package, the update package will not download and you will get a disk full alert.

fct-services

Use this command to configure the built-in FDS to provide FortiGuard services to FortiClient installations.

Syntax

```
config fmupdate fct-services
   set status {enable | disable}
   set port <port_int>
```

```
end
```

Variables	Description
status {enable | disable}	Enable/disable built-in FDS service to FortiClient installations (default = enable).
port <port_int>	Enter the port number on which the built-in FDS should provide updates to FortiClient installations (1 - 65535, default = 80).

Example

You could configure the built-in FDS to accommodate older versions of FortiClient installations by providing service on their required port.

```
config fmupdate fct-services
   set status enable
   set port 80
end
```

fds-setting

Use this command to set FDS settings.

Syntax

```
config fmupdate fds-setting
   set fds-clt-ssl-protocol {sslv3 | tlsv1.0 | tlsv1.1 | tlsv1.2}
   set fds-ssl-protocol {sslv3 | tlsv1.0 | tlsv1.1 | tlsv1.2}
   set fmtr-log {alert | critical | debug | disable | emergency | error | info | notice | warn}
   set fortiguard-anycast {enable | disable}
   set fortiguard-anycast-source {aws | fortinet}
   set linkd-log {alert | critical | debug | disable | emergency | error | info | notice | warn}
   set max-av-ips-version <integer>
   set max-work <integer>
   set send_report {enable | disable}
   set send_setup {enable | disable}
   set system-support-fai {7.x}
   set system-support-faz {6.x 7.x}
   set system-support-fct {4.x 5.0 5.2 5.4 5.6 6.0 6.2 6.4 7.0 7.2}
   set system-support-fdc {3.x 4.x}
   set system-support-fgt {5.4 5.6 6.0 6.2 6.4 7.0 7.2 7.4}
   set system-support-fis {1.x 2.x}
   set system-support-fml {4.x 5.x 6.x 7.x}
   set system-support-fsa {1.x 2.x 3.0 3.1 3.2 3.x 4.x}
   set system-support-fts {3.x 4.x 7.x}
   set umsvc-log {alert | critical | debug | disable | emergency | error | info | notice | warn}
   set unreg-dev-option {add-service | ignore | svc-only}
   set User-Agent <text>
   set wanip-query-mode {disable | ipify}
```

```
end
```

Variables	Description
fds-clt-ssl-protocol {sslv3 | tlsv1.0 | tlsv1.1 | tlsv1.2}	Set the SSL protocols version for connecting FDS server (default = tlsv1.2).
fds-ssl-protocol {sslv3 | tlsv1.0 | tlsv1.1 | tlsv1.2}	Set the SSL protocols version for FDS service (default = tlsv1.0).
fmtr-log {alert | critical | debug | disable | emergency | error | info | notice | warn}	The fmtr log level. Set to `disable` to disable the log (default = info).
fortiguard-anycast {enable | disable}	Enable/disable use of FortiGuard's anycast network (default = disable).
fortiguard-anycast-source {aws | fortinet}	Configure which servers provide FortiGuard services in FortiGuard's anycast network (default = fortinet).
linkd-log {alert | critical | debug | disable | emergency | error | info | notice | warn}	The linkd log level (default = info).
max-av-ips-version <integer>	The maximum number of AV/IPS full version downloadable packages (default = 20).
max-work <integer>	The maximum number of worker processing downlink requests (default = 1).
send_report {enable | disable}	Enable/disable sending reports to the FDS server (default = disable).
send_setup {enable | disable}	Enable/disable sending setup to the FDS server (default = disable).
system-support-fai {7.x}	Set the FortiAI support version.
system-support-faz {6.x 7.x}	Set the FortiAnalyzer support version.
system-support-fct {4.x 5.0 5.2 5.4 5.6 6.0 6.2 6.4 7.0 7.2}	Set the FortiClient support version.
system-support-fdc {3.x 4.x}	Set the FortiDeceptor support version.
system-support-fgt {5.4 5.6 6.0 6.2 6.4 7.0 7.2}	Set the FortiGate support version.
system-support-fis {1.x 2.x}	Set the FortiIsolator support version.
system-support-fml {4.x 5.x 6.x 7.x}	Set the FortiMail support version.
system-support-fsa {1.x 2.x 3.0 3.1 3.2 3.x 4.x}	Set the FortiSandbox support version.
system-support-fts {3.x 4.x 7.x}	Set the FortiTester support version.

Variables	Description
umsvc-log {alert | critical | debug | disable | emergency | error | info | notice | warn}	The um_service log level (default = info).
unreg-dev-option {add-service | ignore | svc-only}	Set the option for unregistered devices: • `add-service`: Add unregistered devices and allow update request (default). • `ignore`: Ignore all unregistered devices. • `svc-only`: Allow update request without add unregistered device.
User-Agent <text>	Configure the User-Agent string.
wanip-query-mode {disable | ipify}	Set the public IP query mode. • `disable`: Do not query public IP (default) • `ipify`: Get public IP through https://api.ipify.org

fds-setting push-override

Use this command to enable or disable push updates, and to override the default IP address and port to which the FDS sends FortiGuard antivirus and IPS push messages.

This is useful if push notifications must be sent to an IP address and/or port other than the FortiAnalyzer unit, such as the external or virtual IP address of a NAT device that forwards traffic to the FortiAnalyzer unit.

Syntax

```
config fmupdate fds-setting
   config push-override
      set ip <ipv_address>
      set port <integer>
      set status {enable | disable}
   end
end
```

Variable	Description
ip <ipv_address>	Enter the external or virtual IP address of the NAT device that will forward push messages to the FortiAnalyzer unit.
port <integer>	Enter the receiving port number on the NAT device (1 - 65535, default = 9443).
status {enable | disable}	Enable/disable the push updates (default = disable).

Example

You could enable the FortiAnalyzer unit's built-in FDS to receive push messages.

If there is a NAT device or firewall between the FortiAnalyzer unit and the FDS, you could also notify the FDS to send push messages to the external IP address of the NAT device, instead of the FortiAnalyzer unit's private network IP address.

```
config fmupdate fds-setting
   config push-override
      set status enable
      set ip 172.16.124.135
      set port 9000
   end
end
```

You would then configure port forwarding on the NAT device, forwarding push messages received on User Datagram Protocol (UDP) port 9000 to the FortiAnalyzer unit on UDP port 9443.

fds-setting push-override-to-client

Use this command to define which FortiAnalyzer IP addresses/ports are announced to devices for which the FortiAnalyzer provides FDS services. By default, FortiAnalyzer will announce all its interfaces using the port 8890.

Syntax

```
config fmupdate fds-setting
   config push-override-to-client
      set status {enable | disable}
      config <announce-ip>
         edit <id>
            set ip <ip_address>
            set port <integer>
      end
   end
end
```

Variable	Description
status {enable | disable}	Enable/disable the push updates (default = disable).
Variables for `config announce-ip` **subcommand**:	
<id>	Edit the announce IP address ID (1 - 10).
ip <ip_address>	Enter the announce IP address.
port <integer>	Enter the announce IP port (1 - 65535, default = 8890).

fds-setting server-override

Use this command to override the default IP address and port that the built-in FDS contacts when requesting FortiGuard spam updates.

Syntax

```
config fmupdate fds-setting
   config server-override
      set status {enable | disable}
      config servlist
         edit <id>
            set ip <ipv4_address>
            set ip6 <ipv6_address>
            set port <integer>
            set server-type {fct | fds}
      end
   end
end
```

Variable	Description
status {enable | disable}	Enable/disable the override (default = disable).
Variable for `config servlist` **subcommand**:	
<id>	Enter the override server ID (1 - 10).
ip <ipv4_address>	Enter the IPv4 address of the override server address.
ip6 <ipv6_address>	Enter the IPv6 address of the override server address.
port <integer>	Enter the port number to use when contacting the FDS (1 - 65535, default = 443).
server-type {fct| fds}	Set the override server type (default = fds).

fds-setting update-schedule

Use this command to schedule when the built-in FortiGuard retrieves antivirus and IPS updates.

Syntax

```
config fmupdate fds-setting
   config update-schedule
      set day {Sunday | Monday | Tuesday | Wednesday | Thursday | Friday | Saturday}
      set frequency {every | daily | weekly}
      set status {enable | disable}
      set time <hh:mm>
   end
end
```

Variable	Description
day {Sunday | Monday | Tuesday | Wednesday | Thursday | Friday | Saturday}	The day that the update will occur (Sunday - Saturday, default = Monday). This option is only available if the update frequency is `weekly`.

Variable	Description
frequency {every | daily | weekly}	The update frequency: every given time interval, once a day, or once a week (default = every).
status {enable | disable}	Enable/disable scheduled updates (default = enable).
time <hh:mm>	The time interval between updates, or the hour and minute when the update occurs (hh: 0 - 23, mm: 0 - 59 or 60 = random, default = 00:10).

fgd-setting

Use this command to configure FortiGuard run parameters.

Syntax

```
config fmupdate fgd-setting
   set as-cache <integer>
   set as-log {all | disable | nospam}
   set as-preload {enable | disable}
   set av-cache <integer>
   set av-log {all | disable | novirus}
   set av-preload {enable | disable}
   set av2-cache <integer>
   set av2-log {all | disable | noav2}
   set av2-preload {enable | disable}
   set eventlog-query {enable | disable}
   set fgd-pull-interval <integer>
   set fq-cache <integer>
   set fq-log {all | disable | nofilequery}
   set fq-preload {enable | disable}
   set iot-cache <integer>
   set iot-log {all | disable | nofilequery}
   set iot-preload {enable | disable}
   set iotv-preload {enable | disable}
   set linkd-log {enable | disable}
   set max-client-worker <integer>
   set max-log-quota <integer>
   set max-unrated-size <integer>
   set restrict-as1-dbver <string>
   set restrict-as2-dbver <string>
   set restrict-as4-dbver <string>
   set restrict-av-dbver <string>
   set restrict-av2-dbver <string>
   set restrict-fq-dbver <string>
   set restrict-iots-dbver <string>
   set restrict-wf-dbver <string>
   set stat-log {alert | critical | debug| disable | emergency | error | info | notice | warn}
   set stat-log-interval <integer>
   set stat-sync-interval <integer>
   set update-interval <integer>
```

```
    set update-log {enable | disable}
    set wf-cache <integer>
    set wf-dn-cache-expire-time <integer>
    set wf-dn-cache-max-number <integer>
    set wf-log {all | disable | nourl}
    set wf-preload {enable | disable}
    config server-override
       set status {enable | disable}
       config servlist
          edit <id>
             set ip <ipv4_address>
             set ip6 <ipv6_address>
             set port <integer>
             set service-type {fgc | fgd | fsa}
       end
    end
end
```

Variable	Description
as-cache <integer>	Antispam service maximum memory usage in megabytes (Maximum = Physical memory-1024, 0 = no limit, default = 300).
as-log {all | disable | nospam}	Antispam log setting: • `all`: Log all spam lookups. • `disable`: Disable spam log. • `nospam`: Log non-spam events (default)
as-preload {enable | disable}	Enable/disable preloading the antispam database into memory (default = disable).
av-cache <integer>	Antivirus service maximum memory usage, in megabytes (100 - 500, default = 300).
av-log {all | disable | novirus}	Antivirus log setting: • `all`: Log all virus lookups. • `disable`: Disable virus log. • `novirus`: Log non-virus events (default).
av-preload {enable | disable}	Enable/disable preloading antivirus database to memory (default = disable).
av2-cache <integer>	Antispam service maximum memory usage, in megabytes (physical memory to 1024, 0 = no limit, default = 800).
av2-log {all | disable | novirus}	Outbreak prevention log setting: • `all`: Log all av2 lookups. • `disable`: Disable av2 logs. • `noav2`: Log non-av2 events (default).
av2-preload {enable | disable}	Enable/disable preloading outbreak prevention database to memory (default = disable).
eventlog-query {enable | disable}	Enable/disable record query to event-log besides fgd-log (default = disable).

Variable	Description
fgd-pull-interval <integer>	FortiGuard pull interval setting, in minutes (1 - 1440, default = 10).
fq-cache <integer>	File query service maximum memory usage, in megabytes (100 - 500, default = 300).
fq-log {all | disable | nofilequery}	Filequery log setting: • `all`: Log all file query. • `disable`: Disable file query log. • `nofilequery`: Log non-file query events (default).
fq-preload {enable | disable}	Enable/disable preloading the filequery database to memory (default = disable).
iot-cache <integer>	IoT service maximum memory usage, in megabytes (100 - 500, default = 300).
iot-log {all | disable | nofilequery}	IoT log setting (default = nofilequery).
iot-preload {enable | disable}	Enable/disable preloading IoT database to memory (default = disable).
iotv-preload {enable | disable}	Enable/disable preloading IoT-Vulnerability database to memory (default = disable).
linkd-log {enable | disable}	Linkd log setting: • `alert`: Immediate action is required. • `critical`: Functionality is affected. • `debug`: Debug information (default). • `disable`: Linkd logging is disabled. • `emergency`: The unit is unusable. • `error`: Functionality is probably affected. • `info`: General information. • `notice`: Information about normal events. • `warn`: Functionality might be affected.
max-client-worker <integer>	Maximum workers to use for TCP client connections (0 - 16, 0 = use CPU count, default = 0).
max-log-quota <integer>	Maximum log quota setting, in megabytes (100 - 20480, default = 6144).
max-unrated-size <integer>	Maximum number of unrated site in memory, in kilobytes(10 - 5120, default = 500).
restrict-as1-dbver <string>	Restrict system update to indicated antispam(1) database version (character limit = 127).
restrict-as2-dbver <string>	Restrict system update to indicated antispam(2) database version (character limit = 127).
restrict-as4-dbver <string>	Restrict system update to indicated antispam(4) database version (character limit = 127).

Variable	Description
restrict-av-dbver <string>	Restrict system update to indicated antivirus database version (character limit = 127).
restrict-av2-dbver <string>	Restrict system update to indicated outbreak prevention database version (character limit = 127).
restrict-fq-dbver <string>	Restrict system update to indicated file query database version (character limit = 127).
restrict-iots-dbver <string>	Restrict system update to indicated file query database version (character limit = 127).
restrict-wf-dbver <string>	Restrict system update to indicated web filter database version (character limit = 127).
stat-log {alert | critical | debug| disable | emergency | error | info | notice | warn}	Statistic log setting (default = `disable`). • `alert`: Immediate action is required (1). • `critical`: Functionality is affected (2). • `debug`: Debug information (7). • `disable`: Linkd logging is disabled. • `emergency`: The unit is unusable (0). • `error`: Functionality is probably affected (3). • `info`: General information (6). • `notice`: Information about normal events (5). • `warn`: Functionality might be affected (4).
stat-log-interval <integer>	Statistic log interval setting, in minutes (1 - 1440, default = 60).
stat-sync-interval <integer>	Synchronization interval for statistic of unrated site in minutes (1 - 60, default = 60).
update-interval <integer>	FortiGuard database update wait time if not enough delta files, in hours (2 - 24, default = 6).
update-log {enable | disable}	Enable/disable update log setting (default = enable).
wf-cache <integer>	Web filter service maximum memory usage, in megabytes (maximum = Physical memory-1024, 0 = no limit, default = 600).
wf-dn-cache-expire-time	Web filter DN cache expire time, in minutes (1 - 1440, 0 = never, default = 30).
wf-dn-cache-max-number	Maximum number of Web filter DN cache (0 = disable, default = 10000).
wf-log {all | disable | nourl}	Web filter log setting: • `all`: Log all URL lookups. • `disable`: Disable URL log. • `nourl`: Log non-URL events (default).
wf-preload {enable | disable}	Enable/disable preloading the web filter database into memory (default = disable).

Variable	Description
Variables for `config server-override` **subcommand**:	
status {enable | disable}	Enable/disable the override (default = disable).
<id>	Override server ID (1 - 10).
ip <ipv4_address>	IPv4 address of the override server.
ip6 <ipv6_address>	IPv6 address of the override server.
port <integer>	Port number to use when contacting FortiGuard (1 - 65535, default = 443).
service-type {fgc | fgd | fsa}	Override service type.

fwm-setting

Use this command to configure firmware management settings.

Syntax

```
config fmupdate fwm-setting
   set auto-scan-fgt-disk {enable | disable}
   set check-fgt-disk {enable | disable}
   set fds-image-timeout <integer>
   set health-check {enable | disable}
   set immx-source {cloud | fgt | fmg}
   set log {fwm | fwm_dm | fwm_dm_json}
   set max-device-history <integer>
   set max-profile-history <integer>
   set multiple-steps-interval <integer>
   set retry-interval <integer>
   set retry-max <integer>
   set retrieve {enable | disable}
   set revision-diff {enable | disable}
   set send-image-retry <integer>
   config upgrade-timeout
      set check-status-timeout <integer>
      set ctrl-check-status-timeout <integer>
      set ctrl-put-image-by-fds-timeout <integer>
      set ha-sync-timeout <integer>
      set license-check-timeout <integer>
      set prepare-image-timeout <integer>
      set put-image-by-fds-timeout <integer>
      set put-image-timeout <integer>
      set reboot-of-fsck-timeout <integer>
```

```
        set reboot-of-upgrade-timeout <integer>
        set retrieve-timeout <integer>
        set rpc-timeout <integer>
        set total-timeout <integer>
    end
end
```

Variable	Description
auto-scan-fgt-disk {enable | disable}	Enable/disable automatic scanning of a FortiGate disk when required (default = enable).
check-fgt-disk {enable | disable}	Enable/disable checking a FortiGate disk prior to upgrading the image (default = enable).
fds-failover-fmg {enable | disable}	Enable/disable using the a local image file on the FortiManager when the FDS download fails (default = enable).
fds-image-timeout <integer>	Set the timer for FortiGate image downloads from FortiGuard, in seconds (300 - 3600, default = 1800).
immx-source {cloud | fgt | fmg}	Configure which of the IMMX file to be used for choosing the upgrade patch: • `cloud`: Use the IMMX file for FortiCloud. • `fgt`: Use the IMMX file for FortiGate. • `fmg`: Use the IMMX file for FortiManager. The default file is the one for FortiManager (default = fmg).
log {fwm | fwm_dm | fwm_dm_json}	Configure log setting for the firmware manager daemon (default = fwm_dm): `fwm`: Firmware Manager daemon log. `fwm_dm`: Firmware Manager and deployment service log. `fwm_dm_json`: Firmware Manager and Deployment service log with JSON data between FortiManager-FortiGate.
max-device-history <integer>	Set the max number of device upgrade report (1-10000, default=100).
max-profile-history <integer>	Set the max number of profile upgrade report (1-10000, default=100).
multiple-steps-interval <integer>	Set the waiting time between multiple step upgrades, in seconds (30 - 180, default = 60).
retry-interval <integer>	Waiting time for resending request to device (1 - 360, default = 60).
retry-max <integer>	Maximum number of retries for sending request to device (0 - 100, default = 10).
send-image-retry <integer>	Set the number of retries to send image when failed (0-2, default = 0). `0` indicates no retry.
Variables for`config upgrade-timeout`**subcommand**:	
check-status-timeout <integer>	Set the timeout for checking status after tunnnel is up, in seconds. (1 - 6000, default = 600)

Variable	Description
ctrl-check-status-timeout <integer>	Set the timeout for checking FortiAP/FortiSwitch/FortiExtender status after request upgrade, in seconds. (1 - 12000, default = 1200)
ctrl-put-image-by-fds-timeout <integer>	Set the timeout for waiting device get FortiAP/FortiSwitch/FortiExtender image from FortiGuard, in seconds. (1 - 9000, default = 900)
ha-sync-timeout <integer>	Set the timeout for waiting HA sync, in seconds. (1 - 18000, default = 1800)
license-check-timeout <integer>	Set the timeout for waiting FortiGate check license, in seconds. (1 - 6000, default = 600)
prepare-image-timeout <integer>	Set the timeout for preparing image, in seconds. (1 - 6000, default = 600)
put-image-by-fds-timeout <integer>	Set the timeout for waiting device get image from FortiGuard, in seconds. (1 - 18000, default = 1800)
put-image-timeout <integer>	Set the timeout for waiting send image over tunnel, in seconds. (1 - 18000, default = 1800)
reboot-of-fsck-timeout <integer>	Set the timeout for waiting FortiGate reboot, in seconds. (1 - 18000, default = 1800)
reboot-of-upgrade-timeout <integer>	Set the timeout for waiting FortiGate reboot after image upgrade, in seconds. (1 - 12000, default = 1200)
retrieve-timeout <integer>	Set the timeout for waiting retrieve, in seconds. (1 - 18000, default = 1800)
rpc-timeout <integer>	Set the timeout for waiting FortiGate rpc response, in seconds. (1 - 1800, default = 180)
total-timeout <integer>	Set the timeout for the whole FortiGate upgrade, in seconds. (1 - 86400, default = 3600)

multilayer

Use this command to set multilayer mode configuration.

Syntax

```
config fmupdate multilayer
   set webspam-rating {enable | disable}
end
```

Variables	Description
webspam-rating {enable | disable}	Enable/disable URL/antispam rating service (default = enable).

publicnetwork

Use this command to enable access to the public FDS. If this function is disabled, the service packages, updates, and license upgrades must be imported manually.

Syntax

```
config fmupdate publicnetwork
   set status {enable | disable}
   set update-server-location {eu | global | usa}
end
```

Variables	Description
status {enable | disable}	Enable/disable the public network (default = enable).
update-server-location {eu | global | usa}	Set the location from which to receive FortiGuard updates (default = global).

server-access-priorities

Use this command to configure how a FortiGate unit may download antivirus updates and request web filtering services from multiple FortiAnalyzer units and private FDS servers.

Use the `private-server` subcommand to configure multiple FortiAnalyzer units and private servers.

By default, the FortiGate unit receives updates from the FortiAnalyzer unit if the FortiGate unit is managed by the FortiAnalyzer unit and the FortiGate unit was configured to receive updates from the FortiAnalyzerunit.

Syntax

```
config fmupdate server-access-priorities
   set access-public {enable | disable}
   set av-ips {enable | disable}
   set web-spam {enable | disable}
   config private-server
      edit <id>
         set ip <ipv4_address>
         set ip6 <ipv6_address>
         set time_zone <integer>
      end
   end
```

Variables	Description
access-public {enable | disable}	Enable/disable allowing FortiGates to access public FortiGuard servers when private servers are unavailable (default = disable).
av-ips {enable | disable}	Enable/disable receiving antivirus and IPS update service for private servers (default = disable).
web-spam {enable | disable}	Enable/disable Web Filter and Email Filter update service for private servers (default = enable).
Variables for `config private-server` **subcommand**:	
<id>	Enter a number to identify the FortiManager unit or private server (1 - 10).
ip <ipv4_address>	Enter the IPv4 address of the FortiManager unit or private server.
ip6 <ipv6_address>	Enter the IPv6 address of the FortiManager unit or private server.
time_zone <integer>	Enter the correct time zone of the private server (-24 = local time zone, default = -24).

Example

The following example configures access to public FDS servers and allows FortiGate units to receive antivirus updates from other FortiAnalyzer units and private FDS servers. This example also configures two private servers.

```
config fmupdate server-access-priorities
   set access-public enable
   set av-ips enable
      config private-server
         edit 1
            set ip 172.16.130.252
         next
         edit 2
            set ip 172.31.145.201
         end
      end
```

server-override-status

Configure strict or loose server override.

Syntax

```
config fmupdate server-override-status
   set mode {loose | strict}
end
```

Variables	Description
mode {loose | strict}	Set the server override mode: • `loose`: Allow access other servers (default). • `strict`: Access override server only.

service

Use this command to enable or disable the services provided by the built-in FDS.

Syntax

```
config fmupdate service
   set avips {enable | disable}
end
```

Variables	Description
avips {enable | disable}	Enable/disable the built-in FortiGuard to provide FortiGuard antivirus and IPS updates (default = enable).

Example

```
config fmupdate service
   set avips enable
end
```

execute

The `execute` commands perform immediate operations on the FortiAnalyzer unit. You can:

- Back up and restore the system settings, or reset the unit to factory settings.
- Set the unit date and time.
- Use ping to diagnose network problems.
- View the processes running on the FortiAnalyzer unit.
- Start and stop the FortiAnalyzer unit.
- Reset or shut down the FortiAnalyzer unit.

FortiAnalyzer CLI commands and variables are case sensitive.

add-mgmt-license	factory-license	ping6	sql-report
add-on-license	fmupdate	raid	ssh
add-vm-license	format	reboot	ssh-known-hosts
backup	iotop	remove	ssh-list-keys
benchmark	iotps	reset	ssh-regen-keys
bootimage	log	restore	tac
certificate	log-aggregation	sensor	time
cloud-remote-access	log-fetch	shutdown	top
console	log-integrity	sql-local	traceroute
date	lvm	sql-query-dataset	traceroute6
device	migrate	sql-query-generic	vm-license
erase-disk	ping	sql-query-siem	

add-mgmt-license

Use this command to load management licenses to the FortiAnalyzer.

This command is only available on hardware-based FortiAnalyzer models.

Syntax

```
execute add-mgmt-license <mgmt license string>
```

Variable	Description
<mgmt license string>	The license string. Copy and paste the string from the license file. The license string must be enclosed with double quotes. Do not removed line breaks from the string.

Example

The contents of the license file needs to be in quotes in order for it to work.

```
execute add-mgmt-license "-----BEGIN FAZ MGMT LICENSE-----
QAAAAJ09s+LTe...ISJTTYPcKoDmMa6
-----END FAZ MGMT LICENSE-----"
```

add-on-license

Use this command to load add-on licenses to support more devices or ADOMs with a license key.

Syntax

```
execute add-on-license <license>
```

Variable	Description
<license>	The add-on license string. Copy and paste the string from the license file. The license string must be enclosed with double quotes. Do not removed line breaks from the string.

add-vm-license

Add a VM license to the FortiAnalyzer.

Syntax

```
execute add-vm-license <vm license string>
```

Variable	Description
<vm license string>	The VM license string. Copy and paste the string from the license file. The license string must be enclosed with double quotes. Do not removed line breaks from the string.

Example

The contents of the license file needs to be in quotes in order for it to work.

```
execute add-vm-license "-----BEGIN FAZ VM LICENSE-----
QAAAAJ09s+LTe...ISJTTYPcKoDmMa6
-----END FAZ VM LICENSE-----"
```

This command is only available on FortiAnalyzer VM models.

api-user

Use this command to generate a key for API users.

Syntax

```
execute api-user generate-key <name>
```

Variable	Description
<name>	Enter the API user name. Optionally, leave blank and press enter to list all API users.

backup

Use the following commands to backup all settings or logs on your FortiAnalyzer.

When you back up the unit settings from the vdom_admin account, the backup file contains global settings and the settings for each VDOM. When you back up the unit settings from a regular administrator account, the backup file contains the global settings and only the settings for the VDOM to which the administrator belongs.

An MD5 checksum is automatically generated in the event log when backing up the configuration. You can verify a backup by comparing the checksum in the log entry with that of the backup file.

Syntax

```
execute backup all-settings {ftp | scp | sftp} <ip:port> <string> <username> <passwd> <ssh-cert>
      <crptpasswd> [force-docker]
execute backup fds {ftp | scp | sftp} <ip:port> <string> <username> <passwd> <ssh-cert>
execute backup fgd {ftp | scp | sftp} <ip:port> <string> <username> <passwd> <ssh-cert>
execute backup fmg-logs {ftp | scp | sftp} <ip:port> <string> <username> <passwd> <ssh-cert>
execute backup fwm {ftp | scp | sftp} <ip:port> <string> <username> <passwd> <ssh-cert>
execute backup ha {ftp | scp | sftp} <ip:port> <string> <username> <passwd> <ssh-cert>
execute backup logs <device name(s)> {ftp | scp | sftp} <ip/fqdn> <username> <passwd> <directory>
      [vdlist]
execute backup logs-only <device name(s)> {ftp | scp | sftp} <ip/fqdn> <username> <passwd>
      <directory> [vdlist]
execute backup logs-rescue <device serial number(s)> {ftp | scp | sftp} <ip> <username> <passwd>
      <directory> [vdlist]
execute backup reports <report schedule name(s)> {ftp | scp | sftp} <ip/fqdn> <username> <passwd>
      <directory> [vdlist]
execute backup reports-config <adom name(s)> {ftp | scp | sftp} <ip/fqdn> <username> <passwd>
      <directory> [vdlist]
execute backup rtm {ftp | scp | sftp} <device name> <ip:port> <string> <username> <passwd> <ssh-
      cert>
execute backup task {ftp | scp | sftp} <ip:port> <string> <username> <passwd> <ssh-cert>
```

Variable	Description
all-settings	Backup all FortiAnalyzer settings to a file on a server.
fds	Backup FortiGuard Distribution Server data.
fgd	Backup FortiGuard data.
fmg-logs	Backup log files.
fwm	Backup firmware management data.
ha	Backup HA logs.
logs	Backup the device logs and the content archives to a specified server.
logs-only	Backup device logs excluding content archives to a specified server.
logs-rescue	Use this hidden command to backup logs regardless of DVM database for emergency reasons. This command will scan folders under /Storage/Logs/ for possible device logs to backup.
reports	Backup the reports to a specified server.
reports-config	Backup reports configuration to a specified server.
rtm	Backup real time monitor data.
task	Backup the task database.
<device name>	Enter the device name for which you want to backup.

Variable	Description
<device name(s)>	Enter the device name(s) separated by a comma, or enter `all` for all devices.
<device serial number(s)>	Enter the device serial number(s) separated by a comma, or enter `all` for all devices.
<report schedule name(s)>	Enter the report schedule name(s) separated by a comma, or enter `all` for all reports schedules.
<adom name(s)>	Enter the ADOM name(s) separated by a comma, or enter `all` for all ADOMs.
{ftp | scp | sftp}	Enter the server type: `ftp`, `scp`, or `sftp`.
<ip:port>	Enter the server IP address and optionally , for FTP servers, the port number.
<ip>	Enter the server IP address.
<ip/fqdn>	Enter the server IP address or fully-qualified domain name (FQDN).
<string>	Enter the path and file name for the backup.
<username>	Enter username to use to log on the backup server.
<passwd>	Enter the password for the username on the backup server. **Note:** You cannot use \\ in passwords.
<ssh-cert>	Enter the SSH certification for the server. This option is only available for backup operations to SCP servers.
<crptpasswd>	Enter a password to protect backup content.
<directory>	Enter the path to where the file will be backed up to on the backup server.
[vdlist]	VD name(s), separated by commas.
[force-docker]	Optional flag to stop when the docker backup fails.

Example

This example shows how to backup the FortiAnalyzer unit system settings to a file named `fmg.cfg` on a server at IP address 192.168.1.23 using the admin username, and password 123456.

```
execute backup all-settings ftp 192.168.1.23 fmd.cfg admin 123456
Starting backup all settings in background, please wait.
# Starting transfer the backup file to FTP server...
Transferred 139.237M of 139.237M in 0:00:00s (178.065M/s)
Backup all settings...Ok.
MD5: xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx
```

benchmark

Use the following commands to test performance.

benchmark io-perf

Use these commands to test IO performance.

Syntax

```
execute benchmark io-perf custom <parameters>
execute benchmark io-perf rand-read [reboot]
execute benchmark io-perf rand-rw [reboot]
execute benchmark io-perf rand-write [reboot]
execute benchmark io-perf seq-read [reboot]
execute benchmark io-perf seq-rw [reboot]
execute benchmark io-perf seq-write [reboot]
execute benchmark io-perf show-last-result <operation>
```

Variable	Description
custom <parameters>	Test IO performance with custom parameters. Enter the following paramaters (format example: `rw=randrw numjobs=8 bs=4 size=4 runtime=60`). • `rw` = Type of I/O pattern. Accepted values are `read`, `write`, `rw` (read and write), `randread` (random read), `randwrite` (random write), and `randrw` (random read and write). • `numjobs` = Number of jobs doing io-perf. • `bs` = The block size in bytes used for I/O units (unit is KB). • `size` = The total size of file I/O for each job (unit is GB). • `runtime` = Limit runtime for io-perf (unit is seconds).
rand-read [reboot]	Test random read IO performance. Enter `reboot` to reboot for io-perf running in clean env.
rand-rw [reboot]	Test random read and write IO performance. Enter `reboot` to reboot for io-perf running in clean env.
rand-write [reboot]	Test random write IO performance. Enter `reboot` to reboot for io-perf running in clean env.
seq-read [reboot]	Test sequential read IO performance. Enter `reboot` to reboot for io-perf running in clean env.
seq-rw [reboot]	Test sequential read and write IO performance. Enter `reboot` to reboot for io-perf running in clean env.

Variable	Description
seq-write [reboot]	Test sequential write IO performance. Enter `reboot` to reboot for io-perf running in clean env.
show-last-result <operation>	Show the last io-perf result for one of the following operations: • `all` = All operations • `seq-read` = Sequential read • `seq-write` = Sequential write • `seq-rw` = Sequential read and write • `rand-read` = Random read • `rand-write` = Random write • `rand-rw` = Random read and write • `custom` = Custom io-perf parameters

bootimage

Set the image from which the FortiAnalyzer unit will boot the next time it is restarted.

This command is only available on hardware-based FortiAnalyzer models.

Syntax

```
execute bootimage {primary | secondary}
```

Variable	Description
{primary | secondary}	Select to boot from either the primary or secondary partition.

If you do not specify primary or secondary, the command will report whether it last booted from the primary or secondary boot image.

If your FortiAnalyzer unit does not have a secondary image, the bootimage command will inform you that option is not available.

To reboot your FortiAnalyzer unit, use:

```
execute reboot
```

certificate

Use these commands to manage certificates.

certificate ca

Use these commands to list, import, or export CA certificates.

Syntax

To list the CA certificates installed on the FortiAnalyzer unit:

```
execute certificate ca list
```

To export or import CA certificates:

```
execute certificate ca export <cert_name> <tftp_ip>
execute certificate ca import <filename> <tftp_ip> <cert_name>
```

Variable	Description
list	Generate a list of CA certificates on the FortiAnalyzer system.
<export>	Export CA certificate to TFTP server.
<import>	Import CA certificate from a TFTP server.
<cert_name>	Name of the certificate.
<tftp_ip>	IP address of the TFTP server.
<filename>	File name on the TFTP server.

certificate crl

Use this command to import CRL certificate from a TFTP server.

Syntax

```
execute certificate crl import <filename> <tftp_ip> <cert_name>
```

certificate local

Use these commands to list, import, or export local certificates, and to generate a certificate request

Syntax

```
execute certificate local export <cert_name> <tftp_ip>
execute certificate local import <filename> <tftp_ip> <cert_name>
execute certificate local import-pkcs12 {ftp | scp | sftp} <ip:port> <filename> <username>
      <password> <password> <name>
execute certificate local generate <certificate-name-string> <subject> <number> [<optional_
      information>]
execute certificate local list
```

Variable	Description
export <cert_name> <tftp_ip>	Export a certificate or request to a TFTP server. • `cert_name` - Name of the certificate. • `tftp_ip` - IP address of the TFTP server.
import <filename> <tftp_ip> <cert_name>	Import a signed certificate from a TFTP server.
import-pkcs12 {ftp | scp | sftp} <ip:port> <filename> <username> <password> <password> <name>	Import a certificate and private key from a PKCS#12 file. • `ftp`, `scp`, `sftp` - The type of server the file will be imported from. • `ip:port` - The server IP address and, optional, the port number. • `filename` - The path and file name on the server. • `username` - The user name on the server. • `password` - The user password. • `password` - The file password. • `name` - The certificate name.

generate <certificate-name_str> <number> <subject> [<optional_information>]	Generate a certificate request.
	• `certificate-name-string` - Enter a name for the certificate. The name can contain numbers (0-9), uppercase and lowercase letters (A-Z, a-z), and the special characters - and _. Other special characters and spaces are not allowed.
	• `number` - The size, in bits, of the encryption key, `512`, `1024`, `1536`, or `2048`.
	• `subject` - Enter one of the following pieces of information to identify the FortiAnalyzer unit being certified:
	  • The FortiAnalyzer unit IP address
	  • The fully qualified domain name of the FortiAnalyzer unit
	  • An email address that identifies the FortiAnalyzer unit
	  • An IP address or domain name is preferable to an email address.
	• `optional_information` - Enter `optional_information` as required to further identify the unit. See Optional information variables on page 176 for more information.

list	Generate a list of CA certificates and requests that are on the FortiAnalyzer system.

Optional information variables

You must enter the optional variables in the order that they are listed in the table. To enter any optional variable you must enter all of the variables that come before it in the list.

For example, to enter the `organization_name_str`, you must first enter the `country_code_str`, `state_name_str`, and `city_name_str`.

While entering optional variables, you can type ? for help on the next required variable.

Variable	Description
<country_code_str>	Enter the two-character country code.
<state_name_str>	Enter the name of the state or province where the FortiAnalyzer unit is located.
<city_name_str>	Enter the name of the city, or town, where the person or organization certifying the FortiAnalyzer unit resides.
<organization-name_str>	Enter the name of the organization that is requesting the certificate for the FortiAnalyzer unit.
<organization-unit_name_str>	Enter a name that identifies the department or unit within the organization that is requesting the certificate for the FortiAnalyzer unit.
<email_address_str>	Enter a contact email address for the FortiAnalyzer unit.

certificate remote

Use these commands to list, import, or export remote certificates.

Syntax

To list the remote certificates installed on the FortiAnalyzer unit:

```
execute certificate remote list
```

To export or import remote certificates:

```
execute certificate remote {<export>|<import>} <cert_name> <tftp_ip>
```

Variable	Description
list	Generate a list of remote certificates on the FortiAnalyzer system.
<export>	Export the certificate to TFTP server.
<import>	Import the certificate from a TFTP server.
<cert_name>	Name of the certificate.
<tftp_ip>	IP address of the TFTP server.

cloud-remote-access

Use this command to log in to FortiCloud.

Syntax

```
execute cloud-remote-access login <id> <password> <domain> <email confirm>
execute cloud-remote-access logout
execute cloud-remote-access domain
```

Variable	Description
<id>	Remote server account ID.
<password>	Password.
<domain>	Remote server domain.
<email confirm>	Email confirmation.

To enable remote access to the GUI from FortiCloud, enter the following command after logging in to FortiCloud:

```
config system central-management
   set type fortigatecloud
```

If the `central-management` type is set to `fortimanager` (default) or `none`, remote access from FortiCloud will be disabled.

console

console baudrate

Use this command to get or set the console baudrate.

Syntax

```
execute console baudrate [9600 | 19200 | 38400 | 57600 | 115200]
```

If you do not specify a baudrate, the command returns the current baudrate.

Setting the baudrate will disconnect your console session.

Example

Get the baudrate:

```
execute console baudrate
```

The response is displayed:

```
current baud rate is: 9600
```

Set the baudrate to 19200:

```
execute console baudrate 19200
```

date

Get or set the FortiAnalyzer system date.

Syntax

```
execute date [<date_str>]
```

where

`date_str` has the form `mm/dd/yyyy`

- `mm` is the month and can be `1` to `12`
- `dd` is the day of the month and can be `1` to `31`
- `yyyy` is the year and can be `2001` to `2037`

If you do not specify a date, the command returns the current system date.

Dates entered will be validated - `mm` and `dd` require one or two digits, and `yyyy` requires four digits. Entering fewer digits will result in an error.

Example

This example sets the date to 29 September 2020:

```
execute date 9/29/2020
```

device

Use this command to change a device password, serial number, or user when changing devices due to a hardware issue.

Syntax

```
execute device replace pw <device_name> <password>
execute device replace sn <device_name> <serial_number>
execute device replace user <device_name> <user>
```

Variable	Description
pw	Replace the device password.
sn	Replace the device serial number.
user	Replace the device user.
<device_name>	The name of the device.
<password>	The new password for the new device.
<serial_number>	The new serial number for the new device, for example: `FWF40C391XXX0062`.
<user>	The new user for the new device.

Example

```
execute device replace pw FGT600C2805030002
This operation will clear the password of the device.
Do you want to continue? (y/n)y
```

erase-disk

Overwrite the flash (boot device) with random data a specified number of times. When you run this command, you will be prompted to confirm the request.

Executing this command will overwrite all information on the FortiAnalyzer system's flash drive. The FortiAnalyzer system will no longer be able to boot up.

Syntax

```
execute erase-disk flash <erase-times>
```

Variable	Description
<erase-times>	Number of times to overwrite the flash with random data (1 - 35, default = 1).

factory-license

Use this command to enter a factory license key. This command is hidden.

Syntax

```
execute factory-license <key>
```

Variable	Description
<key>	The factory license key.

fmupdate

Import or export packages using the FTP, SCP, or TFTP servers.

Syntax

```
execute fmupdate {fgd-db-merge | ftp | scp | tftp} import <type> <filename> <server> <port>
      <directory> <username> <password>
execute fmupdate {fgd-db-merge | ftp | scp | tftp} export <type> <filename> <server> <port>
      <directory> <username> <password> [base64 | delta]
execute fmupdate {fgd-db-merge | ftp | scp | tftp} fds-export <objid> <filename> <server>
      <directory> <username> <password> [base64 | delta]
execute fmupdate fgd-db-merge {as | av | av2 | fq | iot | wf}
```

Variables	Description
{fgd-db-merge | ftp | scp | tftp}	Select the file transfer protocol to use: `ftp`, `scp`, or `tftp`. Select fgd-db-merge to merge the FortiGuard database immediately.
fds-export	Export the AV-IPS package to the FTP server.
fgd-db-merge {as | av | av2 | fq | iot | wf}	Merge FortiGuard database immediately. Select the database type.

<type>	Select the package type to export or import:
	• import:
	  • `package` = fcp package
	  • `license` = license package
	  • `custom-url` = customized URL database
	  • `som` = som.dat default download list
	• export:
	  • `license` = license package

Variables	Description
	• `license-xml` = license info. in xml • `custom-url` = customized URL database • `som` = som.dat default download list
<filename>	Update manager packet file name on the server or host.
<objid>	Enter the object ID (use '-' as a separator).
<server>	Enter the FQDN or the IP address of the server.
<port>	Only available when the file transfer protocol is `scp`. Enter the port to connect to on the remote SCP host (1 - 65535).
<directory>	Enter the name of the directory of the file to download from the FTP server or SCP host. If the directory name has spaces, use quotes instead.
<username>	Enter the username to log into the FTP server or SCP host
<password>	Enter the password to log into the FTP server or SCP host
[base64 | delta]	Optionally, export in base64 format or include delta object.

format

Format the hard disk on the FortiAnalyzer system. You can select to perform a secure (deep-erase) format which overwrites the hard disk with random data. You can also specify the number of time to erase the disks.

To format the disk, FortiAnalyzer must be in Standalone mode, not HA active-active or HA active-passive.

Syntax

```
execute format <disk | disk-ext3 | disk-ext4> <RAID level> [<group>] deep-erase <erase-times>
```

When you run this command, you will be prompted to confirm the request.

Executing this command will erase all device settings/images, databases, and log data on the FortiAnalyzer system's hard drive. The FortiAnalyzer device's IP address, and routing information will be preserved.

Variable	Description
<disk | disk-ext3 | disk-ext4>	Select to format the hard disk or format the hard disk with ext3 or ext4 file system.
deep-erase	Overwrite the hard disk with random data. Selecting this option will take longer than a standard format.

Variable	Description
<erase-times>	Number of times to overwrite the hard disk with random data (1 - 35, default = 1).
[<group>]	Enter the number of RAID groups to be used in the RAID array (default = 2). To view the available options, use an asterisk (*). For example: `execute format disk 50 *` The number of groups can only be selected for RAID 50 and RAID 60.  When building a RAID array, select a number of groups that will use all disks. For example, consider a RAID array with 15 disks. Using the default 2 groups (7 disks per group) would leave 1 disk unused. In order to use all disks, it would be better to select 3 groups (5 disks per group).
<RAID level>	Enter the RAID level to be set on the device. This option is only available on FortiAnalyzer models that support RAID. Enter * to show available RAID levels.

iotop

Use this command to display system processes input/output usage information.

Syntax

```
execute iotop <parameter> <parameter> <parameter> <parameter> <parameter> <parameter> <parameter>
      <parameter>
```

Parameter	Description
--version	Show the program's version number and exit.
-h, --help	Show this help message and exit.
-o, --only	Only show processes or threads that are actually doing I/O.
-b, --batch	Non-interactive mode.
-n NUM, --iter=NUM	The number of iterations before ending (default = infinite).
-d SEC, --delay=SEC	The delay between iterations, in seconds (default = 1).
-p PID, --pid=PID	The processes/threads to monitor (default = all).
-u USER, --user=USER	The users to monitor (default = all).
-P, --processes	Only show processes, not all threads.

Parameter	Description
-a, --accumulated	Show the accumulated I/O instead of bandwidth.
-k, --kilobytes	Use kilobytes instead of a human friendly unit.
-t, --time	Add a timestamp on each line (implies --batch).
-q, --quiet	Suppress some lines of header (implies --batch).

iotps

Use this command to list system processes sorted by their read/write system call rate.

Syntax

```
execute iotps <parameter> <parameter> <parameter> <parameter> <parameter> <parameter>
```

Variable	Description
<parameter>	Parameters: • `-r` • `-w` • `-e` • `-t [intv]`

log

Use the following commands to manage device logs:

log adom disk-quota	log dlp-files clear
log device disk-quota	log import
log device logstore	log ips-pkt clear
log device permissions	log quarantine-files clear
log device vdom	log storage-warning

log adom disk-quota

Set the ADOM disk quota.

Syntax

```
execute log adom disk-quota <adom_name> <value>
```

Variable	Description
<adom_name>	Enter the ADOM name, or enter `All` for all ADOMs.
<value>	Enter the disk quota value in megabytes.

log device disk-quota

Set the log device disk quota.

Syntax

```
execute log device disk-quota <device_id> <value>
```

Variable	Description
<device_id>	Enter the log device ID, or enter `All` for all devices.
<value>	Enter the disk quota value in megabytes.

log device logstore

Use this command to view and edit log storage information.

Syntax

```
execute log device logstore clear <device_id>
execute log device logstore list
```

Variable	Description
clear <device_id>	Remove leftover log directory.
list	List log storage directories.

log device permissions

Use this command to view and set log device permissions.

Syntax

```
execute log device permissions <device_id> <permission> {enable | disable}
```

Variable	Description
<device_id>	Enter the log device ID, or enter `All` for all devices. Example: `FWF40C3911000061`
<permission>	The following options are available: • `all`: All permissions • `logs`: Log permission • `content`: Content permission • `quar`: Quarantine permission • `ips`: IPS permission.
{enable | disable}	Enable/disable permissions.

log device vdom

Use this command to add, delete, or list VDOMs.

Syntax

```
execute log device vdom add <Device Name> <ADOM> <VDOM>
execute log device vdom delete <Device Name> <VDOM>
execute log device vdom delete-by-id <Device Name> <index>
execute log device vdom list <Device Name>
```

Variable	Description
add <Device Name> <ADOM> <VDOM>	Add a new VDOM to a device with the device name, the ADOM that contains the device, and the name of the new VDOM.
delete <Device Name> <VDOM>	Delete a VDOM from a device.
delete-by-id <Device Name> <index>	Delete a VDOM from a device by its index number.
list <Device Name>	List all the VDOMs on a device.

log dlp-files clear

Use this command to clear DLP log files on a specific log device.

Syntax

```
execute log dlp-files clear <device_name> <archive type>
```

Variable	Description
<device_name>	Enter the device name.
<archive type>	Enter the device archive type: `all`, `email`, `im`, `ftp`, `http`, or `mms`.

log import

Use this command to import log files from another device and replace the device ID on imported logs.

Syntax

```
execute log import <service> <ip:port> <user-name> <password> <file-name> <device-id>
```

Variable	Description
<service>	Enter the transfer protocol one of: `ftp`, `sftp`, `scp`,or `tftp`.
<ip:port>	Server IP address or host name. Port is optional.
<user-name>	Enter the username.
<password>	Enter the password or '-' for no password. The `<password>` field is not required when `<service>` is `tftp`.
<file-name>	The file name (e.g. `dir/fgt.alog.log`) or directory name (e.g. `dir/subdir/`).
<device-id>	Replace the device ID on imported logs. Enter a device serial number of one of your log devices.

log ips-pkt clear

Use this command to clear IPS packet logs on a specific log device.

Syntax

```
execute log ips-pkt clear <device_name>
```

Variable	Description
<device_name>	Enter the device name.

log quarantine-files clear

Use this command to clear quarantine log files on a specific log device.

Syntax

```
execute log quarantine-files clear <device_name>
```

Variable	Description
<device_name>	Enter the device name.

log storage-warning

Reset the licensed VM storage size warning

Syntax

```
execute log storage-warning reset
```

log-aggregation

Immediately upload the log to the server.

Syntax

```
execute log-aggregation <id>
```

Variable	Description
<id>	The client ID, or `all` for all clients.

log-fetch

Use the following commands to fetch logs.

log-fetch client

Use these commands to manage client sessions.

Syntax

```
execute log-fetch client cancel <profile name>
execute log-fetch client list <profile name>
execute log-fetch client pause <profile name>
execute log-fetch client resume <profile name>
execute log-fetch client run <profile name>
execute log-fetch client view <profile name>
```

Variable	Description
cancel <profile name>	Cancel one session.
list <profile name>	List all sessions.
pause <profile name>	Pause one session.
resume <profile name>	Resume one session.
run <profile name>	Start a new session.
view <profile name>	View the session status.

log-fetch server

Use this command to manager the log fetching server.

Syntax

```
execute log-fetch server approve <session id>
execute log-fetch server cancel <session id>
execute log-fetch server deny <session id>
execute log-fetch server list
execute log-fetch server pause <session id>
execute log-fetch server resume <session id>
execute log-fetch server view <session id>
```

Variable	Description
approve <session id>	Approve a session.
cancel <session id>	Pause and clear one session or all sessions.
deny <session id>	Deny a session.
list	List all sessions.

Variable	Description
pause <session id>	Pause a session.
resume <session id>	Resume a session.
view <session id>	View the session.

log-integrity

Query the log file's MD5 checksum and timestamp.

Syntax

```
execute log-integrity <device_name> <vdom name> <log_name>
```

Variable	Description
<device_name>	The name of the log device.
<vdom name>	The VDOM name.
<log_name>	The log file name.

lvm

With Logical Volume Manager (LVM), a FortiAnalyzer VM device can have up to fifteen total log disks added to an instance. More space can be added by adding another disk and running the LVM extend command.

Adding an extra disk or adding space to the current LVM disk will not impact current saved archive logs and analytics logs. However, it is recommended to save logs using the following commands before doing so:

```
execute backup logs <device name(s) | all> {ftp | scp | sftp} <ip/fqdn> <username> <passwd>
      <directory> [vdlist]
```

and

```
execute backup reports <report schedule name(s) | all> {ftp | scp | sftp} <ip/fqdn> <username>
      <passwd> <directory> [vdlist]
```

For more details about these commands, see backup on page 169.

The `execute lvm` command is only available on FortiAnalyzer VM models.

You can use the `execute format disk` command to start the LVM. See format on page 181.

Syntax

```
execute lvm extend
execute lvm hwinfo
execute lvm info
```

Variable	Description
extend	Extend the LVM logical volume.
hwinfo	Show LVM hardware information.
info	Get system LVM information.

migrate

Use this command to migrate all backup settings from the FTP, SCP, or SFTP server to the new FortiAnalyzer serial number or FortiAnalyzer HA cluster serial numbers.

This command also allows migrating to the fabric ADOM from a non-fabric ADOM.

Syntax

```
execute migrate all-settings {ftp | scp | sftp} <ip:port> <string> <username> <password> <ssh-
      cert> [<crptpasswd>]
execute migrate fabric <adom name>
execute migrate serial-number-list <serial-number-list>
```

Variable	Description
{ftp | scp | sftp}	Enter the server type: `ftp`, `scp`, or `sftp`.
<ip:port>	Enter the server IP address and optionally, for FTP servers, the port number.
<string>	Enter the path and file name for the backup.
<username>	Enter username to use to log on the backup server.
<password>	Enter the password for the username on the backup server.
<ssh-cert>	Enter the SSH certification for the server. This option is only available for backup operations to SCP servers.
[<crptpasswd>]	Optional password to protect backup content. Use any for no password.

Variable	Description
<adom name>	Enter names of the ADOM(s) separated by commas.
<serial-number-list>	Enter the serial number. The serial number list is separated by commas, e.g., `sno_1,sno_2`.

ping

Send an ICMP echo request (ping) to test the network connection between the FortiAnalyzer system and another network device.

Syntax

```
execute ping <ip | hostname>
```

Variable	Description
<ip | hostname>	IPv4 address or DNS resolvable hostname of network device to contact.

Example

This example shows how to ping a host with the IPv4 address `192.168.1.23`:

```
execute ping 192.168.1.23
```

ping6

Send an ICMP echo request (ping) to test the network connection between the FortiAnalyzer system and another network device.

Syntax

```
execute ping6 <ip | hostname>
```

Variable	Description
<ip | hostname>	Enter the IPv6 address or DNS resolvable hostname of network device to contact.

Example

This example shows how to ping a host with the IPv6 address 8001:0DB8:AC10:FE01:0:0:0:0:

```
execute ping6 8001:0DB8:AC10:FE01:0:0:0:0:
```

raid

This command allows you to add and delete RAID disks.

This command is only available on hardware-based FortiAnalyzer models that support RAID.

Syntax

```
execute raid add-disk <disk index>
execute raid delete-disk <disk index>
```

Variable	Description
add-disk <disk index>	Add a disk and give it an index number.
delete-disk <disk index>	Delete the specified disk.

reboot

Restart the FortiAnalyzer system. This command will disconnect all sessions on the FortiAnalyzer system.

Syntax

```
execute reboot
```

remove

Use this command to remove all GUI data cache, all custom settings in Logview, all reports for a specific device, resync files, security fabric from a specific ADOM, and all endpoints and end user related information from files, tables, and memory.

Syntax

```
execute remove endpoints-endusers
execute remove gui-data-cache
execute remove gui-logview-settings
execute remove reports [device-id]
execute remove resync
execute remove security-facbric <adom-name> <security-fabric-name>
```

Variable	Description
<device-id>	The device identifier for the device that all reports are being removed from.
<adom-name>	The ADOM that contains the security fabric that is being removed.
<security-fabric-name>	The security fabric that is being removed.

Example

```
execute remove gui-logview-settings
This operation will Remove all custom settings in GUI LogView and reset to default for all users.
Do you want to continue? (y/n)y

Remove all custom settings in GUI LogView ...
Done! Reset all settings in GUI LogView to default.
```

reset

Use these commands to reset the FortiAnalyzer unit. These commands will disconnect all sessions and restart the FortiAnalyzerunit.

Syntax

```
execute reset adom-settings <adom> <version> <mr> <ostype>
execute reset all-except-ip
execute reset all-settings
execute reset all-shutdown
```

Variable	Description
adom-settings <adom> <version> <mr> <ostype>	Reset an ADOM's settings. • <adom>: The ADOM name. • <version>: The ADOM version. For example, 5 for 5.x releases. • <mr>: The major release number. • <ostype>: Supported OS type. For example, 18 for FortiDeceptor.

Variable	Description
	Logs sent from FortiDeceptor to FortiAnalyzer 6.4 may not display in FortiAnalyzer GUI because of an incorrect ADOM type for FortiDeceptor. You can use this command reset the FortiDeceptor ADOM type in FortiAnalyzer to workaround this issue if it occurs after upgrade past FortiAnalyzer 6.4.4.
all-except-ip	Reset all settings except the current IP address and route information.
all-settings	Reset to factory default settings.
all-shutdown	Reset all settings and shutdown.

restore

Use this command to:

- restore the configuration or database from a file
- change the FortiAnalyzer unit image
- Restore device logs, DLP archives, and reports from specified servers.

This command will disconnect all sessions and restart the FortiAnalyzer unit.

Syntax

```
execute restore all-settings {ftp | sftp} <ip:port> <filename> <username> <password> <crptpasswd>
      [option1+option2+...]
execute restore all-settings scp <ip:port> <filename> <username> <ssh-cert> <crptpasswd>
      [option1+option2+...]
execute restore image {ftp | scp | sftp} <filepath> <ip:port> <username> <password>
execute restore image tftp <string> <ip>
execute restore logs <device name(s)> {ftp | scp | sftp} <ip> <username> <password> <directory>
      [vdlist]
execute restore logs-only <device name(s)> {ftp | scp | sftp} <ip> <username> <password>
      <directory> [vdlist]
execute restore reports <report name(s)> {ftp | scp | sftp} <ip> <username> <password>
      <directory> [vdlist]
execute restore reports-config {<adom_name> | all} {ftp | scp | sftp} <ip> <username> <password>
      <directory> [full]
```

Variable	Description
all-settings	Restore all FortiAnalyzersettings from a file on a FTP, SFTP, or SCP server. The new settings replace the existing settings, including administrator accounts and passwords.

Variable	Description
image	Upload a firmware image from a(an) FTP/SCP/SFTP/TFTP server to the FortiAnalyzer unit. The FortiAnalyzer unit reboots, loading the new firmware.
logs	Restore device logs and DLP archives from a specified server.
logs-only	Restore device logs from a specified server.
reports	Restore reports from a specified server.
reports-config	Restore report configurations to a specified server.
ftp	Restore from an FTP server.
sftp	Restore from a SFTP server.
scp	Restore from an SCP server.
<ip:port>	Enter the IP address of the server to get the file from and optionally , for FTP servers, the port number.
<ip>	Enter the server IP address.
<device names>	Device name or names, separated by commas, or `all` for all devices. Example: `FWF40C3911000061`
<report name(s)>	Restore specific reports (separated by commas), `all` for all reports, or reports with names containing given pattern. A '?' matches any single character. A '*' matches any string, including the empty string, e.g.: • `foo`: for exact match • `*foo`: for report names ending with foo • `foo*`: for report names starting with foo • `*foo*`: for report names containing foo substring.
{<adom_name> | all}	Select to backup a specific ADOM or all ADOMs.
<filename>	Enter the file to get from the server. You can enter a path with the filename, if required.
<filepath>	Enter the file path on the FTP server.
<username>	The username to log on to the server. This option is not available for restore operations from TFTP servers.
<password>	Enter the password, or - if there is no password.
<ssh-cert>	Enter the SSH certificate used for user authentication on the SCP server.
<crptpasswd>	Enter the password that was used to protect backup content. If no password was used for the backup file, use two single quotation marks (' ') to indicate no password.
[option1+option2+...]	Enter `keepbasic` to retain IP and routing information on the original unit.

Variable	Description
<directory>	Enter the directory.
[full]	Reports configuration full restoration.

Example

This example shows how to upload a configuration file from a FTP server to the FortiAnalyzer unit. The name of the configuration file on the FTP server is `backupconfig`. No `crptpasswd` was used when backing up the content. The IP address of the FTP server is 192.168.1.23. The user is `admin` with a password of `mypassword`. The configuration file is located in the `/usr/local/backups/` directory on the TFTP server.

```
execute restore all-settings 192.168.1.23 /usr/local/backups/backupconfig admin mypassword ''
```

sensor

This command lists sensors and readings.

This command is only available on hardware-based FortiAnalyzer models.

Syntax

```
execute sensor detail
execute sensor list
```

Variable	Description
detail	List detailed sensors and readings.
list	List sensors and readings.

shutdown

Shut down the FortiAnalyzer system. This command will disconnect all sessions.

Syntax

```
execute shutdown
```

sql-local

Use this command to remove the SQL database and logs from the FortiAnalyzer system and to rebuild the database and devices.

When rebuilding the SQL database, new logs will not be available until the rebuild is complete. The time required to rebuild the database is dependent on the size of the database. Please plan a maintenance window to complete the database rebuild. You can use the `diagnose sql status rebuild-db` command to display the SQL log database rebuild status.

The following features will not be available until after the SQL database rebuild has completed: FortiView, Log View, Event Management, and Reports.

Syntax

```
execute sql-local rebuild-db
execute sql-local rebuild-index <adom> <start-time > <end-time>
execute sql-local rebuild-metadb
```

Variable	Description
rebuild-db	Rebuild entire log SQL database from log data. This operation will remove the SQL database and rebuild from log data. It will also reboot the device.
rebuild-index	Rebuild indexes for an ADOM.
rebuild-metadb	Rebuild the metadata database.
<adom>	The ADOM name. Multiple ADOM names can be entered when rebuilding ADOMs.
<start-time>	Enter the start time (timestamp or <yyyy-mm-dd hh:mm:ss>).
<end-time>	Enter the end time (timestamp or <yyyy-mm-dd hh:mm:ss>).
<log type>	Enter the log type from available log types, for example: `emailfilter`

sql-query-dataset

Use this command to execute a SQL dataset against the FortiAnalyzersystem.

Syntax

```
execute sql-query-dataset <adom> <dataset-name> <device/group name> <faz/dev> <start-time> <end-
      time>
```

Variable	Description
<adom_name>	Enter the ADOM name.
<dataset-name>	Enter the SQL dataset name.
<device/group name>	Enter the name of the device or device group.
<faz/dev>	Enter the reference time: FortiAnalyzer time or device time.
<start-time>	Enter the log start time (timestamp or <yyyy-mm-dd hh:mm:ss>).
<end-time>	Enter the log end time (timestamp or <yyyy-mm-dd hh:mm:ss>).

sql-query-generic

Use this command to execute a SQL statement against the FortiAnalyzer system.

Syntax

```
execute sql-query-generic <string>
```

Variable	Description
<string>	Specify the SQL statement to be executed.

sql-query-siem

Use this command to execute a SIEM SQL statement.

Syntax

```
execute sql-query-siem <string>
```

Variable	Description
<string>	Specify the SQL statement to be executed.

sql-report

Use these commands to import and display language translation and font files, and run a SQL report schedule once against the FortiAnalyzer system.

Syntax

```
execute sql-report delete-font <font-name>
execute sql-report delete-lang <language-name>
execute sql-report delete-template adom-installed <adom> <language> [title]
execute sql-report delete-template device-default <dev-type> <language> [title]
execute sql-report export-lang <language-name> <service> <ip> <argument 1> <argument 2> <argument
      3>
execute sql-report export-template adom-installed <adom> <service> <ip> <user> <password> <file
      name> [language] [title]
execute sql-report export-template device-default <dev-type> <service> <ip> <user> <password>
      <file name> [language] [title]
execute sql-report hcache-build <adom> <name/title> <start-time> <end-time>
execute sql-report hcache-check <adom> <name/title> <start-time> <end-time>
execute sql-report import-font <service> <ip> <argument 1> <argument 2> <argument 3>
execute sql-report import-lang <language-name> <service> <ip> <argument 1> <argument 2> <argument
      3>
execute sql-report import-template <devtype> <service> <ip> <user> <password> <file name>
execute sql-report install-template <adom> <language> <service> <ip> <user> <password> <file
      name>
execute sql-report list <adom> [days-range] [layout-name]
execute sql-report list-fonts
execute sql-report list-lang [language]
execute sql-report list-schedule <adom> [sched-only | autocache-only | detail] [detail]
execute sql-report list-template adom-installed <adom> [language]
execute sql-report list-template device-default <dev-type> [language]
execute sql-report run <adom> <name/title> <start-time> <end-time>
execute sql-report view <data-type> <adom> <report-name> <filter> <view-by>
```

Variable	Description
delete-font	Delete one font.
delete-lang	Delete one language translation file.
delete-template	Delete templates. • `adom-installed` - Delete report templates installed in ADOM. • `device-default` - Delete device type default report templates.
export-lang	Export a user-defined language translation file.
export-template	Export report templates. • `adom-installed` - Export ADOM report templates to file. • `device-default` - Export device type default report templates to file.
hcache-build	Build report hcache.

Variable	Description
hcache-check	Check report hcache.
import-font	Import one font.
import-lang	Import a user-defined language translation file.
import-template	Import per device type template from a configuration file.
install-template	Install specific language templates to an ADOM.
list	List recent generated reports.
list-fonts	List all imported fonts.
list-lang	Display all supported language translation files.
list-schedule	List report schedule and autocache information.
list-template	List templates. • `adom-installed` - Display report templates installed in ADOM. • `device-default` - Display device type default report templates.
run	Run a report once.
view	View report data.
<adom>	Specify the ADOM name.
<font-name>	The name of a font.
<dev-type>	Enter the device type abbreviation: • `FGT` - FortiGate • `FMG` - FortiManager • `FCT` - FortiClient • `FML` - FortiMail • `FWB` - FortiWeb • `FCH` - FortiCache • `FAZ` - FortiAnalyzer • `FSA` - FortiSandbox • `FDD` - FortiDDoS • `FAC` - FortiAuthenticator • `FPX` - FortiProxy
<language-name>	Enter the language name to import, export, or delete a language translation file, or select one of the following options: • `English` • `French` • `Japanese` • `Korean` • `Portuguese` • `Simplified_Chinese` • `Spanish` • `Traditional_Chinese`
<service>	Enter the transfer protocol: `ftp`, `sftp`, `scp`, or `tftp`. TFTP is not available for all commands.
<ip>	Enter the server IP address.
<argument 1>	For FTP, SFTP, or SCP, type a user name. For TFTP, enter a file name.

Variable	Description
<argument 2>	For FTP, SFTP, or SCP, type a password or '-'. For TFTP, press <enter>.
<argument 3>	Enter a file name and press <enter>.
<user>	Enter a user name for the remote server.
<password>	Enter the password, or -, for the remote server user.
<file name>	Enter the name of the file.
<filter>	Set filter for the data. Enter "" to set no filter.
<data-type>	The data type to view: report-data or report-log.
<report-name>	The name of the report to view.
<name/title>	Select one of the available names or titles.
<start-time>	The start date and time of the report schedule, in the format: "HH:MM yyyy/mm/dd"
<end-time>	The enddate and time of the report schedule, in the format: "HH:MM yyyy/mm/dd"
[days-range]	The recent n days to list reports, from 1 to 99.
[layout-name]	One of the available SQL report layout names.
[language]	Enter the language abbreviation: • en - English • de - German • es - Spanish • fr - French • it - Italian • ja - Japanese • ko - Korean • pt - Portuguese • ru - Russian • zh - Simplified Chinese • zh_Hant - Traditional Chinese
[title]	Title of a specific report template.
<view-by>	View the document all or by page, "view-all" or "view-by-page".

ssh

Use this command to establish an SSH session with another system.

Syntax

```
execute ssh <destination> <username>
```

Variable	Description
<destination>	Enter the IP or FQ DNS resolvable hostname of the system you are connecting to.
<username>	Enter the user name to use to log on to the remote system.

To leave the SSH session type `exit`. To confirm that you are connected or disconnected from the SSH session, verify that the command prompt has changed.

ssh-known-hosts

Use this command to remove known SSH hosts.

Syntax

```
execute ssh-known-hosts remove-all
execute ssh-known-hosts remove-host <host/ip>
```

Variable	Description
remove-all	Remove all known SSH hosts.
remove-host	Remove the specified SSH hosts. • `<host/IP>` - The hostname or IP address of the SSH host to remove.

ssh-list-keys

Use this command to list SSH host keys fingerprint.

Syntax

```
execute ssh-list-keys
```

ssh-regen-keys

Use this command to regenerate SSH host keys.

Syntax

```
execute ssh-regen-keys
```

tac

Use this command to upload, debug, or remove dangling debug reports older than an hour.

Syntax

```
execute tac cleanup
execute tac report
execute tac upload <service> <ip> <dir> <user name> <password>
```

Variable	Description
<service>	Enter the transfer protocol: `ftp`, `sftp`, or `scp`.
<ip>	Enter the server IP address. For ftp, the port can be specified by adding `:port`.
<dir>	Enter the directory.
<user name>	Enter the username.
<password>	Enter the password or enter `-` for no password.

time

Get or set the system time.

Syntax

```
execute time [<time_str>]
```

Variable	Description
[<time_str>]	The time of day, in the form `hh:mm:ss`. • `hh` is the hour and can be `00` to `23` • `mm` is the minutes and can be `00` to `59` • `ss` is the seconds and can be `00` to `59` All parts of the time are required. Single digits are allowed for each of `hh`, `mm`, and `ss`.

If you do not specify a time, the command returns the current system time.

Example

This example sets the system time to 15:31:03:

```
execute time 15:31:03
```

top

Use this command to view the processes running on the FortiAnalyzer system.

Syntax

```
execute top <parameter> <parameter> ... <parameter>
```

Variable	Description
<parameter>	The following parameters can be used: `-hv | -bcHiOSs -d secs -n max -u|U user -p pid(s) -o field -w [cols]`

execute top help menu

Use the following commands when viewing the running processes. Press h or ? for help.

Command	Description
Z,B,E,e	Global: 'Z' colors; 'B' bold; 'E'/'e' summary/task memory scale
l,t,m	Toggle Summary: 'l' load avg; 't' task/cpu stats; 'm' memory info
0,1,2,3,I	Toggle: '0' zeros; '1/2/3' cpus or numa node views; 'I' Irix mode
f,F,X	Fields: 'f'/'F' add/remove/order/sort; 'X' increase fixed-width
L,&,<,> .	Locate: 'L'/'&' find/again; Move sort column: '<'/'>' left/right
R,H,V,J .	Toggle: 'R' Sort; 'H' Threads; 'V' Forest view; 'J' Num justify
c,i,S,j .	Toggle: 'c' Cmd name/line; 'i' Idle; 'S' Time; 'j' Str justify
x,y.	Toggle highlights: 'x' sort field; 'y' running tasks
z,b.	Toggle: 'z' color/mono; 'b' bold/reverse (only if 'x' or 'y')
u,U,o,O .	Filter by: 'u'/'U' effective/any user; 'o'/'O' other criteria
n,#,^O.	Set: 'n'/'#' max tasks displayed; Show: Ctrl+'O' other filter(s)

Command	Description
C,....	Toggle scroll coordinates msg for: up,down,left,right,home,end
k,r	Manipulate tasks: 'k' kill; 'r' renice
d or s	Set update interval
W,Y	Write configuration file 'W'; Inspect other output 'Y'
q or <Esc>	Quit

traceroute

Test the connection between the FortiAnalyzer system and another network device, and display information about the network hops between the device and the FortiAnalyzer system.

Syntax

```
execute traceroute <host>
```

Variable	Description
<host>	Enter the IP address or hostname of network device.

traceroute6

Test the connection between the FortiAnalyzer system and another network device, and display information about the network hops between the device and the FortiAnalyzer system.

Syntax

```
execute traceroute6 <host>
```

Variable	Description
<host>	Enter the IPv6 address or hostname of network device.

vm-license

Activate the VM license to the FortiAnalyzer by entering the token.

This command is only available on FortiAnalyzer VM models.

Syntax

```
execute vm-license <token>
```

Variable	Description
<token>	The VM license token.

diagnose

The `diagnose` commands display diagnostic information that help you to troubleshoot problems.

CLI commands and variables are case sensitive.

auto-delete	fmnetwork	log	test
cdb	fmupdate	pm2	upload
debug	fortilogd	report	vpn
dlp-archives	fortitoken-cloud	rtm	
docker	fwmanager	siem	
dvm	ha	sniffer	
faz-cdb	hardware	sql	
fdsm	incident	svctools	
fgfm	license	system	

auto-delete

Use this command to view and configure auto-deletion settings.

Syntax

```
diagnose auto-delete dlp-files {delete-now | list}
diagnose auto-delete log-files {delete-now | list}
diagnose auto-delete quar-files {delete-now | list}
diagnose auto-delete report-files {delete-now | list}
```

Variable	Description
dlp-files {delete-now | list}	Delete or list DLP files. • `delete-now`: Delete DLP files right now according to system automatic deletion policy. • `list`: List DLP files according to system automatic deletion policy.
log-files {delete-now | list}	Delete or list log files.

Variable	Description
	• `delete-now`: Delete log files right now according to system automatic deletion policy. • `list`: List log files according to system automatic deletion policy.
quar-files {delete-now | list}	Delete or list quarantine files. • `delete-now`: Delete quarantine files right now according to system automatic deletion policy. • `list`: List quarantine files according to system automatic deletion policy.
report-files {delete-now | list}	Delete or list report files. • `delete-now`: Delete report files right now according to system automatic deletion policy. • `list`: List report files according to system automatic deletion policy.

cdb

Use the following commands for configuration database related settings.

cdb check

Use this command to check and repair configuration database.

Syntax

```
diagnose cdb check adom-revision [adom] [preview]
diagnose cdb check internet-service-name [adom]
diagnose cdb check update-devinfo logdisk-size [new value] [0 | 1] [model-name]
diagnose cdb check update-devinfo sslvpn-flag <devname>
```

Variable	Description
adom-revision [adom] [preview]	Check or remove invalid ADOM revision database. Optionally, preview the check before running it.
internet-service-name [adom]	Check mis-matched internet service name. Optinally, specify the ADOM.
update-devinfo logdisk-size [new value] [0 | 1] [model-name]	Update device log disk size. • `new value`: Item new value. • `0 | 1`: update only empty values (default), or always update (1). • `model-name`: Only update on model name (default: all models).
update-devinfo sslvpn-flag <devname>	Upgrade the device SSL-VPN flag on the specified device.

cdb manual-fix

Use this command to manually repair the configuration database.

Syntax

```
diagnose cdb manual-fix adom <adom> <repair action>
```

Variable	Description
adom <adom> <repair action>	Manually repair adom configuration database. Enter the ADOM name. The following repair actions are available: • `cli-templates-path`: update cli template working path • `fw-policy-match-vip`: Fix firewall policy match-vip after adom upgrades from 7.0 to 7.2 • `generate-adom-ca`: Re-generate ADOM CA

cdb upgrade

Use this command to upgrade and repair configuration database.

Syntax

```
diagnose cdb upgrade check <action>
diagnose cdb upgrade force-retry <action>
diagnose cdb upgrade log
diagnose cdb upgrade pending-list
diagnose cdb upgrade summary
```

Variable	Description
check <action>	Perform a check to see if upgrade and repair is necessary. • `resync-dev-vdoms` - Resync and add any missing vdoms from device database to DVM database
force-retry <action>	Re-run an upgrade that was already performed in previous release.
log	Display the configuration database upgrade log.
pending-list	Display the list of upgrades scheduled for the next reboot.
summary	Display the firmware upgrade summary.

debug

Use the following commands to debug the FortiAnalyzer.

debug application

Use these commands to view or set the debug levels for the FortiAnalyzer applications. All of the debug levels are 0 by default.

Syntax

```
diagnose debug application alertmail <integer>
diagnose debug application apiproxyd <integer>
diagnose debug application archd <integer>
diagnose debug application auth <integer>
diagnose debug application clusterd <integer>
diagnose debug application connector <integer>
diagnose debug application csfd <integer>
diagnose debug application curl <integer>
diagnose debug application dhcpcd <integer>
diagnose debug application discoverd <integer>
diagnose debug application dmapi <integer>
diagnose debug application dns <integer>
diagnose debug application docker <integer>
diagnose debug application dump
diagnose debug application execmd <integer>
diagnose debug application fabricsyncd <integer>
diagnose debug application fazalertd <integer>
diagnose debug application fazcfgd <integer>
diagnose debug application fazincid <integer>
diagnose debug application fazmaild <integer>
diagnose debug application faznotify <integer>
diagnose debug application fazsvcd <integer> <reg exp filter>
diagnose debug application fazwatchd <integer>
diagnose debug application fdssvrd <integer>
diagnose debug application fgdlinkd <integer>
diagnose debug application fgdsvr <integer>
diagnose debug application fgdupd <integer>
diagnose debug application fgfmsd <integer> <deviceName>
diagnose debug application filefwd <integer>
diagnose debug application fileparsed <integer>
diagnose debug application fortilogd <integer>
diagnose debug application fortimanagerws <integer>
diagnose debug application fortimeter <integer>
diagnose debug application fsvrd <integer>
diagnose debug application fwdplugind <integer>
diagnose debug application gui <integer>
diagnose debug application ha <integer>
diagnose debug application ipsec <integer>
```

```
diagnose debug application keepalived <integer>
diagnose debug application lldp <integer>
diagnose debug application localmod <integer>
diagnose debug application log-aggregate <integer>
diagnose debug application logd <integer>
diagnose debug application log-fetchd <integer>
diagnose debug application logfiled <integer>
diagnose debug application logfwd <integer>
diagnose debug application lrm <integer>
diagnose debug application oftpd <integer> <IP/deviceSerial/deviceName>
diagnose debug application quotad <integer>
diagnose debug application rptchkd <integer>
diagnose debug application rptsched <integer>
diagnose debug application run-sql-rpt <integer>
diagnose debug application scansched <integer>
diagnose debug application scheduled <integer>
diagnose debug application sdnproxy <integer>
diagnose debug application siemagentd <integer>
diagnose debug application siemdbd <integer>
diagnose debug application snapd <integer>
 diagnose debug application sniffer <integer>
diagnose debug application snmpd <integer>
diagnose debug application sql-integration <integer>
diagnose debug application sqllogd <integer>
diagnose debug application sqlplugind <integer> <filter>
diagnose debug application sqlreportd <integer> <filter>
diagnose debug application sqlrptcached <integer>
diagnose debug application ssh <integer>
diagnose debug application sshd <integer>
diagnose debug application storaged <integer>
diagnose debug application syncsched <integer>
diagnose debug application uploadd <integer>
diagnose debug application vmd <integer>
```

Variable	Description
alertmail <integer>	Set the debug level of the alert email daemon.
apiproxyd <integer>	Set the debug level of the API proxy daemon.
archd <integer>	Set the debug level of the archd daemon (0 - 8).
auth <integer>	Set the debug level of the Fortinet authentication module.
clusterd <integer>	Set the debug level of the clusterd daemon.
connector <integer>	Set the debug level of the connector daemon.
csfd <integer>	Set the debug level of the Security Fabric daemon.
curl <integer>	This command is not in use.
dhcpcd <integer>	Set the debug level of the dhcpcd daemon.
discoverd <integer>	Set the debug level of the camera discovery daemon.
dmapi <integer>	Set the debug level of the dmapi daemon.

Variable	Description
dns <integer>	Set the debug level of DNS daemon.
docker <integer>	Set the debug level of the Docker daemon.
dump	Dump services.
execmd <integer>	Set the debug level of the execmd daemon.
fabricsyncd <integer>	Set the debug level of the fabricsyncd daemon (0 - 8).
fazalertd <integer>	Set the debug level of the fazalertd daemon (0 - 8).
fazcfgd <integer>	Set the debug level of the fazcfgd daemon.
fazincid <integer>	Set the debug level of the fazincid daemon.
fazmaild <integer>	Set the debug level of the fazmaild daemon.
faznotify <integer>	Set the debug level of the faznotify daemon.
fazsvcd <integer> <reg exp filter>	Set the debug level of the FAZ server daemon. Set a filter; use "" to reset. Debug logs can be filtered using simple string, regular expression, or not operator. For example, use `filter=~!request|response` to remove all requests and responses from the debug logs.
fazwatchd <integer>	Set the debug level of the fazwatchd daemon.
fdssvrd <integer>	Set the debug level of the FDS server daemon.
fgdlinkd <integer>	Set the debug level of the FGD server daemon (0 - 8).
fgdsvr <integer>	Set the debug level of the FortiGuard query daemon.
fgdupd <integer>	Set the debug level of the FortiGuard update daemon.
fgfmsd <integer> <deviceName>	Set the debug level of FGFM daemon. Enter a device name to only show messages related to that device. **Note:** Enter "" to reset. Multiple device names should be separated by commas. For example, `Host1, Host2`.
filefwd <integer>	Set the debug level of the filefwd daemon.
fileparsed <integer>	Set the debug level of the fileparsed daemon.
fortilogd <integer>	Set the debug level of the fortilogd daemon.
fortimanagerws <integer>	Set the debug level of the FortiAnalyzer Web Service.
fortimeter <integer>	Set the debug level of the FortiMeter daemon.
fsvrd <integer>	Set the debug level of the FortiService daemon.
fwdplugind <integer>	Set the debug level of the fwdplugind daemon (0 - 8).
gui <integer>	Set the debug level of the GUI.
ha <integer>	Set the debug level of HA.

Variable	Description
ipsec <integer>	Set the debug level of the IPsec daemon.
keepalived <integer>	Set the debug level of the keepalived daemon.
lldp <integer>	Set the debug level of the link layer discovery protocol (LLDP) daemon.
localmod <integer>	Set the debug level of the localmod daemon.
log-aggregate <integer>	Set the debug level of the log aggregate daemon.
logd <integer>	Set the debug level of the log daemon.
log-fetchd <integer>	Set the debug level of the log fetcher daemon.
logfiled <integer>	Set the debug level of the logfilled daemon.
logfwd <integer>	Set the debug level of the logfwd daemon.
lrm <integer>	Set the debug level of the Log and Report Manager.
oftpd <integer> <IP/deviceSerial/deviceName>	Set the debug level of the oftpd daemon. Enter an IPv4 address, device serial number, or device name to only show messages related to that device or IPv4 address. **Note:** Enter "" to reset.
quotad <integer>	Set the debug level of the quota daemon.
rptchkd <integer>	Set the debug level of the rptchkd daemon.
rptsched <integer>	Set the debug level of the rptsched daemon.
run-sql-rpt <integer>	Set the debug level of the SQL report daemon.
scansched <integer>	Set the debug level of the scan schedule daemon.
scheduled <integer>	Set the debug level of the schedule task daemon.
sdnproxy <integer>	Set the debug level of the sdnproxy daemon.
siemagentd <integer>	Set the debug level of the siemagentd daemon.
siemdbd <integer>	Set the debug level of the siemdbd daemon.
snapd <integer>	Set the debug level of the snapshot daemon.
sniffer <integer>	Set the debug level of the interface sniffer.
snmpd <integer>	Set the debug level of the SNMP daemon.
sql-integration <integer>	Set the debug level of SQL applications.
sqllogd <integer>	Set the debug level of SQL log daemon.
sqlplugind <integer> <filter>	Set the debug level of the SQL plugin daemon. Set filter for sqlplugind. **Note:** Enter "" to reset the filter.
sqlreportd <integer> <filter>	Set the debug level (0-8) of the SQL report daemon. Set the filter for sqlreportd.

Variable	Description
	Note: Enter "" to reset the filter. Without `<integer>` and `<filter>`, it shows the current debug level and filter of sqlreportd.
sqlrptcached <integer>	Set the debug level of the SQL report caching daemon.
ssh <integer>	Set the debug level of SSH protocol transactions.
sshd <integer>	Set the debug level of the SSH daemon.
storaged <integer>	Set the debug level of communication with java clients.
syncsched <integer>	Set the debug level of the syncsched daemon.
uploadd <integer>	Set the debug level of the upload daemon.
vmd <integer>	Set the debug level for vmd.

Example

This example shows how to set the debug level to 7 for the upload daemon:

```
diagnose debug application uploadd 7
```

debug backup-oldformat-script-logs

Use this command to backup script log files that failed to be upgraded to the FTP server.

Syntax

```
diagnose debug backup-oldformat-script-logs <ip> <string> <username> <password>
```

Variable	Description
<ip>	Enter the FTP server IP address.
<string>	Enter the path/filename to save the log to the FTP server.
<username>	Enter the user name on the FTP server.
<password>	Enter the password associated with the user name.

debug cdbchk

Use these commands to enable or disable CLI CDB check debug output.

Syntax

```
diagnose debug cdbcheck {enable | disable}
```

debug cli

Use this command to set the debug level of CLI.

Syntax

```
diagnose debug cli <integer>
```

Variable	Description
<integer>	Set the debug level of the CLI (0 - 8, default = 3).

debug console

Use this command to enable or disable console debugging.

Syntax

```
diagnose debug console {enable | disable}
```

Variable	Description
{enable | disable}	Enable/disable console debugging.

debug coredump

Use this command to manage daemon and process core dumps.

Syntax

```
diagnose debug coredump crash-pid <pid>
diagnose debug coredump delete <daemon>
diagnose debug coredump disable <daemon>
diagnose debug coredump disable-pid <pid>
diagnose debug coredump enable <daemon>
diagnose debug coredump enable-once <daemon>
diagnose debug coredump enable-pid <pid>
diagnose debug coredump list
diagnose debug coredump upload <daemon> <service> <ip> <username> <password> <directory>
```

Variable	Description
crash-pid <pid>	Crash running process for core dump.
delete <daemon>	Delete core dumps for a daemon.
disable <daemon>	Disable core dump for a daemon.
disable-pid <pid>	Disable core dump of running process.
enable <daemon>	Enable core dump for a daemon.
enable-once <daemon>	Enable core dump the next time a daemon starts (one time only).
enable-pid <pid>	Enable core dump of running process.
list	List core dumps.
upload <daemon> <service> <ip> <username> <password> <directory>	Upload core dumps for a daemon to the specified server.

debug crashlog

Use this command to clear the debug crash log.

Syntax

```
diagnose debug crashlog clear
diagnose debug crashlog read
```

Variable	Description
clear	Clear the crash log.
read	Read the crash log.

debug disable

Use this command to disable debugging.

Syntax

```
diagnose debug disable
```

debug enable

Use this command to enable debugging.

Syntax

```
diagnose debug enable
```

debug filter

Use this command to filter the terminal session debug output. The debug filter is disabled by default.

Syntax

```
diagnose debug filter <filter>
```

Variable	Description
<filter>	Set a pattern to filter the debug output. This is a global pattern for all session terminals that overrides the old pattern. You can use a normal string search or a regex search as the filter: • Normal string search: strstr(msg, filter) For example: `diagnose debug filter "test"` For inverse matching, use an exclamation point: `diagnose debug filter "!test"` • Regex search: regexec(regex, msg, 0, NULL, 0)) For example: `diag debug filter "~(req|rsp)"` For inverse matching, use an exclamation point: `diagnose debug filter "~!(req|rsp)"` Leave blank to show the current pattern. Enter `""` to reset the filter.

debug gui

Use these commands to enable or disable the GUI debug flag.

Syntax

```
diagnose debug gui {enable | disable}
```

debug info

Use this command to show active debug level settings.

Syntax

```
diagnose debug info
```

debug klog

Use this command to show all kernel logs.

Syntax

```
diagnose debug klog clear
diagnose debug klog read
```

debug raw-elog

Use this command to show raw elog.

Syntax

```
diagnose debug raw-elog [filter]
```

Variable	Description
[filter]	Set filter to local event logs.

debug reset

Use this command reset the debug level settings. All debug settings will be reset.

Syntax

```
diagnose debug reset
```

debug service

Use this command to view or set the debug level of various service daemons, and to dump the services.

Syntax

```
diagnose debug service anonymous <integer>
diagnose debug service cdb <integer>
diagnose debug service cluster <integer>
diagnose debug service cmdb <integer>
diagnose debug service csf <integer>
diagnose debug service dbcache <integer>
diagnose debug service dvmcmd <integer>
diagnose debug service dvmdb <integer>
diagnose debug service dump
diagnose debug service fazcmd <integer>
diagnose debug service fazconf <integer>
diagnose debug service fgfm-cluster <integer>
diagnose debug service httpd <integer>
diagnose debug service main <integer>
diagnose debug service rpc-auth <integer>
diagnose debug service sys <integer>
diagnose debug service task <integer>
```

Variable	Description
<integer>	The debug level
dump	Dump the services.

The `anonymous`, `dbcache`, `dump`, `fazcmd`, and `rpc-auth` commands are only available on hardware devices.

debug sysinfo

Use this command to show system information.

Syntax

```
diagnose debug sysinfo
```

debug sysinfo-log

Use this command to generate one system info log file every two minutes.

Syntax

```
diagnose debug sysinfo-log {on | off}
```

debug sysinfo-log-backup

Use this command to backup all sysinfo log files to an FTP server.

Syntax

```
diagnose debug sysinfo-log-backup <server> <filepath> <user> <password>
```

Variable	Description
<server>	Enter the FTP server IP address.
<filepath>	Enter the path/filename to save the log to the FTP server.
<user>	Enter the user name on the FTP server.
<password>	Enter the password associated with the user name.

debug sysinfo-log-list

Use this command to display system information elogs.

Syntax

```
diagnose debug sysinfo-log-list <integer>
```

Variable	Description
<integer>	Display the last n elogs (default = 10).

debug timestamp

Use this command to enable or disable debug timestamp.

Syntax

```
diagnose debug timestamp {enable | disable}
```

debug vmd

Use this command to show all the VMD (Virtual Machine Daemon) logs.

Syntax

```
diagnose debug vmd
```

debug vminfo

Use this command to show VM license information.

This command is only available on FortiAnalyzer VM models.

Syntax

```
diagnose debug vminfo
```

dlp-archives

Use this command to manage the DLP archives.

Syntax

```
diagnose dlp-archives quar-cache list-all-process
diagnose dlp-archives quar-cache kill-process <pid>
diagnose dlp-archives rebuild-quar-db
diagnose dlp-archives remove
diagnose dlp-archives statistics {show | flush}
diagnose dlp-archives status
diagnose dlp-archives upgrade
diagnose dlp-archives verify-quar-db
```

Variable	Description
quar-cache list-all-process	List all processes that are using the quarantine cache.
quar-cache kill-process <pid>	Kill a process that is using the quarantine cache.

Variable	Description
rebuild-quar-db	Rebuild Quarantine Cache DB
remove	Remove all upgrading DLP archives.
statistics {show | flush}	Display or flush the quarantined and DLP archived file statistics.
status	Running status.
upgrade	Upgrade the DLP archives.
verify-quar-db	Verify the quarantine cache database. This command is only available on hardware devices.

docker

Use this command to view Docker status, clean up Docker data, and upgrade Docker management extensions.

As of FortiAnalyzer 7.6.3, there are no management extensions supported on FortiAnalyzer.

Syntax

```
diagnose docker cleanup
diagnose docker reset
diagnose docker status
diagnose docker upgrade
```

Variable	Description
cleanup	Remove unused Docker data.
reset	Reset a docker. Select to remove a docker volume and restart.
status	Show Docker status.
upgrade	Upgrade the specified management extension.

dvm

Use the following commands for DVM related settings.

dvm adom

Use this command to list ADOMs.

Syntax

```
diagnose dvm adom list [adom]
diagnose dvm adom lockinfo <admon>
diagnose dvm adom reset-default-flags
diagnose dvm adom time-zone
diagnose dvm adom unlock <adom>
```

Variable	Description
list [adom]	List ADOMs, state, product, OS version (OSVER), major release (MR), name, mode, VPN management, and IPS. Optionally, specify an ADOM name or OID.
lockinfo <adom>	Print adom lock states. Enter the ADOM or OID.
reset-default-flags	Reset ADOM default flags.
time-zone	List ADOM time zone infortmation.
unlock <adom>	Remove DVM lock by FortiManager.

dvm capability

Use this command to set the DVM capability.

Syntax

```
diagnose dvm capability set {all | standard}
diagnose dvm capability show
```

Variable	Description
set {all | standard}	Set the capability to all or standard.
show	Show what the capability is set to.

dvm chassis

Use this command to list chassis and supported chassis models.

Syntax

```
diagnose dvm chassis list
diagnose dvm chassis supported models
```

Variable	Description
list	List chassis.
supported-models	List supported chassis models.

dvm check-integrity

Use this command to check the DVM database integrity.

Syntax

```
diagnose dvm check-integrity
```

dvm csf

Use this command to print the CSF configuration.

Syntax

```
diagnose dvm csf <adom> <category>
```

Variable	Description
<adom>	The ADOM name.
<category>	The category: • `all`: Dump all CSF categories • `group`: Dump CSF group • `intf-role`: Dump interface role • `user-device`: Dump user device

dvm dbstatus

Use this command to print the database status.

Syntax

```
diagnose dvm dbstatus
```

dvm debug

Use this command to enable or disable debug channels, and show debug message related to DVM.

Syntax

```
diagnose dvm debug {enable | disable} <channel> <channel> <channel> ... <channel>
diagnose dvm debug trace [filter]
```

Variable	Description
{enable | disable}	Enable/disable debug channels.
trace	Show the DVM debug message.
<channel>	The following channels are available: `all`, `dvm_db`, `dvm_dev`, `shelfmgr`, `ipmi`, `lib`, `dvmcmd`, `dvmcore`, `gui`, and `monitor`.
[filter]	The following filters are available: `all`, `dvm_db`, `dvm_dev`, `shelfmgr`, `ipmi`, `lib`, `dvmcmd`, `dvmcore`, `gui`, and `monitor`.

dvm device

Use this command to list devices or objects referencing a device.

Syntax

```
diagnose dvm device auto-management-list <device>
diagnose dvm device coordinate <action> [device]
diagnose dvm device delete <adom> <device>
diagnose dvm device dynobj <device>
diagnose dvm device list <device> <vdom>
diagnose dvm device lockinfo <device>
diagnose dvm device monitor <device> <api>
diagnose dvm device object-reference
diagnose dvm device reload <device> <vdom> <category> <object>
```

Variable	Description
auto-management-list <device>	List devices with auto management flags information. Optionally, enter a device name or OID.
coordinate <action> [device]	List device coordinate.

Variable	Description
	Enter an action: • `list` • `update` • `clear` Optionally, enter a device name or OID.
delete <adom> <device>	Delete a device in a specific ADOM.
dynobj <device>	List dynamic objects on this device.
list <device> <vdom>	List devices. Optionally, enter a device or VDOM name.
lockinfo <device>	Print device lock states. Enter the device name or OID.
monitor <device> <api>	JSON API for device monitor. Specify the device name and the monitor API name.
object-reference	List object reference.
reload <device> <vdom> <category> <object>	Reload device config. Specify the device name, VDOM, category (or *all* for all categories), and object.

dvm device-tree-update

Use this command to enable or disable device tree automatic updates.

Syntax

```
diagnose dvm device-tree-update {enable | disable}
```

Variable	Description
{enable | disable}	Enable/disable device tree automatic updates.

dvm extender

Use these commands to list FortiExtender devices, synchronize FortiExtender data via JSON, and perform other actions.

Syntax

```
diagnose dvm extender copy-data-to-device <device>
diagnose dvm extender import-profile <device> <vdom> <name>
diagnose dvm extender import-template <device> <extender id>
diagnose dvm extender list [devname]
diagnose dvm extender reset-adom <adom> [clear-only] [skip-restart]
diagnose dvm extender set-template <device> <extender id> <template>
```

```
diagnose dvm extender sync-extender-data <devname> [savedb/no/force] [syncadom/no] [task]
```

Variable	Description
copy-data-to-device <device>	Copy extender data (data plan and SIM profile) to the device. Enter the device name.
import-profile <device> <vdom> <name>	Import extender profile to the ADOM. Enter the device name or ID, VDOM, and profile name.
import-template <device> <extender id>	Import dataplan and SIM profile to the ADOM template. Enter the device name or ID, and the extender ID.
list [device]	List FortiExtender devices, or those connected to a specific device.
reset-adom <adom> [clear-only] [skip-restart]	Reset all extender data in the ADOM: • `adom`: Enter `121` for FortiCarrier, `147` for FortiFirewall, `151` for Unmanaged_Devices, and `3` for root Optionally, use the following variables: • `clear-only`: Do not sync extender data to the ADOM • `skip-restart`: Do not restart FortiManager after the operation
set-template <device> <extender id> <template>	Set template to the extender modem. Enter the device name or ID, extender ID, and template.
sync-extender-data <devname> [savedb] [syncadom] [task]	Synchronize FortiExtender data by JSON. Optionally: save the data to the database, synchronize the ADOM, and/or create a task.

dvm fap

Use this command to list the FortiAP devices connected to a device.

Syntax

```
diagnose dvm fap list <devname>
```

Variable	Description
<devname>	The name of the device.

dvm fsw

Use this command to list the FortiSwitch devices connected to a device.

Syntax

```
diagnose dvm fsw list <devname>
```

Variable	Description
<devname>	The name of the device.

dvm group

Use this command to list groups.

Syntax

```
diagnose dvm group list
```

Variable	Description
list	List groups.

dvm lockinfo

Use this command to print the DVM lock states.

Syntax

```
diagnose dvm lockinfo
```

dvm proc

Use this command to list DVM process (dvmcmd) information.

Syntax

```
diagnose dvm proc list
```

dvm psirt

Use these commands to list device PSIRT data.

Syntax

```
diagnose dvm psirt controller-status clear
diagnose dvm psirt controller-status list <adom> [<device>]
```

```
diagnose dvm psirt device <adom> [<device> | fap | faz | fsw]
diagnose dvm psirt ir-number <ir-number>
diagnose dvm psirt product <product>
diagnose dvm psirt reset [clear-only]
diagnose dvm psirt version
```

Variable	Description
controller-status clear	Clear the controller status,
controller-status list <adom> [<device>]	List the controller status.
device <adom> [<device> | fap | faz | fsw]	List the PSIRT data of the device(s).
ir-number <ir-number>	Check PSIRT data by entering the IR number of the PSIRT.
product <product>	List PSIRT data by product. Use help (?) to determine available products.
reset [clear-only]	Reset PSIRT data for device.
version	List version info of PSIRT.

dvm remove

Use this command to remove all unused IPS package files.

Syntax

```
diagnose dvm remove
```

dvm supported-platforms

Use this command to list supported platforms.

Syntax

```
diagnose dvm supported-platforms list <detail>
diagnose dvm supported-platforms mr-list
diagnose dvm supported-platforms fimg-list
diagnose dvm supported-platforms fortiswitch [adom]
```

Variable	Description
fimg-list	List supported platforms by fimg ID.

Variable	Description
fortiswitch [adom]	List supported platforms in FortiSwitch manager. Optionally, enter the ADOM name.
list <detail>	List supported platforms by device type. Enter *detail* to show details with syntax support.
mr-list	List supported platforms by major release.

dvm task

Use this command to repair or reset the task database.

Syntax

```
diagnose dvm task list <adom> <type>
diagnose dvm task lockinfo
diagnose dvm task repair
diagnose dvm task reset
```

Variable	Description
list <adom> <type>	List task database information.
lockinfo	Print task lock states.
repair	Repair the task database while preserving existing data where possible. The FortiAnalyzer will reboot after the repairs.
reset	Reset the task database to its factory default state. All existing tasks and the task history will be erased. The FortiAnalyzer will reboot after the reset.

dvm taskline

Use this command to repair the task lines.

Syntax

```
diagnose dvm taskline repair
```

Variable	Description
repair	Repair the task lines while preserving data wherever possible. The FortiAnalyzer will reboot after the repairs.

dvm template

Use this command to update the default template settings.

Syntax

```
diagnose dvm template update <category> <adom> [country]
```

Variable	Description
update <category> <adom> [country]	Enter the template category {wtp | vap | wifi-setting | extender} and ADOM. Optionally, enter a country ID or country ISO code.

dvm transaction-flag

Use this command to edit or display DVM transaction flags.

Syntax

```
diagnose dvm transaction-flag [abort | debug | none]
```

Variable	Description
transaction-flag [abort | debug | none]	Set the transaction flag.

dvm workflow

This command does not function on FortiAnalyzer.

faz-cdb

Use these commands for FortiAnalyzer database configuration related settings.

faz-cdb fix

Use this command to fix the FortiAnalyzer configuration database.

Syntax

```
diagnose faz-cdb fix check-report-folder <adom name>
diagnose faz-cdb fix fix-report-folder <adom name>
```

Variable	Description
check-report-folder	Check FortiAnalyzer configuration database report folders from the last upgrade backup.
fix-report-folder	Fix FortiAnalyzer configuration database report folders from the last upgrade.
<adom name>	Enter the ADOM name or enter `all` for all ADOMs.

faz-cdb reset

Use this command to reset the FortiAnalyzer configuration database.

Syntax

```
diagnose faz-cdb reset
```

faz-cdb upgrade

Use this command to upgrade the FortiAnalyzer configuration database.

Syntax

```
diagnose faz-cdb upgrade check-adom <adom name>
diagnose faz-cdb upgrade check-global
diagnose faz-cdb upgrade export-config <adom name> <service> <ip> <user> <password>
      <path/filename>
diagnose faz-cdb upgrade import-config <adom name> <service> <ip> <user> <password>
      <path/filename>
diagnose faz-cdb upgrade log
diagnose faz-cdb upgrade summary
```

Variable	Description
check-adom	Check the last ADOM upgrade result.
check-global	Check the last global upgrade result.
export-config	Export the FortiAnalyzer configuration database files.
import-config	Import the FortiAnalyzer configuration database files.

Variable	Description
log	Display the FortiAnalyzer configuration database upgrade log.
summary	Display the FortiAnalyzer configuration database summary.
<adom name>	Enter the ADOM name or enter `all` for all ADOMs.
<service>	Enter the transfer protocol one of: `ftp`, `sftp`, or `scp`.
<ip>	Enter the server IP address. For FTP, the port can be specified by adding `:port` to the server IP address.
<user>	Enter a user name of the remote server.
<password>	Enter the password or `'-'` for user.
<path/filename>	Enter the path/ filename on remote server.

fdsm

Use this command to check the FortiCloud Service.

Syntax

```
diagnose fdsm contract-controller-update
```

Variable	Description
contract-controller-update	Update contract controller.

fgfm

Use this command to diagnose the FGFM session list.

Syntax

```
diagnose fgfm session-list
```

fmnetwork

Use the following commands for network related settings.

fmnetwork arp

Use this command to manage ARP.

Syntax

```
diagnose fmnetwork arp del <intf-name> <ip>
diagnose fmnetwork arp list
```

Variable	Description
del <intf-name> <ip>	Delete an ARP entry.
list	List ARP entries.

fmnetwork interface

Use this command to view interface information.

Syntax

```
diagnose fmnetwork interface detail <interface>
diagnose fmnetwork interface list [<interface>]
```

Variable	Description
detail <interface>	View a specific interface's details, for example: `port1`.
list [<interface>]	List all interface details.

fmnetwork netstat

Use this command to view network statistics.

Syntax

```
diagnose fmnetwork netstat list [-r]
diagnose fmnetwork netstat tcp [-r]
```

```
diagnose fmnetwork netstat udp [-r]
```

Variable	Description
list [-r]	List all connections, or use -r to list only resolved IP addresses.
tcp [-r]	List all TCP connections, or use -r to list only resolved IP addresses.
udp [-r]	List all UDP connections, or use -r to list only resolved IP addresses.

fmupdate

Use these commands to diagnose update services.

Syntax

```
diagnose fmupdate check-disk-quota {export-import | fds | fgd | all} <clean>
diagnose fmupdate crdb {generate | view}
diagnose fmupdate dbcontract [<serial>]
diagnose fmupdate del-device <serial>
diagnose fmupdate del-log
diagnose fmupdate del-object {fds | fgd | fqfq | geoip} [<object_type>] [<object_version>]
diagnose fmupdate del-serverlist {fct | fds | fgd}
diagnose fmupdate dump-um-db {um2.db | fds.db} [<table>]
diagnose fmupdate fds-dump {breg | fds-log | fect | fmgi | imlt | imlt-d | imlt-d20 | immx | oblt
      | srul | subs}
diagnose fmupdate fds-getobject <filter type> <filter> <other options>
diagnose fmupdate fds-update-info
diagnose fmupdate fgd-bandwidth {1h | 6h | 12h | 24h | 7d | 30d}
diagnose fmupdate fgd-dbver [{as1 | as2 | as4 | av | av2 | cat1 | fq | geoip | iotm | iotr | iots
      | wf}]
diagnose fmupdate fgd-del-db [{as1 | as2 | as4 | av | av2 | cat1 | fq | geoip | iotm | iotr |
      iots | wf}]
diagnose fmupdate fgd-dump [{as1 | as2 | as4 | av | av2 | cat1 | fq | geoip | iotm | iotr | iots
      | wf}]
diagnose fmupdate fgd-wfas-clear-log
diagnose fmupdate fgd-wfas-log [{name | ip} {<name> | <ip addr>}]
diagnose fmupdate fgd-wfas-rate {wf | av | as_ip | as_url | as_hash}
diagnose fmupdate fgd-wfdevice-stat {10m | 30m | 1h | 6h | 12h | 24h | 7d} {all | <serial>
      [<integer>]
diagnose fmupdate fgd-wfserver-stat {top10sites | top10devices} [{10m | 30m | 1h | 6h | 12h |
      24h | 7d}]
diagnose fmupdate fgt-del-statistics
diagnose fmupdate fgt-del-um-db [{um.db | um2.db | fds.db | um_stat.db | som.dat}]
diagnose fmupdate fortitoken {seriallist | add | del} <serial>
diagnose fmupdate list-object {fds | fgd | fqfq | geo-ip} [<object_type>] [<object_version>]
diagnose fmupdate priority-download {clear | list | view}
diagnose fmupdate service-restart {fds | fgd | fmtr | fwm}
diagnose fmupdate show-bandwidth {fct | fgt | fml | faz} {1h | 6h | 12h | 24h | 7d | 30d}
diagnose fmupdate show-dev-obj [<serial>]
diagnose fmupdate test {fgd-url-rating | fgd-test-client | ping-server | fds-contract} <string>
      <string> <string> <string> <string>
```

```
diagnose fmupdate update-status {fds | fct | fgd}
diagnose fmupdate updatenow {fds | fgd} {fgd | fgfq | geoip} {SelectivePoll | Poll |
      Consolidation | Command}
diagnose fmupdate view-configure {fds | fct | fgd | fmtr}
diagnose fmupdate view-linkd-log {fct | fds | fgd}
diagnose fmupdate view-serverlist {fds | fgd}
diagnose fmupdate view-service-info {fds | fgd}
diagnose fmupdate vm-license
```

Variables	Description
check-disk-quota {export-import | fds | fgd | all} <clean>	Check the related directory size. Clean the export/import directory, if necessary.
crdb {generate | view}	Generate or view certificate files from the database.
dbcontract [<serial>]	Dump the subscriber contract. Optionally, enter the serial number of the device.
del-device <serial>	Delete a device. Optionally, enter a serial number for the device.
del-log	Delete all the logs for FDS and FortiGuard update events.
del-object {fds | fgd | fqfq | geoip} [<object_type>] [<object_version>]	Remove all objects from the specified service. Optionally, enter the object type and version or time.
del-serverlist {fct | fds | fgd}	Delete the server list file (fdni.dat) from the specified service.
dump-um-db {um2.db | fds.db} [<table>]	Dump um databases or dump either um2 or fds database. Optionally, you can dump a specified table in um2 or fds databases.
fds-dump {breg | fds-log | fect | fmgi | imlt | imlt-d | imlt-d20 | immx | oblt | srul | subs}	Dump FDS files: • `breg`: Dump the FDS beta serial numbers. • `fds-log`: Dump the FDS svrd log. Optionally, enter a rolling number from 0 to 10. • `fect`: Dump the FortiClient image file. Choose from the two available options of dumping the FortiClient file for the server or the client. • `fmgi`: Dump FMGI (Object description details) file. • `imlt`: Dump FGT image list file. • `imlt-d`: Dump FGT image file for downstream device. • `imlt-d20`: Dump FGT image list file for downsteam, v2.0. • `immx`: Dump the image upgrade matrix file. You can dump the IMMX files for FortiManager, FortiGate, or FortiCloud. • `oblt`: Dump the object list file. You can dump the object list files for FGT, FCT, FGD, FQFQ, or geoip services. You can also dump the downstream object file for one of these services. • `srul`: Dump the FDS select filtering rules. • `subs`: Dump Contract file.
fds-getobject <filter type> <filter> <other options>	Get the versions of all FortiGate objects for antivirus-IPS. • `<filter type>`: Enter `product` or `objid` as the filter type. • `<filter>`: Enter an available filter. These filters are available only when you select `product` as your filter type. Enter `all` for all product filters.

Variables	Description
	• <other options>: Enter used to show used-only objects or raw to show response in raw JSON format.
fds-update-info	Display scheduled update information.
fgd-bandwidth {1h | 6h | 12h | 24h | 7d | 30d}	Display the download bandwidth.
fgd-dbver [{as1 | as2 | as4 | av | av2 | cat1 | fq | geoip | iotm | iotr | iots | wf}]	Get the version of the database. Optionally, enter the database type: • as1: Antispam (IP). • as2: Antispam (URL). • as4: Antispam (HASH). • av: AntiVirus Query. • av2: Outbreak Prevention. • cat1: Query Category. • fq: File Query. • geoip: GeoIP. • iotm: IoT (mapping). • iotr: IoT (range). • iots: IoT (single). • wf: Webfilter.
fgd-del-db [{as1 | as2 | as4 | av | av2 | cat1 | fq | geoip | iotm | iotr | iots | wf}]	Delete FortiGuard database. Optionally, enter the database type: • as1: Antispam (IP). • as2: Antispam (URL). • as4: Antispam (HASH). • av: AntiVirus Query. • av2: Outbreak Prevention. • cat1: Query Category. • fq: File Query. • geoip: GeoIP. • iotm: IoT (mapping). • iotr: IoT (range). • iots: IoT (single). • wf: Webfilter.
fgd-dump [{as1 | as2 | as4 | av | av2 | cat1 | fq | geoip | iotm | iotr | iots | wf}]	Dump the FortiGuard information. Optionally, select a database category type: • as1: Antispam (IP). • as2: Antispam (URL). • as4: Antispam (HASH). • av: AntiVirus Query. • av2: Outbreak Prevention. • cat1: Query Category.

Variables	Description
	• `fq`: File Query. • `geoip`: GeoIP. • `iotm`: IoT (mapping). • `iotr`: IoT (range). • `iots`: IoT (single). • `wf`: Webfilter.
fgd-wfas-clear-log	Clear the FortiGuard service log file.
fgd-wfas-log [{name | ip} {<name> | <ip addr>}]	View the FortiGuard service log file. Optionally, enter the device filter type, and device name or IPv4 address.
fgd-wfas-rate [{as_hash | as_ip | as_url | av | av2 | fq | wf}]	Get the web filter / antispam rating speed. Optionally, enter the server type: • `as_hash`: Antispam (HASH). • `as_ip`: Antispam (IP). • `as_url`: Antispam (URL). • `av`: AntiVirus Query. • `av2`: Outbreak Prevention. • `fq`: File Query. • `wf`: Webfilter.
fgd-wfdevice-stat {10m | 30m | 1h | 6h | 12h | 24h | 7d} <serial> [<integer>]	Display web filter device statistics. Enter `all` or a specific device's serial number. Optionally, enter the number of time periods to display (default = 1).
fgd-wfserver-stat {top10sites | top10devices} [{10m | 30m | 1h | 6h | 12h | 24h | 7d}]	Display web filter server statistics for the top 10 sites or devices. Optionally, enter the time frame to cover.
fgt-del-statistics	Remove all statistics (antivirus / IPS and web filter / antispam). This command requires a reboot.
fgt-del-um-db [{um.db | um2.db | fds.db | um_stat.db | som.dat}]	Remove `UM`, `UM2`, `fds`, and `um_stat` databases. This command requires a reboot. **Note**: um.db is a sqlite3 database that update manager uses internally. It will store AV/IPS package information of downloaded packages. This command removes the database file information. The package is not removed. After the reboot, the database will be recreated. Use this command if you suspect the database file is corrupted.
fortitoken {seriallist | add | del} <serial>	FortiToken related operations.
list-object {fds | fgd | fqfq | geo-ip} [<object_type>] [<object_version>]	List downloaded objects of linkd service. Optionally, enter the object type and version or time.
priority-download {clear | list | view}	Command for priority download: • `clear`: view config.

Variables	Description
	• `list`: list object id of list. • `view`: clear config.
service-restart {fds | fgd | fmtr | fwm}	Restart the linkd service.
show-bandwidth {fct | fgt | fml | faz} {1h | 6h | 12h | 24h | 7d | 30d}	Display the download bandwidth for a device type over a specified time period.
show-dev-obj [<serial>]	Display an objects version of a device. Optionally, enter a serial number.

test {fgd-url-rating | fgd-test-client | ping-server | fds-contract} <string> <string> <string> <string> <string>	Test tools:
	• `fgd-url-rating`: Rate URLs within the FortiManager database using the hostname or IP of the FortiGuard server.
	  • `<string>`: Enter the hostname or IP of the FortiGuard server.
	  • `<string>`: Enter the FortiGate serial number.
	  • `<string>`: Enter the category version.
	  • `<string>`: Enter the URL.
	  • `<string>`: Enter the IP (optional).
	• `fgd-test-client`: Execute FortiGuard test client using the hostname or IP of the FortiGuard server.
	  • `<string>`: Enter the hostname or IP of the FortiGuard server.
	  • `<string>`: Enter the serial number of the device.
	  • `<string>`: Enter the query number per second (for stress test) or URL (for single query).
	  • `<string>`: Enter the category version (optional, default 7).
	• `ping-server`: Check connection of FortiGuard servers.
	  • `<string>`: Enter the DNS server (optional).
	  • `<string>`: Enter the server number or address.
	• `fds-contract`: Get the fds contract by SelectivePoll.
	  • `<string>`: Enter the details (optional).

update-status {fds | fct | fgd}	Display the update status for a service.
updatenow {fds | fgd} {fgd | fgfq | geoip} {SelectivePoll | Poll | Consolidation | Command}	Update immediately. Select a service, service type, and task type. **Note**: Selecting a service and task type is only available when the service is `fgd`.
view-configure {fds | fct | fgd | fmtr}	Dump the running configuration.
view-linkd-log {fct | fds | fgd}	View the linkd log file.
view-serverlist {fds | fgd}	Dump the server list.
view-service-info {fds | fgd}	Display the service information.
vm-license	Dump the FortiGate VM license.

fortilogd

Use this command to view FortiLog daemon information.

Syntax

```
diagnose fortilogd lograte
diagnose fortilogd lograte-adom
diagnose fortilogd lograte-device [filter]
diagnose fortilogd lograte-total
diagnose fortilogd lograte-type
diagnose fortilogd logvol-adom
diagnose fortilogd msgrate
diagnose fortilogd msgstat [flush]
diagnose fortilogd status
```

Variable	Description
lograte	Display the log rate.
lograte-adom	Display log rate by ADOM.
lograte-device [filter]	Display log rate by device.
lograte-total	Display log rate by total.
lograte-type	Display log rate by type.
logvol-adom	Display the GB/day by ADOM.
msgrate	Display log message rate.
msgstat [flush]	Display or flush log message statuses.
status	Running status.

fortitoken-cloud

Use these commands to show the FortiToken Cloud (FTC) status or activate a FTC free trial.

Syntax

```
diagnose fortitoken-cloud status
diagnose fortitoken-cloud trial
```

Variable	Description
status	Show the FCT status.
trial	Activate a FTC free trial.

fwmanager

Use these commands to manage firmware.

Syntax

```
diagnose fwmanager fwm-log <dump> [rolling number]
diagnose fwmanager image-clear
diagnose fwmanager image-delete <file>
diagnose fwmanager image-download <platform> <version>
diagnose fwmanager image-list <product> [raw]
diagnose fwmanager profile <action> [adom] <device | group | profile> <id | name> <raw | name>
      <raw>
diagnose fmmanager report <action> <argument 1> <argument 2>
diagnose fwmanager service-restart
diagnose fwmanager set-controller-schedule <device> <controller_id> <version> [date_time]
diagnose fwmanager set-dev-schedule <device> <version> [flags] [date_time]
diagnose fwmanager set-grp-schedule <group> <version> [flags] [date_time]
diagnose fwmanager show-dev-disk-check-status <device>
diagnose fwmanager show-dev-upgrade-path <device> <version>
diagnose fwmanager show-grp-disk-check-status <group>
diagnose fwmanager test-upgrade-path <platform> <from-version> <to-version> [debug]
```

Variable	Description
fwm-log <dump> [rolling number]	View the firmware manager log file. Optionally, dump whole log. Optionally, enter a rolling number from 0 to 10.
image-clear	Clear all local images and its FCP object files.
image-delete <file>	Delete a local image.
image-download <platform> <version>	Download the official image. Enter the platform name and version.
image-list <product> [raw]	Get the local firmware image list for the product: • FGT: FortiGate • FMG: FortiManager • FAZ: FortiAnalyzer • FAP: FortiAP • FSW: FortiSwitch • FXT: FortiExtender

Variable	Description
	Optionally, enter `raw` get the raw JSON response.
profile <action> [adom] <device | group | profile> <id | name> <raw | name> <raw>	Clear, list, or synchronize the firmware profile setting. Enter one of the following actions: • `cancel` • `clear` • `list` • `list-by-device` • `sync` If using `list-by-device`, enter the name or id of the device or group. If using `cancel`, enter the profile name, device name or id, and, optionally, enter raw to show the raw data.
service-restart	Restart the firmware manager server.
set-controller-schedule <device> <controller_id> <version> [date_time]	Create a controller upgrade schedule for a device.
set-dev-schedule <device> <version> [flags] [date_time]	Create an upgrade schedule for a device.
set-grp-schedule <group> <version> <flags> <date_time>	Create an upgrade schedule for a group.
show-dev-disk-check-status <device>	Show whether the device needs a disk check.
show-dev-upgrade-path <device> <version>	Show the possible upgrade path.
show-grp-disk-check-status <group>	Show whether the devices in the group need disk checks.
test-upgrade-path <platform> <from-version> <to-version> [debug]	Show possible FortiGate upgrade paths.

ha

Use this command to view and manage high availability.

Syntax

```
diagnose ha check-data {start | stop | status}
diagnose ha data-check-report {read | delete}
```

```
diagnose ha dump-cloud-api-log
diagnose ha dump-datalog
diagnose ha failover <device-id>
diagnose ha force-cfg-resync
diagnose ha load-balance
diagnose ha logs
diagnose ha request-init-sync
diagnose ha restart-init-sync
diagnose ha restore-preemption
diagnose ha stats [verbose]
diagnose ha status
diagnose ha trace-client-req {enable | disable}
```

Variable	Description
check-data {start | stop | status}	Start/stop or check status of database hash and revision files.
data-check-report {read | delete}	Read or delete the data check validation report.
dump-cloud-api-log	Dump cloud API log.
dump-datalog	Dump the HA data log.
failover <device-id>	Force HA failover. Use the device ID of the new primary device, or re-elect from backup FortiAnalyzer devices if not specified.
force-cfg-resync	Force HA to re-synchronize the configuration.
load-balanace	HA load balance status.
logs	Get HA logs.
request-init-sync	Request to redo HA initial sync. This command can only be run on the secondary unit.
restart-init-sync	Restart HA initial sync. This command can only be run on the primary unit.
restore-preemption	Restore preemption setting by HA config.
stats [verbose]	Get HA statistics. Optionally, get verbose output.
status	Get HA status.
trace-client-req {enable | disable}	Enable/disable trace of client side request.

hardware

Use this command to view hardware information. This command provides comprehensive system information including: CPU, memory, disk, and RAID information.

Syntax

```
diagnose hardware info
```

incident

Use this command to view incident attachment information

Syntax

```
diagnose incident attachment status <adom> <attachment type> [detail]
```

Variable	Description
attachment	Incident's Attachment.
status	Attachment status information.
<adom>	ADOM name or `all` for all ADOMs.
<attachment type>	The attachment type: `report`, `alertevent`, `note`, `file`, or `all` for all types.
[detail]	Show detailed information.

license

Use this command to check license information.

Syntax

```
diagnose license list
diagnose license update
```

Variable	Description
list	List the FortiAnalyzer license information.
update	Update the FortiAnalyzer license information.

log

Use the following command to view log information.

log device

Use this command to view device log usage.

Syntax

```
diagnose log device [<device-id> | adom] [adom-name | all | *]
```

Variable	Description
[<device-id> | adom]	Optionally filter by device ID or ADOM.
[adom-name | all | *]	Optionally filter by ADOM name when filtering by ADOM.

log restore

Use this command to view the last log restore result or to cancel the last log restore request.

Syntax

```
diagnose log restore cancel
diagnose log restore status
```

Variable	Description
cancel	Cancel the last log restore request.
status	Show the last log restore result.

pm2

Use these commands to check the integrity of the database.

Syntax

```
diagnose pm2 check-integrity {all adom device global ips task ncmdb}
```

```
diagnose pm2 db-recover <db-category>
diagnose pm2 print <log-type>
```

Variable	Description
check-integrity {all adom device global ips task ncmdb}	Check the integrity of the database. Multiple database categories can be selected.
db-recover <db-category>	Recover data from a corrupted database. Enter the database category.
print <log-type>	Print the database log messages.

report

Use this command to check the SQL database.

Syntax

```
diagnose report clean {ldap-cache | report-queue}
diagnose report status [pending | running]
```

Variable	Description
clean {ldap-cache | report-queue}	Cleanup the SQL report queue or LDAP cache.
status [pending | running]	Check status information on pending and running reports.

rtm

Use this command to display or update real time monitor profile database.

Syntax

```
diagnose rtm profile
```

siem

Use this command to check the SIEM database.

siem config

Use this command to configure clickhouse.

Syntax

```
diagnose siem config add <svr | usr> <config_name> <config_value>
diagnose siem config del <svr | usr> <config_name>
diagnose siem config show
```

Variable	Description
add <svr | usr> <config_name> <config_value>	Set the clickhouse configuration. Select server or user config, and then enter the config name and config value.
del <svr | usr> <config_name>	Delete the clickhouse configuration. Select server or user config, and then enter the config name to delete.
show	Show the clickhouse configuration.

siem merges

Use this command to list the background merge tasks.

Syntax

```
diagnose siem merges list
```

Variable	Description
list	List the background merge tasks.

siem mutations

Use this command to list the background mutation tasks.

Syntax

```
diagnose siem mutations list
```

Variable	Description
list	List the background mutation tasks.

siem parts

Use this command to list the SIEM parts.

Syntax

```
diagnose siem parts list <table> <level>
```

Variable	Description
list <table> <level>	List the SIEM parts. Enter the table name and part level.

siem process

Use this command to list or kill query processes.

Syntax

```
diagnose siem process list full
diagnose siem process kill <query_id>
```

Variable	Description
list full	List the query processes and its details.
kill <query_id>	Kill a running query. Enter the query ID.

sniffer

Use this command to perform a packet trace on one or more network interfaces.

Packet capture, also known as sniffing, records some or all of the packets seen by a network interface. By recording packets, you can trace connection states to the exact point at which they fail, which may help you to diagnose some types of problems that are otherwise difficult to detect.

FortiAnalyzer units have a built-in sniffer. Packet capture on FortiAnalyzer units is similar to that of FortiGate units. Packet capture is displayed on the CLI, which you may be able to save to a file for later analysis, depending on your CLI client.

Packet capture output is printed to your CLI display until you stop it by pressing `CTRL + C`, or until it reaches the number of packets that you have specified to capture.

Packet capture can be very resource intensive. To minimize the performance impact on your FortiAnalyzer unit, use packet capture only during periods of minimal traffic, with a serial console CLI connection rather than a Telnet or SSH CLI connection, and be sure to stop the command when you are finished.

Syntax

```
diagnose sniffer packet <interface> <filter> <verbose> <count> <Timestamp format>
```

Variable	Description
<interface>	Type the name of a network interface whose packets you want to capture, such as `port1`, or type `any` to capture packets on all network interfaces.

<filter>	Type either `none` to capture all packets, or type a filter that specifies which protocols and port numbers that you do or do not want to capture, such as `'tcp port 25'`. Surround the filter string in quotes.
	The filter uses the following syntax:
	`'[[src|dst] host {<host1_fqdn> | <host1_ipv4>}] [and|or] [[src|dst] host {<host2_fqdn> | <host2_ipv4>}] [and|or] [[arp|ip|gre|esp|udp|tcp] port <port1_int>] [and|or] [[arp|ip|gre|esp|udp|tcp] port <port2_int>]'`
	To display only the traffic between two hosts, specify the IP addresses of both hosts. To display only forward or only reply packets, indicate which host is the source and which is the destination.
	For example, to display UDP port 1812 traffic between 1.example.com and either 2.example.com or 3.example.com, you would enter:
	`'udp and port 1812 and src host 1.example.com and dst \ ( 2.example.com or 2.example.com \)'`

<verbose>	Type one of the following numbers indicating the depth of packet headers and payloads to capture: • `1`: print header of packets (default) • `2`: print header and data from ip of packets • `3`: print header and data from ethernet of packets (if available) For troubleshooting purposes, Fortinet Technical Support may request the most verbose level (`3`).
<count>	Type the number of packets to capture before stopping. If you do not specify a number, the command will continue to capture packets until you press `CTRL + C`.
<Timestamp format>	Type the timestamp format. • `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

Example 1

The following example captures the first three packets' worth of traffic, of any port number or protocol and between any source and destination (a filter of `none`), that passes through the network interface named port1. The capture uses a low level of verbosity (indicated by `1`).

Commands that you would type are highlighted in bold; responses from the Fortinet unit are not in bold.

```
FortiAnalyzer# diag sniffer packet port1 none 1 3
interfaces=[port1]
filters=[none]
0.918957 192.168.0.1.36701 -> 192.168.0.2.22: ack 2598697710
0.919024 192.168.0.2.22 -> 192.168.0.1.36701: psh 2598697710 ack 2587945850
0.919061 192.168.0.2.22 -> 192.168.0.1.36701: psh 2598697826 ack 2587945850
```

If you are familiar with the TCP protocol, you may notice that the packets are from the middle of a TCP connection. Because port 22 is used (highlighted above in bold), which is the standard port number for SSH, the packets might be from an SSH session.

Example 2

The following example captures packets traffic on TCP port 80 (typically HTTP) between two hosts, 192.168.0.1 and 192.168.0.2. The capture uses a low level of verbosity (indicated by `1`). Because the filter does not specify either host as the source or destination in the IP header (`src` or `dst`), the sniffer captures both forward and reply traffic.

A specific number of packets to capture is not specified. As a result, the packet capture continues until the administrator presses CTRL + C. The sniffer then confirms that five packets were seen by that network interface.

Commands that you would type are highlighted in bold; responses from the Fortinet unit are not in bold.

```
FortiAnalyzer# diag sniffer packet port1 'host 192.168.0.2 or host 192.168.0.1 and tcp port 80' 1
192.168.0.2.3625 -> 192.168.0.1.80: syn 2057246590
192.168.0.1.80 -> 192.168.0.2.3625: syn 3291168205 ack 2057246591
192.168.0.2.3625 -> 192.168.0.1.80: ack 3291168206
192.168.0.2.3625 -> 192.168.0.1.80: psh 2057246591 ack 3291168206
192.168.0.1.80 -> 192.168.0.2.3625: ack 2057247265
5 packets received by filter
0 packets dropped by kernel
```

Example 3

The following example captures all TCP port 443 (typically HTTPS) traffic occurring through port1, regardless of its source or destination IP address. The capture uses a high level of verbosity (indicated by `3`).

A specific number of packets to capture is not specified. As a result, the packet capture continues until the administrator presses CTRL + C. The sniffer then confirms that five packets were seen by that network interface.

Verbose output can be very long. As a result, output shown below is truncated after only one packet.

Commands that you would type are highlighted in bold; responses from the Fortinet unit are not in bold.

```
FortiAnalyzer # diag sniffer port1 'tcp port 443' 3
```

```
interfaces=[port1]
filters=[tcp port 443]
10.651905 192.168.0.1.50242 -> 192.168.0.2.443: syn 761714898
0x0000 0009 0f09 0001 0009 0f89 2914 0800 4500 ..........)...E.
0x0010 003c 73d1 4000 4006 3bc6 d157 fede ac16 .<s.@.@.;..W....
0x0020 0ed8 c442 01bb 2d66 d8d2 0000 0000 a002 ...B..-f........
0x0030 16d0 4f72 0000 0204 05b4 0402 080a 03ab ..Or............
0x0040 86bb 0000 0000 0103 0303 ..........
```

Instead of reading packet capture output directly in your CLI display, you usually should save the output to a plain text file using your CLI client. Saving the output provides several advantages. Packets can arrive more rapidly than you may be able to read them in the buffer of your CLI display, and many protocols transfer data using encodings other than US-ASCII. It is usually preferable to analyze the output by loading it into in a network protocol analyzer application such as Wireshark (http://www.wireshark.org/).

For example, you could use PuTTY or Microsoft HyperTerminal to save the sniffer output. Methods may vary. See the documentation for your CLI client.

Requirements

- terminal emulation software such as PuTTY
- a plain text editor such as Notepad
- a Perl interpreter
- network protocol analyzer software such as Wireshark

To view packet capture output using PuTTY and Wireshark:

1. On your management computer, start PuTTY.
2. Use PuTTY to connect to the Fortinet appliance using either a local serial console, SSH, or Telnet connection.
3. Type the packet capture command, such as:
   ```
   diagnose sniffer packet port1 'tcp port 541' 3 100
   ```
   but do not press `Enter` yet.
4. In the upper left corner of the window, click the PuTTY icon to open its drop-down menu, then select *Change Settings*.
   A dialog appears where you can configure PuTTY to save output to a plain text file.
5. In the *Category* tree on the left, go to *Session* > *Logging*.
6. In *Session logging*, select *Printable output*.
7. In *Log file name*, click the *Browse* button, then choose a directory path and file name such as `C:\Users\MyAccount\packet_capture.txt` to save the packet capture to a plain text file. (You do not need to save it with the `.log` file extension.)
8. Click *Apply*.
9. Press Enter to send the CLI command to the FortiMail unit, beginning packet capture.
10. If you have not specified a number of packets to capture, when you have captured all packets that you want to analyze, press `CTRL + C` to stop the capture.
11. Close the PuTTY window.
12. Open the packet capture file using a plain text editor such as Notepad++.
13. Delete the first and last lines, which look something like this:
    ```
    =~=~=~=~=~=~=~=~=~=~=~=~= PuTTY log 2025.09.29 08:03:40 =~=~=~=~=~=~=~=~=~=~=~=~=
    Fortinet-2000 #
    ```

These lines are a PuTTY timestamp and a command prompt, which are not part of the packet capture. If you do not delete them, they could interfere with the script in the next step.

14. Convert the plain text file to a format recognizable by your network protocol analyzer application.
You can convert the plain text file to a format (.pcap) recognizable by Wireshark using the fgt2eth.pl Perl script. To download fgt2eth.pl, see the Fortinet Knowledge Base article Using the FortiOS built-in packet sniffer.

The fgt2eth.pl script is provided as-is, without any implied warranty or technical support, and requires that you first install a Perl module compatible with your operating system.

To use fgt2eth.pl, open a command prompt, then enter a command such as the following:

```
fgt2eth.pl -in packet_capture.txt -out packet_capture.pcap
```

where:

- `fgt2eth.pl` is the name of the conversion script; include the path relative to the current directory, which is indicated by the command prompt
- `packet_capture.txt` is the name of the packet capture's output file; include the directory path relative to your current directory
- `packet_capture.pcap` is the name of the conversion script's output file; include the directory path relative to your current directory where you want the converted output to be saved

15. Open the converted file in your network protocol analyzer application. For further instructions, see the documentation for that application.
For additional information on packet capture, see the Fortinet Knowledge Base article Using the FortiOS built-in packet sniffer.

sql

Use this command to diagnose the SQL database.

sql config

Use this command to show, set, or reset the SQL database configuration.

Syntax

```
diagnose sql config auto-cache-delay [set <seconds>| reset]
diagnose sql config debug-filter [set | test] <daemon> <string>
diagnose sql config deferred-index-timespan [set <value>]
diagnose sql config hcache-agg-step [reset | set <integer>]
diagnose sql config hcache-auto-rebuild-status [reset | set <integer>]
diagnose sql config hcache-auto-rebuild-task-priority [reset | set <integer>]
diagnose sql config hcache-base-trim-interval [reset | set <integer>]
diagnose sql config hcache-max-base-row [reset | set <integer>]
diagnose sql config hcache-max-fv-row [reset | set <integer>]
```

```
diagnose sql config hcache-max-fv-row-per-timescale [reset | set <integer>]
diagnose sql config hcache-max-high-accu-row [reset | set <integer>]
diagnose sql config hcache-max-rpt-row [reset | set <integer>]
diagnose sql config sampling-max-row [reset | set <integer>]
diagnose sql config sampling-status [reset | set <integer>]
diagnose sql config sampling-type [reset | set <integer>]
```

Variable	Description
auto-cache-delay [set <seconds>| reset]	Show, set, or reset the auto-cache delay, in seconds (default = 300).
debug-filter {set | test} <daemon> <string>	Show sqlplugind and sqlreportd debug filter. Enter `sqlplugind`, `sqlreportd` or `both` as the `<daemon>`. Enter the filter string.
deferred-index-timespan [set <value>]	View or set the time span for the deferred index (default = 10000).
hcache-agg-step [reset | set <integer>]	Show, set, or reset the hcache aggregation step (default = 10).
hcache-auto-rebuild-status [reset | set <integer>]	Show, set, or reset the status of hcache auto rebuild task (0 - 1, default = 1). • `0` = disable • `1` = enable
hcache-auto-rebuild-task-priority [reset | set <integer>]	Show, set, or reset the priority of hcache auto rebuild task (0 - 2, default = 1). • `0` = low • `1` = medium • `2` = high
hcache-base-trim-interval [reset | set <integer>]	Show, set, or reset the hcache base trim interval (3600 - 2147483647, default = 172800).
hcache-max-base-row [reset | set <integer>]	Show, set, or reset max row number for base hcache (1000 - 1500000, default = 1000000).
hcache-max-fv-row [reset | set <integer>]	Show, set, or reset max row number for fortiview hcache (1000 - 400000, default = 50000).
hcache-max-fv-row-per-timescale [reset | set <integer>]	Show, set, or reset max row number per timescale for FortiView hcache (0 - 40000, default = 0).
hcache-max-high-accu-row [reset | set <integer>]	Show, set, or reset max row number for high-accuracy hcache (1000 - 1000000, default = 400000).
hcache-max-rpt-row [reset | set <integer>]	Show, set, or reset max row number for report hcache (1000 - 400000, default = 18000).
sampling-max-row [reset | set <integer>]	Show, set, or reset max row number for sampling (1000 - 10000000, default = 1000000).
sampling-status [reset | set <integer>]	Show, set, or reset the sampling status. Enter 0 for disabling and 1 for enabling the sample status (0 - 1, default = 1).

Variable	Description
sampling-type [reset | set <integer>]	Show, set, or reset the type of sampling (0 - 1, default = 0).

sql debug

Use this command to show or update the SQL debug statuses.

Syntax

```
diagnose sql debug chlog show [<filter>] [<NUM>]
diagnose sql debug chlog upload {ftp | sftp} <host> <dir> <user name> <password>
diagnose sql debug hcache-agg dbgoff
diagnose sql debug hcache-agg dbgon
diagnose sql debug hcache-agg delete
diagnose sql debug hcache-agg show [<filter>][<NUM>]
diagnose sql debug hcache-agg upload {ftp | sftp} <host> <dir> <user name> <password>
diagnose sql debug imexport dbgoff
diagnose sql debug imexport dbgon
diagnose sql debug imexport delete
diagnose sql debug imexport show [<filter>] [<NUM>]
diagnose sql debug imexport upload {ftp | sftp} <host> <dir> <user name> <password>
diagnose sql debug logview dbgoff
diagnose sql debug logview dbgon <level value>
diagnose sql debug logview delete
diagnose sql debug logview show [<filter>] [<NUM>]
diagnose sql debug logview upload {ftp | sftp} <host> <dir> <user name> <password>
diagnose sql debug pglog show [<filter>] [<NUM>]
diagnose sql debug pglog upload {ftp | sftp} <host> <dir> <user name> <password>
diagnose sql debug sqlqry auto-explain disable
diagnose sql debug sqlqry auto-explain enable <duration> <work-mem>
diagnose sql debug sqlqry dbgoff
diagnose sql debug sqlqry dbgon <level value>
diagnose sql debug sqlqry delete
diagnose sql debug sqlqry show [<filter>][<NUM>]
diagnose sql debug sqlqry upload {ftp | sftp} <host> <dir> <user name> <password>
```

Variable	Description
chlog show [<filter>] [<NUM>]	Show last lines of the Clickhouse log debug file. Set filter for debug file, and show last NUM lines of the debug file. The filter and NUM variables are optional.
chlog upload {ftp | sftp} <host> <dir> <user name> <password>	Upload Clickhouse log debug file to FTP or SFTP server. Enter host IP address, directory, user name, and password.
hcache-agg dbgoff	Disable hcache-agg debug output.
hcache-agg dbgon	Enable hcache-agg debug output.

Variable	Description
hcache-agg delete	Delete hcache-agg debug file.
hcache-agg show [<filter>] [<NUM>]	Show the last 10 lines of the hcache-agg debug file. Set filter for the debug file, and show the last NUM lines of the debug file. The filter and NUM variables are optional.
hcache-agg upload {ftp | sftp} <host> <dir> <user name> <password>	Upload hcache-agg debug file to FTP or SFTP server. Enter host IP address, directory, user name, and password.
imexport dbgoff	Disable Report import/export debug output.
imexport dbgon	Enable Report import/export debug output.
imexport delete	Delete Report import/export debug file.
imexport show [<filter>] [<NUM>]	Show the last 10 lines of the Report import/export debug file. Set filter for debug file, and show last NUM lines of the debug file. The filter and NUM variables are optional.
imexport upload {ftp | sftp} <host> <dir> <user name> <password>	Upload Report import/export debug file to FTP or SFTP server. Enter host IP address, directory, user name, and password.
logview dbgoff	Disable Log view debug output.
logview dbgon <level value>	Enable log view debug output. Set log view debug level (1-5). Default level is 1.
logview delete	Delete log view debug file.
logview show [<filter>] [<NUM>]	Show the last 10 lines of the Log view debug file. Set filter for debug file, and show last NUM lines of the debug file. The filter and NUM variables are optional.
logview upload {ftp | sftp} <host> <dir> <user name> <password>	Upload log view debug file to FTP or SFTP server. Enter host IP address, directory, user name, and password.
pglog show [<filter>] [<NUM>]	Show the last 10 lines of the Postgres log debug file. Set filter for debug file, and show last NUM lines of the debug file. The filter and NUM variables are optional.
pglog upload {ftp | sftp} <host> <dir> <user name> <password>	Upload Postgres log debug file to FTP or SFTP server. Enter host IP address, directory, user name, and password.
sqlqry auto-explain disable	Disable SQL query auto explain.
sqlqry auto-explain enable <duration> <work-mem>	Enable SQL query auto explain. Enter the duration in seconds and the local work_mem in MB.
sqlqry dbgoff	Disable SQL query debug output.

Variable	Description
sqlqry dbgon <level value>	Enable SQL query debug output. Set SQL query debug level (1-5). The default level is 1. **Note:** When the debug level is 5, the final SQL running in sqlreportd will show in the debug output as well.
sqlqry delete	Delete the SQL query debug file.
sqlqry show [<filter>] [<NUM>]	Show the last 10 lines of the SQL query debug file. Set filter for the debug file, and show the last NUM lines of the debug file. The filter and NUM variables are optional.
sqlqry upload {ftp | sftp} <host> <dir> <user name> <password>	Upload SQL query debug file to FTP or SFTP server. Enter host IP address, directory, user name, and password.

sql fluentd

Use this command to diagnose the Fluentd engine status.

Syntax

```
diagnose sql fluentd log-tail
diagnose sql fluentd log-view
```

Variable	Description
log-tail	Tail fluentd log from end. Will follow the log file changes.
log-view	View fluentd log from start. Will follow the log file changes.

sql hcache

Use this command to show or update the SQL hcache.

Syntax

```
diagnose sql hcache add-task agg <spname> <norm-query-hash> <agg-level> <timestamp> <num-of-days>
diagnose sql hcache add-task agg-update <spname> <hid>
diagnose sql hcache dump-task <filter>
diagnose sql hcache list <spname> <query-hash/tag> <filter> <detail>
diagnose sql hcache plan <spname> <start-time> <end-time> <query-tag/norm-qry-hash/sql> <is-
      fortiview> <max-time-scale>
diagnose sql hcache rebuild-report <spname> <start-time> <end-time> <reset>
diagnose sql hcache rebuild-status
diagnose sql hcache show hcache <spname> <id>
diagnose sql hcache show hcache-query <spname> <norm-qry-hash>
```

```
diagnose sql hcache show hcache-res-tbl <spname> <res-tbl-id>
diagnose sql hcache show time <time> <time> <time> <time>
diagnose sql hcache status {all | <spname> | all-summary}
```

Variable	Description
add-task agg <spname> <norm-query-hash> <agg-level> <timestamp> <num-of-days>	Add an hcache agg task. The following input is required: • spname: SP name. • norm-query-hash: The normalized query hash. • agg-level: The aggregation level. • timestamp: The timestamp (format = yyyy-mm-dd hh:mm:ss). • num-of-days: The number of days (1, 3, or 30).
add-task agg-update <spname> <hid>	Add an hcache agg update task. The following input is required: • spname: SP name. • hid: The hcache agg ID.
dump-task <filter>	Dump hcache tasks. Enter the task filter.

list <spname> <queryhash/tag> <filter> <detail>	List hcaches:
	• spname: SP name.
	• query-hash/tag: The hash or tag filter query, or all for all queries.
	• filter: Narrow down the hcache list search result by using a filter. The filter keywords include:
	  • status: The hcache status. 0(Ready), 1(Ready-Loss), 2(In-Building), 3(Error), 4(Invalid-SQL), 5(No-Data), 6(Not-Ready).
	  • fv_flag: List FortiView/report only. 1(fortiview), 0(report).
	  • sql: The SQL query match. '*' for wildcard, e.g. *select*.
	  • time_start: Start of the log time. format: yyyy-mm-dd hh:MM:ss.
	  • time_end: End of the log time. format: yyyy-mm-dd hh:MM:ss.
	  The following shows an example of the variable <filter>:
	  "status=0,1,5 sql=\"*srcip, dstip*\" time_start>=\"2020-11-01 00:00:00\" time_end<=\"2020-11-30 23:59:59\"".
	  Enter "" for no filter.
	• detail: Show detailed information.

plan <spname> <start-time> <end-time> <query-tag/norm-qry-hash/sql> <is-fortiview> <max-time-scale>	Plan hcaches: • spname: SP name. • start-time: The start time (format: yyyy-mm-dd hh:mm:ss). • end-time: The end time (format: yyyy-mm-dd hh:mm:ss). • query-tag/norm-qry-hash/sql: The query tag, normalized query hash, or sql statement. • is-fortiview: Enter 1 for FortiView, or 0 for report. • max-time-scale: Maximum timescale.
rebuild-report <spname> <start-time> <end-time> <reset>	Rebuild hcache for report only. • spname: SP name. • start-time: The start time (format: yyyy-mm-dd hh:mm:ss).

Variable	Description
	• `end-time`: The end time (format: yyyy-mm-dd hh:mm:ss). • `reset`: Clean up all existing hcache tasks.
rebuild-status	Show report hcache rebuild/check status.
show hcache <spname> <id>	Show hcache information. Enter the SP name and hcache ID.
show hcache-query <spname> <norm-qry-hash>	Show hcache query information. Enter the SP name and the normalized query hash.
show hcache-res-tbl <spname> <res-tbl-id>	Show hcache result table information. Enter the SP name and the result table ID.
show time <time> <time> <time> <time>	Show hcache time. Enter up to four timestamps.
status {all | <spname> | all-summary}	Show detailed hcache information per SP name, for all SPs, or display the summary.

sql process

Use this command to kill or list query processes in the the SQL database.

Syntax

```
diagnose sql process kill <pid>
diagnose sql process list [full]
```

Variable	Description
kill <pid>	Kill a running query.
list [full]	List running query processes.

sql remove

Use this command to remove from the SQL database.

Syntax

```
diagnose sql remove {hcache <spname> <start-time> <end-time> | query-cache | rebuild-db-flag |
      tmp-table}
```

Variable	Description

{hcache <spname> <start-time> <end-time> | query-cache | rebuild-db-flag | tmp-table}	Remove the selected information:
	• `hcache`: Remove the hcache tables created for the SQL report.
	  • `spname`: SP name, or `all` for all SPs.
	  • `start-time`: The start time (format: yyyy-mm-dd hh:mm:ss).
	  • `end-time`: The end time (format: yyyy-mm-dd hh:mm:ss).
	• `query-cache`: Remove the SQL query cache for log search.
	• `rebuild-db-flag`: Remove the rebuild database flag. The system will exit the rebuild database state.
	• `tmp-table`: Remove the SQL database temporary tables.

sql show

Use this command to show SQL database information.

Syntax

```
diagnose sql show {db-size | hcache-size | log-filters | log-stfile <device-id> <vdom> | policy-
      info <adom>}
```

Variable	Description
{db-size | hcache-size | log-filters | log-stfile <device-id> <vdom> | policy-info <adom>}	Show the database, hcache size, log filters, or log status file: • `db-size`: Show database size. • `hcache-size`: Show hcache size. • `log-filters`: Show log view searching filters. • `log-stfile`: Show logstatus file for the specified device (for HA cluster, input the member's serial number) and VDOM. • `policy-info`: Show policy uuid and name map.

sql status

Use this command to show statuses of the SQL database.

Syntax

```
diagnose sql status {migrate-db | rebuild-db | run_sql_rpt | sqlplugind | sqlreportd | upgrade-
      db}
```

Variable	Description
{migrate-db | rebuild-db | run_sql_rpt | sqlplugind | sqlreportd | upgrade-db}	Show the status: • `migrate-db`: Show log SQL database migrate status. • `rebuild-db`: Show SQL log database rebuild status. • `run-sql-rpt`: Show run_sql_rpt status. • `sqlplugind`: Show sqlplugind status. • `sqlreportd`: Show sqlreportd status. • `upgrade-db`: Show log SQL database upgrade status.

sql upload

Use this command toupload sqlplugind messages / pgsvr logs via FTP or SFTP.

Syntax

```
diagnose sql upload {ftp | sftp} <host> <directory> <user_name> <password>
```

Variable	Description
{ftp | sftp} <host> <directory> <user_name> <password>	Upload sqlplugind messages / pgsvr logs with FTP or SFTP.

svctools

Import or export the FortiAnalyzer configuration, and run JSON files.

Syntax

```
diagnose svctools export local
diagnose svctools export remote <ip> <string> <username> <password>
diagnose svctools import local name <adom> <integer>
diagnose svctools import remote <ip> <string> <username> <password> <adom> <integer>
diagnose svctools run local filename
diagnose svctools run remote <ip> <string> <username> <password>
```

Variable	Description
export local	Export the configuration locally.
export remote <ip> <string> <username> <password>	Export the configuration to a remote FTP server.

Variable	Description
import local name <adom> <integer>	Import a local configuration from the specified ADOM. Enable or disable upgrade mode.
import remote <ip> <string> <username> <password> <adom> <integer>	Import a remote configuration from an FTP server to the specified ADOM. Enable or disable upgrade mode.
run local filename	Run a local JSON file on the target.
run remote <ip> <string> <username> <password>	Run a remote file from an FTP server.

Example

```
# diagnose svctools export local
Export FortiAnalyzer(121), 1 of 15 ADOM.
Export FortiAuthenticator(137), 2 of 15 ADOM.
Export FortiCache(125), 3 of 15 ADOM.
Export FortiCarrier(117), 4 of 15 ADOM.
Export FortiClient(127), 5 of 15 ADOM.
Export FortiDDoS(135), 6 of 15 ADOM.
Export FortiMail(119), 7 of 15 ADOM.
Export FortiManager(131), 8 of 15 ADOM.
Export FortiNAC(141), 9 of 15 ADOM.
Export FortiProxy(139), 10 of 15 ADOM.
Export FortiSandbox(133), 11 of 15 ADOM.
Export FortiWeb(123), 12 of 15 ADOM.
Export Syslog(129), 13 of 15 ADOM.
Export others(115), 14 of 15 ADOM.
Export root(3), 15 of 15 ADOM.
Exported to /var/tmp/svctools_export
```

system

Use the following commands for system related settings.

system admin-session

Use this command to view and kill log in sessions.

Syntax

```
diagnose system admin-session kill <sid>
```

```
diagnose system admin-session list
diagnose system admin-session status
```

Variable	Description
kill <sid>	Kill a current session. • <sid>: Session ID
list	List log in sessions.
status	Show the current session.

system aiserver

Use this command to view the FortiAI server.

Syntax

```
diagnose system aiserver get
diagnose system aiserver test
```

Variable	Description
get	Get current FortiAI server.
test	Test FortiAI server connection.

system csf

Use this command to view the cooperative security fabric information.

Syntax

```
diagnose system csf authorization {accept | deny | pending-list} <SN> [name]
diagnose system csf downstream [-x] [-a]
diagnose system csf downstream-devices <device-type>
diagnose system csf global
diagnose system csf upstream
```

Variable	Description

authorization {accept | deny | pending-list} <sn> [name]	Authorization requests and permits.
	• {accept | deny | pending-list}:
	  • accept: Authorize device to join CSF tree.
	  • deny: Deny device from joining CSF tree.
	  • pending-list: List of pending requests to join security fabric.

Variable	Description
	• <SN>: Serial number. • [name]: Optional entry name (if not passed SN is used).
downstream [-x] [-a]	Show connected downstream devices. • [-x]: Show encrypted tokens. • [-a]: Show all devices.
downstream-devices <device-type>	Show downstream fabric device. For example, fortianalyzer or any.
global	Show a summary of all connected members in Security Fabric.
upstream	Show connected upstream devices.

system disk

Use this command to view disk diagnostic information.

Only usage is available on FortiAnalyzer-VM. Other disk related commands are only available on the hardware-based FortiAnalyzer.

Syntax

```
diagnose system disk attributes
diagnose system disk delete
diagnose system disk disable
diagnose system disk enable
diagnose system disk errors
diagnose system disk health
diagnose system disk info
diagnose system disk sed <sed-key>
diagnose system disk usage <parameter> <parameter> <parameter> <parameter> <parameter>
      <parameter> <parameter> <parameter> <parameter> <parameter>
```

Variable	Description
attributes	Show vendor specific SMART attributes.
delete	Delete the disk.
disable	Disable SMART support.
enable	Enable SMART support.
errors	Show the SMART error logs.
health	Show the SMART health status.

Variable	Description
info	Show the SMART information.
sed <sed-key>	SED encryption key. The key requires 8-32 characters, and it must include upper case, lower case, number, and special character (excluding '\). This command is only available on hardware models that support self-encrypting drives. For more information, see the FortiAnalyzer Administration Guide.
usage <parameter> ... <parameter>	Display the disk usage. Enter a parameter.

Parameter	Description
-a	Show file sizes.
-L	Follow all symlinks.
-H	Follow symlinks on the command line.
-d N	Limit output to directories (and files with -a) of depth < N.
-c	Show the grand total.
-l	Count sizes many times if hard linked.
-s	Display only a total for each argument.
-x	Skip directories on different file systems.
-h	Sizes in human readable format (e.g., 1K 243M 2G).
-m	Sizes in megabytes.
-k	Sizes in kilobytes (default).

system export

Use this command to export logs.

Syntax

```
diagnose system export crashlog <ftp | sftp> <(s)ftp server> <username> <password> <directory>
      <filename>
diagnose system export fmwslog <ftp | sftp> <type> <(s)ftp server> <username> <password>
      <directory> <filename>
diagnose system export raidlog <ftp server> <username> <password> [remote path] [filename]
diagnose system export rpclog <ftp | sftp> <(s)ftp server> <username> <password> <directory>
      <filename>
diagnose system export umlog <ftp | sftp> <type> <(s)ftp server> <username> <password>
      <directory> <filename>
diagnose system export upgradelog <ftp | sftp> <(s)ftp server> <username> <password> <directory>
      <filename>
```

```
diagnose system export vartmp <ftp | sftp> <(s)ftp server> <username> <password> <directory>
      <filename>
```

Variable	Description
crashlog <ftp | sftp> <(s)ftp server> <username> <password> <directory> <filename>	Export the crash log.
fmwslog <ftp | sftp> <type> <(s)ftp server> <username> <password> <directory> <filename>	Export the web service log files. The type is the log file prefix and can be: `SENT`, `RECV`, or `TEST`.
raidlog <ftp server> <username> <password> [remote path] [filename]	Export the RAID log. This command is only available on devices that support RAID.
rpclog <ftp | sftp> <(s)ftp server> <username> <password> <directory> <filename>	Export RPC log files.
umlog {ftp | sftp} <type> <(s)ftp server> <username> <password> <directory> <filename>	Export the update manager and firmware manager log files. The `type` options are: `fdslinkd`, `fctlinkd`, `fgdlinkd`, `fgdsvr`, `update`, `service`, `misc`, `umad`, and `fwmlinkd`.
upgradelog <ftp | sftp> <(s)ftp server> <username> <password> <directory> <filename>	Export the upgrade error log.
vartmp <ftp | sftp> <(s)ftp server> <username> <password> <directory> <filename>	Export the system log files in `/var/tmp`.

system filesystem

Use this command to diagnose filesystem information.

Syntax

```
diagnose system filesystem hash <path> <depth>
diagnose system filesystem list <path>
```

Variable	Description
hash <path> <depth>	Print hashes of files in the filesystem.

Variable	Description
	• <path>: Enter the path to parent directory. • <depth>: Enter the maximum depth of traversal (default: 99).
list <path>	List files in the filesystem. • <path>: Enter the path to parent directory.

system flash

Use this command to diagnose the flash memory.

Syntax

```
diagnose system flash list
```

Variable	Description
list	List flash images. The information displayed includes the image name, version, total size (KB), used (KB), percent used, boot image, and running image.

system fsck

Use this command to check and repair the file system, and to reset the disk mount count.

Syntax

```
diagnose system fsck harddisk
diagnose system fsck reset-mount-count
```

Variable	Description
harddisk	Check and repair the file system, then reboot the system.
reset-mount-count	Reset the mount-count of the disk on the next reboot.

system geoip

Use these commands to get geoip information.

FortiAnalyzer uses a MaxMind GeoLite database of mappings between geographic regions and all public IPv4 addresses that are known to originate from them.

Syntax

```
diagnose system geoip dump
diagnose system geoip info
diagnose system geoip ip <ip>
```

Variable	Description
dump	Display all geographic IP information.
info	Display a brief geography IP information.
ip <ip>	Find the specified IP address' country.

Example

Find the country of the IP address 4.3.2.1:

```
FAZVM64 # diagnose system geoip ip 4.3.2.1
4.3.2.1 : US - United States
```

system geoip-city

Use these commands to get geographic IP information at a city level.

Syntax

```
diagnose system geoip-city info
diagnose system geoip-city ip <ip>
```

Variable	Description
info	Display geographic IP information.
ip <ip>	Find the specified IP address' city.

system interface

Use this command to diagnose the interface.

Syntax

```
diagnose system interface segmentation-offload <intf-name> <action>
```

Variable	Description
segmentation-offload <intf-name> <action>	Print/set segmentation-offload for all interfaces: • `<intf-name>`: Enter the interface name (or enter `all` for all interfaces) • `<action>`: Enter one of `show/on/off` to show or switch on/off interfaces

system mapserver

Use this command to access the map server information.

Syntax

```
diagnose system mapserver checksum
diagnose system mapserver clearcache
diagnose system mapserver get
diagnose system mapserver test
```

Variable	Description
checksum	Get map server checksum.
clearcache	Clear the map server cache.
get	Get the current map server.
test	Test the map server connection.

system ntp

Use this command to list NTP server information.

Syntax

```
diagnose system ntp status
```

Variable	Description
status	List NTP server information.

system print

Use this command to print server information.

Syntax

```
diagnose system print connector [adom] <server_type> <server> <tag>
diagnose system print cpuinfo
diagnose system print df [arg0] [arg1] [arg2] .... [arg9]
diagnose system print hosts
diagnose system print interface <interface>
diagnose system print ipcs
diagnose system print loadavg
diagnose system print netstat
diagnose system print partitions
diagnose system print route
diagnose system print rtcache
diagnose system print slabinfo
diagnose system print sockets
diagnose system print uptime
```

Variable	Description
connector [adom] <server_type> <server> <tag>	Print connector information. Enter the ADOM name, or Global, the server type (pxGrid, clearpass, or nsx), and then the server name.
cpuinfo	Print the CPU information.
df [arg0] [arg1] [arg2] .... [arg9]	Print the file system disk space usage. Optionally, enter arguments.
hosts	Print the static table lookup for host names.
interface <interface>	Print the specified interface's information.
ipcs	Print inter-process communication IPC information.
loadavg	Print the average load of the system.
netstat	Print the network statistics for active Internet connections (servers and established).
partitions	Print the disk partition information.
route	Print the main route list.
rtcache	Print the contents of the routing cache.
slabinfo	Print the slab allocator statistics.
sockets	Print the currently used socket ports.
uptime	Print how long the system has been running.

system process

Use this command to view and kill processes.

Syntax

```
diagnose system process fdlist <pid> [list]
diagnose system process kill <signal> <pid>
diagnose system process killall <signal> <module>
diagnose system process list [string]
```

Variable	Description
fdlist <pid> [list]	List all file descriptors that the process is using. • `<pid>`: Process ID • `[list]`: Optionally, process fdlist detail. Enter `ls` or `list`.
kill <signal> <pid>	Kill a process: • `<signal>`: Signal name or number, such as -9 or -KILL • `<pid>`: Process ID
killall <signal> <module>	Kill all the related processes. • `<signal>`: Signal name or number, such as -9 or -KILL • `<module>`: Scriptmgr/deploymgr/fgfm/httpd/securityconsole
list [string]	List all processes running on the FortiAnalyzer. Optionally, enter a substring to match. The information displayed includes the PID, user, VSZ, stat, and command.

system raid

Use this command to view RAID information.

This command is only available on hardware-based FortiAnalyzer models that support RAID.

Syntax

```
diagnose system raid cc <rate> <delay>
diagnose system raid hwinfo
diagnose system raid status
```

Variable	Description
cc <rate> <delay>	Show/Set RAID consistency check rate (1-100%, 0 = no change) and delay (1-8760 hours, 0 = no change).
hwinfo	Show RAID controller hardware information.
status	Show RAID status.

system route

Use this command to help diagnose routes. The listed information includes the destination IP, gateway IP, netmask, flags, metric, reference, use, and interface for each IPv4 route.

The following flags can appear in the route list table:

- *U*: the route is up
- *G*: the route is to a gateway
- *H*: the route is to a host rather than a network
- *D*: the route was dynamically created by a redirect
- *M*: the route was modified by a redirect

Syntax

```
diagnose system route list
```

system route6

Use this command to help diagnose routes. The listed information includes the destination IP, gateway IP, netmask, flags, metric, reference, use, and interface for each IPv6 route.

For a list of flags that can appear in the route6 list table, see information for the `diagnose system route list` command above.

Syntax

```
diagnose system route6 list
```

system server

Use this command to start the FortiAnalyzer server.

Syntax

```
diagnose system server start
```

test

Use the following commands to test the FortiAnalyzer.

test application

Use this command to test application daemons. Enter an unassigned integer value to see the available options for each command.

Syntax

```
diagnose test application apiproxyd <integer> <integer> ... <integer>
diagnose test application archd <integer> <integer> ... <integer>
diagnose test application clusterd <integer> <integer> ... <integer>
diagnose test application csfd <integer> <integer> ... <integer>
diagnose test application execmd <integer> <integer> ... <integer>
diagnose test application fabricsyncd <integer> <integer> ... <integer>
diagnose test application fazalertd <integer> <integer> ... <integer>
diagnose test application fazcfgd <integer> <integer> ... <integer>
diagnose test application fazincid <integer> <integer> ... <integer>
diagnose test application fazmaild <integer> <integer> ... <integer>
diagnose test application faznotify <integer> <integer> ... <integer>
diagnose test application fazsvcd <integer> <integer> ... <integer>
diagnose test application fazwatchd <integer> <integer> ... <integer>
diagnose test application filefwd <integer> <integer> ... <integer>
diagnose test application fileparsed <integer> <integer> ... <integer>
diagnose test application forticldd <integer> <integer> ... <integer>
diagnose test application fortilogd <integer> <integer> ... <integer>
diagnose test application fwdplugind <integer> <integer> ... <integer>
diagnose test application logfiled <integer> <integer> ... <integer>
diagnose test application logfwd <integer> <integer> ... <integer>
diagnose test application log-fetchd <integer> <integer> ... <integer>
diagnose test application miglogd <integer> <integer> ... <integer>
diagnose test application oftpd <integer> <integer> ... <integer>
diagnose test application rptchkd <integer> <integer> ... <integer>
diagnose test application rptsched <integer> <integer> ... <integer>
diagnose test application scansched <integer> <integer> ... <integer>
diagnose test application sdnproxyd <integer> <integer> ... <integer>
diagnose test application siemagentd <integer> <integer> ... <integer>
diagnose test application siemdbd <integer> <integer> ... <integer>
diagnose test application snmpd <integer> <integer> ... <integer>
diagnose test application sqllogd <integer> <integer> ... <integer>
diagnose test application sqlplugind <integer> <integer> ... <integer>
diagnose test application sqlreportd <integer> <integer> ... <integer>
diagnose test application sqlrptcached <integer> <integer> ... <integer>
diagnose test application syncsched <integer> <integer> ... <integer>
diagnose test application uploadd <integer> <integer> ... <integer>
diagnose test application vmd <integer> <integer> ... <integer>
```

Variable	Description
apiproxyd <integer> ...	API proxy daemon test usage: • 1: show PID • 2: show statistics and state • 20: fsa tracer log request • 21: fsa tracer log request

Variable	Description
	• 99: restart daemon
archd <integer> ...	Archd daemon test usage: • 1: usage • 2: display content subdir info file • 3: force scan to archive ips files • 4: force preen content files • 99: restart daemon
clusterd <integer> ...	Clusterd daemon test usage: • 1: Daemon info (PID, meminfo, backtrace ...) • 2: Thread pool status • 3: Log Cluster core • 4: Devices cache module • 5: Logging Topology module • 6: Avatar uploading module • 7: Meta-CSF uploading module • 9: Tunnel module • 10: oftpd file fwd module • 11: Service module • 12: HA nodes info module • 13: HA config module • 97: HA module • 98: Monitor status • 99: Restart clusterd • 100: Restart clusterd and clusterd-monitor • 102: Various tests... • 103: generate core dump (on or off) when cluster.monitor kills cluster.main
csfd <integer> ...	Security Fabric daemon test usage. • 1: Show stats • 2: Show plugin status • 4: Start csfd diagnostic stat collection • 5: Stop csfd diagnostic stat collection • 6: Toggle diagnostic collection type • 7: Print collected diagnostic stats • 10: Show query cache status • 30: Show worker processes information • 31: Kill/Recreate worker processes gracefully • 32: Kill/Recreate worker processes by force (May loose tasks) • 33: Run a test job • 40: Show Upstream Path

Variable	Description
	• 41: Show list of pending downstream authorizations • 42: Show list of authorized downstream nodes • 43: Show auth mode • 44: Show upstream mgmt info • 50: Show key info • 63: Show config versions • 80: Send test message to upstream • 81: Send test message to first downstream • 82: List unconfirmed outgoing messages • 83: List partial incoming messages • 84: List unconfirmed confirmations with extra data • 85: Dump timeout information • 86: Flush all outgoing messages • 90: Dump Table Counts • 91: Print Known Processes • 92: Send test message to root's cli-test-listener process • 100: Show cached downstream list • 110: Dump file meory usage info • 999: Restart
execmd <integer> ...	Execmd daemon test usage: • 1: show PID • 2: show statistics and state • 3: reset statistics and state • 4: show statistics of cmd tool • 5: reset statistics of cmd tool • 99: restart daemon
fabricsyncd <integer> ...	Fabricsyncd daemon test usage.
fazalertd <integer> ...	Fazalertd daemon test usage: • 1: Daemon info (PID, meminfo, backtrace ...) • 2: show statistics and state • 4: show worker thread info • 5: show commit info • 99: restart daemon • 200: diag for event manager • 201: diag for alert parser • 203: diag for event engine debug settings • 204: diag for alert commit statistics • 205: diag for event engine • 206: diag for event engine scheduler • 207: diag for event engine rocksdb stats

Variable	Description
	• 500: diag for event engine rocks db
fazcfgd <integer> ...	Fazcfg daemon test usage: • 1: Daemon info (PID, meminfo, backtrace ...) • 2: show statistics • 3: show merged ca info • 4: show runtime logs. 'help' to show usage • 5: device offline event logs info and debug options • 6: system general check • 7: timezone diag info • 40: DVM cache diag info • 41: CSF diag info • 42: ncmdb diag info • 43: reload csf info in devtable • 44: show log device group stats • 45: check log device group • 46: metadata table diag info [sub-module] • 48: test update link prefixes file • 49: test update webfilter categories description file • 50: test get app icon • 51: test update app logo files • 52: dvm call stats • 53: dvm call stats clear • 54: check ips/app meta-data update • 55: log disk readahead get • 56: log disk readahead toggle • 57: maintain redis storage <check|fix> [redis-port] [filepath] • 59: test update faz license • 60: test fortigate restful api • 65: log aggregation server stats • 66: log aggregation server state toggle (debug only) • 67: test redis security connect [port] [key] [value] • 69: show device SN change events • 70: show installed meta-data status • 82: list avatar meta-data • 83: rebuild avatar meta-data table • 84: rebuild ips meta-data table • 85: rebuild app meta-data table • 86: rebuild FortiClient Vulnerability meta-data table • 88: update ffdb meta-data • 90: use built-in TIDB package and disable updating it

Variable	Description
	• 91: enable updating TIDB package • 92: disable updating TIDB package • 93: switch on/off adom default report schedule • 94: switch on/off report schedule by name • 97: set 'force_restore_data' flag for clickhouse start • 99: restart daemon
fazincid <integer> ...	Fazincid daemon test usage.
fazmaild <integer> ...	Fazmaild daemon test usage: • 1: show PID and daemon status • 2: show runtime status • 90: pause sending mail • 91: resume sending mail • 99: restart fazmaild daemon
faznotify <integer> ...	Faznotify daemon test usage: • 1: Daemon info (PID, meminfo, backtrace ...) • 2: show faznotify statistics [clear] • 3: show faznotifyspecific connector statistics <adom> <webhook-name> [clear] • 10: send a faznotify <adom> <id> <send-data> • 20: show active channel • 29: delete active channel <adom> <id> • 30: pause active channel <seconds> • 40: test webhook server <adom> <webhook-name> • 41: test oauth2 token server <adom> <webhook-name> • 99: restart
fazsvcd <integer> ...	Fazsvcd daemon test usage: • 1: Daemon info (PID, meminfo, backtrace ...) • 2: show daemon stats and status • 3: list async search threads • 4: dump async search slot info • 7: dump log search filters • 10: show database log stats aggregated per day • 11: show received log stats aggregated per day • 20: show avatar request stats • 52: enable or disable skip-index usage • 53: enable or disable agg group skip-index usage • 54: enable or disable search cache usage • 55: show current search caches • 57: Fazbroker stats • 58: Reset Fazbroker stats

Variable	Description
	• 60: rawlog idx cache test • 61: logbrowse cache stats • 62: FortiView Session Stats • 70: show stats for device vdom cache • 71: show stats for remote fortiview and reports • 72: show filterable and sortable fields for fortiview. <v3.0 view name> • 73: show stats for the address object uuid2name cache • 74: clear the address object uuid2name cache • 75: data masking test. <passwd> <plaint test> <1|0 (high secure)> [do_unmasking] • 76: fazsvcd fabric service diagnostics • 77: Fabric of FAZ fabric remote request stats • 78: Fabric of FAZ session table list • 82: rebuild or dump [filter] logstat cache info • 90: SQL Rewriter pool stats • 91: faz fabric dvm diagnostics • 99: restart daemon • 100: log FAZ debugs • 101: Close FAZ debug log • 200: gui api test • 201: diag for jsonrpc .. • 202: faz fabric toggle trace debug • 203: faz fabric worker number config • 204: playbook session manager debug • 310: diag for incident attachment limits cache
fazwatchd <integer> ...	Fazwatchd daemon test usage: • 1: show process summary and report stats • 2: show playbook stats • 4: show nac asset stats • 5: show playbook task log • 6: show ha command execution stats • 7: show casb metadata stats • 8: show ems metadata stats • 9: show pgsvr.log monitor stats • 10: show airflow status or reset airflow • 11: show iocha stats • 99: restart daemon
filefwd <integer> ...	Filefwd daemon test usage: • 1: show daemon PID • 2: show daemon stats

Variable	Description
	• 3: show threads stats • 99: restart daemon
fileparsed <integer> ...	Fileparsed daemon test usage: • 1: show PID • 2: show statistics and state • 3: show devtable local cache status • 4: reload devtable local cache. • 11: show FortiGate interface cache status • 12: show FortiGate interface parsers status • 13: show FortiGate interface archived files disk usage • 14: show FortiGate interface archived files retention days • 15: show FortiGate interface info • 16: show total number of interfaces trimmed from database • 17: show FortiGate policy files process status • 18: show total number of policy records in database • 98: rebuild FortiGate interface SQL tables • 99: restart daemon
forticldd <integer> ...	Forticldd Diag test usage: • 1: Daemon info (PID, meminfo, backtrace ...) • 2: switch on/off debug messages • 3: dump Contract Controller status • 4: Update contract controller • 5: Show fgfm status • 6: Recover fgfm • 99: restart forticldd
fortilogd <integer> ...	Fortilogd Diag test usage: • 1: Daemon info (PID, meminfo, backtrace ...) • 2: dump message status • 3: logstat status • 4: client devices status • 5: print log received • 6: switch on/off debug messages • 7: log forwarding prep status • 8: show logUID info • 9: device log cache reloading status • 10: dz_client cache status • 11: file stats • 12: stop/restart receiving logs • 14: show cached adom lograte status • 15: show cached adom log volume status • 16: show appevent logs receiving info • 17: show logging rate of the system and per-device • 18: show per-ADOM log rate and rate limit

Variable	Description
	• 90: show or set fortilogd working status • 95: show runtime logs. option format: pid=0:current,-1:all,PID duration=DURA filter=STR • 98: memory check • 99: restart fortilogd

fwdplugind <integer> ...	Fwdplugind daemon test usage:
	• 1: Daemon info (PID, meminfo, backtrace ...)
	• 2: show stats
	• 3: show fwd-plugin status
	• 4: show Fluentd stats
	• 5: show Fluentd config
	• 88: restart Fluentd with new config
	• 99: restart daemon
	• 200: dia for configuration:
	  • reload: reload configuration
	  • logfwd-remote: show fluentd configuration by logfwd remote name
	  • temp-config: show temporary fluentd configuration file when creating configuraion file fail.
	  • auth-limit: show plugins detail about google auth-limit control.
	  • conflict-limit: show plugins detail about conflict control.
	  • suspend-limit: show plugins detail about suspended.
	• 201: dia for debug:
	  • log: enable/disable Fluentd from generating logs in files.
	  • monitor: enable/disable Fluentd monitoring.
	  • restart: restart Fluentd immediately.
	  • clean_restart: remove all Fluentd related files and restart fwdplugind.
	  • worker_memory: display memory usage for Fluentd workers.
	  • worker_restart: restart Fluentd worker via pid.

logfiled <integer> ...	Logfile daemon test usage: • 1: Daemon info (PID, meminfo, backtrace ...) • 2: show statistics and state • 4: show ADOM statistics ([adom-filter(adom-name or 'ALL' or oid in format of 'oid=123') [force-refresh | dev-filter|* [vd-filter|*]]) • 5: show device statistics ([devid-filter [vd-filter|*]]) • 6: show auto-del statistics • 7: show log file disk usage ([dev-filter|* [vd-filter|*]) • 8: update, show log file disk usage ([devid [vd [from-ndays-ago [to-ndays-ago]]]) • 9: show inode usage

Variable	Description
	• 10: enable or diable debug filter of device and vdom • 11: du cache diag commands • 12: force to check the oldest log litime when trim log files. • 13: force to delete log files older than <days> to enforce deletion policy for uploaded log files (<days>). • 90: reset statistics and state • 91: force to preen content files info • 99: restart daemon
logfwd <integer> ...	Logfwd daemon test usage: • 1: Daemon info (PID, meminfo, backtrace ...) • 2: Dump thread-pool status • 3: Dump log-forward configurations • 4: Dump log-forwarding status • 5: Overall and converter stats • 6: Dump HA CID info • 7: show runtime logs. 'help' to show usage • 8: show cfile list status [all: for all cfiles] • 9: show max duarion of loss in memory mode, 120 seconds default, 0 to disable memory mode • 10: Force logfwd to run in disk mode [1:enable, 0:disable] • 11: show fwdplugind ports info • 97: memory check • 98: Reset log-forwarding stats • 99: Restart logfwd
log-fetchd <integer> ...	Log-fetch daemon test usage: • 1: show PID • 2: show states • 3: show running sessions • 99: restart the daemon
miglogd <integer> ...	Miglogd daemon test usage: • 1: show PID • 2: dump memory pool • 99: restart daemon
oftpd <integer> ...	Oftpd daemon test usage: • 1: Daemon info (PID, meminfo, backtrace ...) • 2: show statistics and state • 3: show connected device name and IP • 4: show detailed session state • 5: show oftp request statistics • 6: show cmdb device cache [filter]

Variable	Description
	• 7: show logfwd thread stats • 8: show tasklist statistics • 9: show unreg dev cache [filter] • 10: log cluster bridge stats • 11: show helper threads stats • 12: show HA group cache • 13: show file fwd stats • 14: show fct software inventory cache • 15: show fgt interface stats • 16: show fos-auto device dump. [dev] to dump device list • 17: show device logging rate & rate-limit. [enable] to force tracking log-rate or [disable] to track only rate-limited devices. [config] to show config • 18: show fgt policy info, [dev] to dump device list • 19: show syslog receiving stats, [oversize] to print last received oversize syslogs • 20: show fgt epeu stats • 21: dump oftp-restapi-sched stats • 22: dump oftp-restapi-sched status • 23: dump oftp csf member status • 24: dump blacklisted devices • 25: show connection close logs. 'help' to show usage • 30: dump csf groups data in all adoms in json string • 31: show csf groups update stats • 32: reschedule all restapi task for designated devid • 40: show connections by last-request type • 43: manage fct-log-upload track [show all/fct-sn|del fct-sn] • 50: display logtypes for all devid • 60: display login requests stats • 61: Fortiview feature list cache dump • 72: config high priority device • 80: set region • 81: show FAZ HA info • 90: reload un-reg device tree • 91: delete designated csf group • 92: reload reg dev cache • 93: filter incoming connections by source IP • 96: oftp packet sniffer • 95: debug output • 97: adjust REST APIs client device allowed to call.

Variable	Description
	• 99: restart daemon • 101: schedule restart the daemon. [enable <interval>|disable] • 102: oftpd monitor. [enable [timeout]|enable-with-core [timeout]|disable]
rptchkd <integer> ...	Sqlrptcache daemon test usage: • 1: show PID • 2: show statistics and state • 3: reset statistics and state • 4: list adoms • 6: list schedules • 7: show statistics of sched-rpt dispatcher • 8: show track info of reports • 9: enable/disable report run-queue debug • 55: re-check an adom • 99: restart daemon • 910: enable rptchkd • 911: disable rptchkd
rptsched <integer> ...	Rptschedler daemon test usage: • 1: show PID • 2: show statistics and state • 3: reset statistics and state • 99: restart daemon
scansched <integer> ...	Scansched daemon test usage: • 1: show PID • 2: show statistics and state • 3: reset statistics and state • 11: show ioc-rescan task status • 99: restart daemon
sdnproxyd <integer> ...	SDN proxy daemon test usage.
siemagentd <integer> ...	Siemagentd daemon test usage: • 1: show PID • 2: show daemon statistics • 3: show workers log stats • 4: show workers status stats • 5: show workers pools status • 6: siem workers reload config • 7: siem workers engine info dump • 20: show the siem stream storage info • 21: show the latest siem stream submitted in redis • 99: restart daemon

Variable	Description
	• 200: diag for log based alert (event mgmt) • 201: diag for siemagentd configuration
siemdbd <integer> ...	Siemdbd daemon test usage: • 1: Daemon info (PID, meminfo, backtrace ...) • 2: show statistics and state • 3: show running processes • 4: show writers info • 5: show splitter info • 6: show Adom database info • 7: show trimmer info • 8: show the shared Materialized View disk usage info • 9: set/reset max memory usage ratio • 10: add or drop skip indices on SIEM table • 11: cleanup CH tmp_merge dir • 20: show fabric stats • 41: show writer 1 info • 42: show writer 2 info • 43: show writer 3 info • 44: show writer 4 info • 45: show writer 5 info • 46: show writer 6 info • 97: clear redis stream • 99: restart daemon
snmpd <integer> ...	SNMP daemon test usage: • 1: display daemon pid • 2: display snmp statistics • 3: clear snmp statistics • 4: generate test trap (cpu high) • 5: generate test traps (log alert, rate, data rate) • 6: generate test traps (licensed gb/day, device quota) • 99: restart daemon
sqllogd <integer> ...	SqlLog daemon test usage: • 1: Daemon info (PID, meminfo, backtrace ...) • 2: show statistics and state • 3: show worker init state • 4: show worker thread info • 5: show log device scan info, optionally filter by <devid> • 6: show batch file commit stat • 7: show ADOM device list by <adom-name> • 8: show logUID info

Variable	Description
	• 9: show ADOM scan sync info, optionally filter by <adom> • 10: show FortiClient dev to sql-ID (sID) map • 11: show devtable cache info • 12: show intfrole cache info • 41: show worker 1 info • 51: show worker 1 registered log devices • 61: show worker 1 open log file cache • 70: show sql database building progress • 80: show daemon status flags • 81: show debug zone devices status • 82: show all adoms with member devices or filer by <adom-name> • 83: show all registered logdevs • 84: show all unreg logdevs • 85: show fazid map stats • 91: diag worker devvd loadbalance • 94: clear all redis queues for batch file commit • 95: request to rebuild SQL database for local event logs • 96: resend all pending batch files to commit queues • 97: rebuilding warm restart • 98: set worker assignment to policy 'round-robin' or 'adom-affinity', daemon will restart on policy change. • 99: restart daemon • 200: diag for log based alert (event mgmt) .. • 201: diag for UTM correlation cache .. • 203: diag for logstat .. • 204: diag for IoC .. • 205: diag for endpoint and enduser .. • 206: diag for ueba .. • 207: diag for FSA scan session .. • 208: diag for audit report event process .. • 209: diag for shadow it info .. • 210: diag for fgt epeu info .. • 211: diag for dns info .. • 221: estimated browsing time stats • 222: fsa devmap cache info • 224: fgt lograte cache info • 225: dump enum field error cache • 226: reset enum field error cache • 227: dump tz field error cache • 228: reset tz field error cache

Variable	Description
	• 229: diag archivers compression algorithm • 230: diag for ems enrich .. • 231: diag for geo-location lookup ..
sqlplugind <integer> ...	Sqlplugind daemon test usage: • 1: Daemon info (PID, meminfo, backtrace ...) • 2: show daemon stats • 3: show SIEM table stats • 6: show table slow upgrade info • 7: show faz fabric meta table stats • 8: show postgres table migrate stats • 91: scan hcache query templates and clean up unused • 92: scan metadata and update sql • 98: scan and clean zombie cstore files • 99: restart daemon
sqlreportd <integer> ...	Sqlreportd daemon test usage: • 1: Daemon info (PID, meminfo, backtrace ...) • 2: show daemon stats • 3: show restorable table schema • 4: show restorable table status • 5: delete SQL restorable table files in collector mode <ADOM> • 99: restart daemon
sqlrptcached <integer> ...	Sqlrptcache daemon test usage: • 1: Daemon info (PID, meminfo, backtrace ...) • 2: show statistics and state • 3: reset statistics and state • 5: dump auto-cache charts • 6: show auto-cache SQL grouping • 7: upload auto-cache SQL grouping • 8: show auto-cache SQL recommendation • 9: upload auto-cache SQL recommendation • 99: restart daemon
syncsched <integer> ...	Syncsched daemon test usage: • 1: Daemon info (PID, meminfo, backtrace ...) • 2: show report nodes states • 3: show report syncing state • 4: show ha sync peers • 5: reset ha sync queue • 6: show ha elog sync • 10: sync reports with peer

Variable	Description
	• 11: fsync stat • 12: fsync reload • 13: trim sync dir • 14: trim sync dir stat • 99: restart daemon
uploadd <integer> ...	Uploadd daemon test usage: • 1: Daemon info (PID, meminfo, backtrace ...) • 2: show statistics and state • 3: reset statistics and state • 4: show uploadd queues content • 5: show upload server state • 6: show backup state • 50: clear log queue [mirror server1] • 51: clear log queue [mirror server2] • 52: clear log queue [mirror server3] • 53: clear log queue [backup] • 54: clear log queue [original request] • 55: clear log queues [all] • 56: clear report queue • 60: cloud storage get backlog info • 61: cloud storage get setting pending info <setting name> • 62: cloud storage test connector <connector> <remote path> • 63: cloud storage get usage info • 99: restart daemon
vmd <integer> ...	Cloud VM daemon test usage.

test connection

Test the connection to the mail server and syslog server.

Syntax

```
diagnose test connection fortianalyzer <ip>
diagnose test connection mailserver <server-name> <mail-from> <mail-to> [adom]
diagnose test connection syslogserver <server-name> [adom]
```

Variable	Description
fortianalyzer <ip>	Test the connection to the FortiAnalyzer.

Variable	Description
mailserver <server-name> <mail-from> <mail-to> [adom]	Test the connection to the mail server. Enter the email account which this test email will be sent from and to. Optionally, enter the ADOM name.
syslogserver <server-name> [adom]	Test the connection to the syslog server. Enter the syslog server name. Optionally, enter the ADOM name.

test policy-check

Check policy consistency.

Syntax

```
diagnose test policy-check flush
diagnose test policy-check list
```

Variable	Description
flush	Flush all policy check sessions.
list	List all policy check sessions.

test search

Test the search daemon.

Syntax

```
diagnose test search flush
diagnose test search list
```

Variable	Description
flush	Flush all search sessions.
list	List all search sessions.

test sftp

Use this command to test the secure file transfer protocol (SFTP) scheduled backup.

Syntax

```
diagnose test sftp auth <sftp server> <username> <password> <directory>
```

Variable	Description
<sftp server>	SFTP server IP address.
<username>	SFTP server username.
<password>	SFTP server password.
<directory>	The directory on the SFTP server where you want to put the file (default = /).

upload

Use the following commands for upload related settings.

upload clear

Use this command to clear the upload request.

Syntax

```
diagnose upload clear log {all | backup | mirror 1 | mirror 2 | mirror 3 | original}
diagnose upload clear report
```

Variable	Description
log {all | original | backup | mirror 1 | mirror 2 | mirror 3	Clear log uploading requests. • `all`: Clear all log uploading requests. • `backup`: Clear log uploading requests in the backup queue. • `mirror 1`: Clear log uploading requests in the mirror queue for server 1. • `mirror 2`: Clear log uploading requests in the mirror queue for server 2. • `mirror 3`: Clear log uploading requests in the mirror queue for server 3. • `original`: Clear log uploading requests in the original queue.
report	Clear all report upload requests.

upload status

Use this command to get the running status on files in the upload queue.

Syntax

```
diagnose upload status
```

vpn

Use this command to flush SAD entries and list tunnel information.

Syntax

```
diagnose vpn tunnel flush-SAD
diagnose vpn tunnel list
```

Variable	Description
flush-SAD	Flush the SAD entries.
list	List tunnel information.

get

The get commands display a part of your FortiAnalyzer unit's configuration in the form of a list of settings and their values.

Although not explicitly shown in this section, for all `config` commands there are related get and show commands that display that part of the configuration. `get` and `show` commands use the same syntax as their related `config` command, unless otherwise specified.

CLI commands and variables are case sensitive.

The get command displays all settings, including settings that are in their default state.

Unlike the `show` command, `get` requires that the object or table whose settings you want to display are specified, unless the command is being used from within an object or table.

For example, at the root prompt, this command would be valid:

```
get system status
```

and this command would not:

```
get
```

fmupdate analyzer	system admin	system ha	system performance
fmupdate av-ips	system alert-console	system interface	system report
fmupdate custom-url-list	system alertemail	system local-in-policy	system route
fmupdate disk-quota	system alert-event	system local-in-policy6	system route6
fmupdate fct-services	system auto-delete	system locallog	system saml
fmupdate fgd-setting	system backup	system log	system sniffer
fmupdate fds-setting	system central-management	system log-fetch	system snmp
fmupdate fwm-setting	system certificate	system log-forward	system soc-fabric
fmupdate multilayer	system connector	system log-forward-service	system sql
fmupdate publicnetwork	system dns	system loglimits	system status
fmupdate server-access-priorities	system docker	system mail	system syslog

fmupdate server-override-status	system fips	system metadata	system web-proxy
fmupdate service	system fortiview	system ntp	
	system global	system password-policy	

fmupdate analyzer

Use this command to view the virus report to FDS.

Syntax

```
get fmupdate analyzer virusreport
```

fmupdate av-ips

Use this command to view AV/IPS update settings.

Syntax

```
get fmupdate av-ips advanced-log
```

fmupdate custom-url-list

Use this command to view the custom URL database.

Syntax

```
get fmupdate custom-url-list
```

fmupdate disk-quota

Use this command to view the disk quota for the update manager.

Syntax

```
get fmupdate disk-quota
```

Example

This example shows the output for `get fmupdate disk-quota`:

```
value : 51200
```

fmupdate fct-services

Use this command to view FortiClient update services configuration.

Syntax

```
get fmupdate fct-services
```

Example

This example shows the output for `get fmupdate fct-services`:

```
status : enable
port : 80
```

fmupdate fds-setting

Use this command to view FDS parameters.

Syntax

```
get fmupdate fds-setting
```

Example

This example shows the output for `get fmupdate fds-setting`:

```
User-Agent : Mozilla/5.0 (compatible; MSIE 9.0; Windows NT 6.1; Trident/5.0)
fds-clt-ssl-protocol: tlsv1.2
fds-ssl-protocol : tlsv1.2
fmtr-log : info
```

```
fortiguard-anycast : disable
fortiguard-anycast-source: fortinet
linkd-log : info
max-av-ips-version : 20
max-work : 1
push-override:
push-override-to-client:
send_report : enable
send_setup : disable
server-override:
system-support-fai :
system-support-faz :
system-support-fct :
system-support-fdc :
system-support-fgt :
system-support-fml :
system-support-fsa :
system-support-fts :
umsvc-log : info
unreg-dev-option : add-service
update-schedule:
   time: 00:10 wanip-query-mode : disable
```

fmupdate fgd-setting

Use this command to view FortiGuard run parameters.

Syntax

```
get fmupdate fgd-setting
```

Example

This example shows the output for `get fmupdate fgd-setting`:

```
as-cache : 300
as-log : nospam
as-preload : disable
av-cache : 300
av-log : novirus
av-preload : disable
av2-cache : 800
av2-log : noav2
av2-preload : disable
eventlog-query : disable
fgd-pull-interval : 10
fq-cache : 300
fq-log : nofilequery
fq-preload : disable
iot-cache : 300
```

```
iot-log : noiot
iot-preload : disable
iotv-preload : disable
linkd-log : debug
max-client-worker : 0
max-log-quota : 6144
max-unrated-site : 500
restrict-as1-dbver : (null)
restrict-as2-dbver : (null)
restrict-as4-dbver : (null)
restrict-av-dbver : (null)
restrict-av2-dbver : (null)
restrict-fq-dbver : (null)
restrict-iots-dbver : (null)
restrict-wf-dbver : (null)
server-override:
stat-log : disable
stat-log-interval : 60
stat-sync-interval : 60
update-interval : 6
update-log : enable
wf-cache : 600
wf-dn-cache-expire-time: 30
wf-dn-cache-max-number: 10000
wf-log : nourl
wf-preload : disable
```

fmupdate fwm-setting

Use this command to view firmware management settings.

Syntax

```
get fmupdate fwm-setting
```

Example

This example shows the output for `get fmupdate fwm-setting`:

```
auto-scan-fgt-disk : enable
check-fgt-disk : enable
fds-failover-fmg : enable
fds-image-timeout : 1800
health-check : enable
immx-source : fmg
log : fwm_dm_json
max-device-history : 100
max-profile-history : 100
multiple-steps-interval: 60
retrieve : enable
```

```
retry-interval : 60
retry-max : 10
revision-diff : enable
send-image-retry : 0
upgrade-timeout:
```

fmupdate multilayer

Use this command to view multilayer mode configuration.

Syntax

```
get fmupdate multilayer
```

fmupdate publicnetwork

Use this command to view public network configuration.

Syntax

```
get fmupdate publicnetwork
```

fmupdate server-access-priorities

Use this command to view server access priorities.

Syntax

```
get fmupdate server-access-priorities
```

Example

This example shows the output for `get fmupdate server-access-priorities`:

```
access-public : disable
av-ips : disable
private-server:
web-spam : enable
```

fmupdate server-override-status

Use this command to view server override status configuration.

Syntax

```
get fmupdate server-override-status
```

fmupdate service

Use this command to view update manager service configuration.

Syntax

```
get fmupdate service
```

Example

This example shows the output for `get fmupdate service`:

```
avips : enable
```

system admin

Use these commands to view admin configuration.

Syntax

```
get system admin group [group name]
get system admin ldap [server entry name]
get system admin profile [profile ID]
get system admin radius [server entry name]
get system admin setting
get system admin tacacs [server entry name]
get system admin user [username]
```

Example

This example shows the output for `get system admin setting`:

```
access-banner : disable
admin-https-redirect: enable
admin-login-max : 256
admin_server_cert : server.crt
auth-addr : (null)
auth-port : 443
banner-message : (null)
fgt-gui-proxy : enable
fgt-gui-proxy-port : 8082
firmware-upgrade-check: enable
fsw-ignore-platform-check: disable
gui-theme : jade
http_port : 80
https_port : 443
idle_timeout : 900
idle_timeout_api : 900
idle_timeout_gui : 900
idle_timeout_sso : 900
object-threshold-limit: disable
objects-force-deletion: enable
preferred-fgfm-intf : (null)
shell-access : disable
show-add-multiple : disable
show-checkbox-in-table: disable
show-device-import-export: disable
show-fct-manager : disable
show-hostname : disable
show-log-forwarding : enable
show-sdwan-manager : enable
unreg_dev_opt : add_allow_service
webadmin_language : auto_detect
```

system alert-console

Use this command to view the alert console settings.

Syntax

```
get system alert-console
```

Example

This example shows the output for `get system alert-console`:

```
period : 7
severity-level : emergency
```

system alertemail

Use this command to view alert email settings.

Syntax

```
get system alertemail
```

Example

This example shows the output for `get system alertemail`:

```
authentication : enable
fromaddress : (null)
fromname : (null)
smtppassword : *
smtpport : 25
smtpserver : (null)
smtpuser : (null)
```

system alert-event

Use this command to view alert event information.

Syntax

```
get system alert-event [alert name]
```

Example

This example shows the output for an alert event named `Test` that has default values:

```
name : Test
alert-destination:
enable-generic-text : disable
enable-severity-filter: disable
event-time-period : 0.5
generic-text : (null)
num-events : 1
severity-filter : high
severity-level-comp : =
severity-level-logs : no-check
```

system auto-delete

Use this command to view automatic deletion policies for logs, reports, DLP files, and quarantined files.

Syntax

```
get system auto-delete
```

system backup

Use the following commands to view backups:

Syntax

```
get system backup all-settings
get system backup status
```

Example

This example shows the output for `get system backup status`:

```
All-Settings Backup
   Last Backup: Tue Sep 29 08:03:35 2020
   Next Backup: N/A
```

system central-management

Use this command to view the central management configuration.

Syntax

```
get system central-management
```

Example

This example shows the output for `get system central-management`:

```
type : fortimanager
allow-monitor : enable
```

```
fmg : (null)
enc-algorithm : default
authorized-manager-only: enable
serial-number :
```

system certificate

Use these commands to view certificate configuration.

Syntax

```
get system certificate ca [certificate name]
get system certificate crl [crl name]
get system certificate local [certificate name]
get system certificate oftp [certificate name]
get system certificate remote [certificate name]
get system certificate ssh [certificate name]
```

Example

This example shows the output for `get system certificate local Fortinet_Local`:

```
name : Fortinet_Local
password : *
comment : Default local certificate
private-key :
certificate :
   Subject: C = US, ST = California, L = Sunnyvale, O = Fortinet, OU = FortiAnalyzer, CN = FAZ-
        VM0000000001, emailAddress = support@fortinet.com
   Issuer: C = US, ST = California, L = Sunnyvale, O = Fortinet, OU = Certificate Authority, CN =
        fortinet-subca2001, emailAddress = support@fortinet.com
   Valid from: 2017-08-30 26:03:83 GMT
   Valid to: 2056-01-19 33:14:77 GMT
   Fingerprint: 68:--:--:--:--:--:--:--:--:--:--:--:--:--:--:7C
   Root CA: No
   Version: 3
   Serial Num:
      38:f9
   Extensions:
      Name: X509v3 Subject Key Identifier
      Critical: no
      Content:
      EC:--:--:--:--:--:--:--:--:--:--:--:--:--:--:--:--:--:--:94
      Name: X509v3 Authority Key Identifier
      Critical: no
      Content:
      keyid:98:--:--:--:--:--:--:--:--:--:--:--:--:--:--:--:--:--:--:D7
DirName:/C=US/ST=California/L=Sunnyvale/O=Fortinet/OU=Certificate Authority/CN=fortinet-
      ca2/emailAddress=support@fortinet.com
serial:20:01
```

```
        Name: X509v3 Basic Constraints
        Critical: yes
        Content:
        CA:FALSE
        Name: X509v3 Key Usage
        Critical: yes
        Content:
        Digital Signature
    csr :
```

system connector

Use this command to view FSSO connector refresh intervals, in seconds.

Syntax

```
get system connector
```

Example

This example shows the output for `get system connector`:

```
cloud-orchest-refresh-interval: 300
conn-refresh-interval: 300
conn-ssl-protocol : follow-global-ssl-protocol
faznotify-msg-queue-max: 1000
faznotify-msg-timeout: 72
fsso-refresh-interval: 180
fsso-sess-timeout : 300
px-svr-timeout : 300
```

system csf

Use this command to view CSF configuration.

Syntax

```
get system csf
```

system dns

Use this command to view DNS settings.

Syntax

```
get system dns
```

Example

This example shows the output for `get system dns`:

```
primary : 111.11.111.11
secondary : 111.11.111.12
ip6-primary : ::
ip6-secondary : ::
```

system docker

Use this command to view Docker and management extension statuses.

Syntax

```
get system docker
```

Example

This example shows the output for `get system docker`:

```
status : disable
cpu : 50
mem : 50
default-address-pool_base : 172.17.0.0 255.255.0.0
default-address-pool_size : 24
docker-user-login-max: 32
```

system fips

Use this command to view FIPS settings.

Syntax

```
get system fips
```

Example

This example shows the output for `get system fips`:

```
entropy-token : enable
re-seed-interval : 1440
```

system fortiview

Use this command to view the FortiView settings.

Syntax

```
get system fortiview auto-cache
get system fortiview settings
```

Example

This example shows the output for `get system fortiview auto-cache`:

```
aggressive-fortiview: disable
incr-fortiview: disable
interval : 168
status : enable
```

system global

Use this command to view global system settings.

Syntax

```
get system global
```

Example

This example shows the output for `get system global`:

```
admin-host : (null)
admin-lockout-duration: 60
admin-lockout-method: ip
admin-lockout-threshold: 3
admin-ssh-grace-time: 120
adom-mode : normal
adom-status : disable
apache-mode : event
apache-wsgi-processes: 10
api-ip-binding : enable
auth-dev-restapi-allowlist: disable
backup-compression : normal
backup-to-subfolders: disable
clone-name-option : default
clt-cert-req : disable
console-output : standard
contentpack-fgt-install: disable
country-flag : enable
create-revision : enable
daylightsavetime : enable
default-logview-auto-completion: enable
default-search-mode : filter-based
detect-unregistered-log-device: enable
device-view-mode : tree
dh-params : 2048
disable-module : none
enc-algorithm : high
event-correlation-cache-size: 1
fabric-storage-pool-quota: 0
fabric-storage-pool-size: 20
fcp-cfg-service : disable
fgfm-ca-cert :
fgfm-cert-exclusive : disable
fgfm-local-cert : (null)
fgfm-ssl-protocol : follow-global-ssl-protocol
fmg-fabric-port : 8893
fortiservice-port : 8013
global-ssl-protocol : tlsv1.2
gui-curl-timeout : 30
gui-feature-visibility-mode: per-adom
gui-polling-interval: 5
ha-member-auto-grouping: enable
hostname : FAZVM64-HV
httpd-ssl-protocol : tlsv1.3 tlsv1.2
jsonapi-log : disable
language : english
latitude : (null)
ldap-cache-timeout : 86400
ldapconntimeout : 60000
log-checksum : none
log-checksum-upload : disable
log-forward-cache-size: 1
log-forward-plugin-workers: 10
log-mode : analyzer
longitude : (null)
management-ip : (null)
management-port : 443
```

```
mapclient-ssl-protocol: follow-global-ssl-protocol
max-aggregation-tasks: 0
max-running-reports : 1
multiple-steps-upgrade-in-autolink: disable
no-copy-permission-check: enable
no-vip-value-check : disable
normalized-intf-zone-only: disable
object-revision-db-max: 100000
object-revision-mandatory-note: enable
object-revision-object-max: 100
object-revision-status: enable
oftp-ssl-protocol : tlsv1.2
policy-object-icon : disable
policy-object-in-dual-pane: disable
pre-login-banner : disable
private-data-encryption: disable
remoteauthtimeout : 10
rpc-log : enable
search-all-adoms : disable
ssh-enc-algo : chacha20-poly1305@openssh.com aes256-ctr aes256-gcm@openssh.com
ssh-hostkey-algo : ecdsa-sha2-nistp521 rsa-sha2-256 rsa-sha2-512 ssh-ed25519
ssh-kex-algo : 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
ssh-mac-algo : hmac-sha2-256 hmac-sha2-256-etm@openssh.com hmac-sha2-512 hmac-sha2-512-
      etm@openssh.com
ssh-strong-crypto : enable
ssl-low-encryption : disable
ssl-static-key-ciphers: enable
storage-age-limit: 0
table-entry-blink : enable
task-list-size : 2000
timezone : (GMT-8:00) Pacific Time (US & Canada).
tunnel-mtu : 1500
usg : enable
webservice-proto : tlsv1.3 tlsv1.2
```

system ha

Use this command to view HA configuration.

Syntax

```
get system ha
```

system interface

Use these commands to view interface configuration and status.

Syntax

```
get system interface
get system interface [interface name]
```

Examples

This example shows the output for `get system interface`:

```
== [ port1 ]
name: port1 status: enable mode : static ip: 111.11.11.11 255.255.255.0 speed: auto
== [ port2 ]
name: port2 status: enable mode : static ip: 0.0.0.0 0.0.0.0 speed: auto
== [ port3 ]
name: port3 status: enable mode : static ip: 0.0.0.0 0.0.0.0 speed: auto
== [ port4 ]
name: port4 status: enable mode : static ip: 0.0.0.0 0.0.0.0 speed: auto
```

This example shows the output for `get system interface port1`:

```
name : port1
status : enable
mode: static
ip : 111.11.11.11 255.255.255.0
allowaccess : ping https ssh snmp soc-fabric http webservice fgfm
speed : auto
description : (null)
alias : (null)
mtu : 1500
type : physical
ipv6:
    ip6-address: ::/0 ip6-allowaccess: ip6-autoconf: enable
```

system local-in-policy

Use this command to view the IPv4 local-in policy configuration.

Syntax

```
get system local-in-policy
```

system local-in-policy6

Use this command to view the IPv6 local-in policy configuration.

Syntax

```
get system local-in-policy6
```

system locallog

Use these commands to view local log configuration.

Syntax

```
get system locallog disk filter
get system locallog disk setting
get system locallog [fortianalyzer | fortianalyzer2 |fortianalyzer3] filter
get system locallog [fortianalyzer | fortianalyzer2 |fortianalyzer3] setting
get system locallog memory filter
get system locallog memory setting
get system locallog setting
get system locallog [syslogd | syslogd2 | syslogd3] filter
get system locallog [syslogd | syslogd2 | syslogd3] setting
```

Examples

This example shows the output for `get system locallog disk setting`:

```
status : enable
severity : information
upload : disable
server-type : FTP
max-log-file-size : 100
max-log-file-num : 10000
roll-schedule : none
diskfull : overwrite
log-disk-full-percentage: 80
log-disk-quota : 5
```

This example shows the output for `get system locallog syslogd3 filter`:

```
controller : enable
event : enable
devcfg : enable
devops : enable
diskquota : enable
docker : enable
```

```
dvm : enable
ediscovery : enable
eventmgmt : enable
faz : enable
fazsys : enable
fgd : enable
fmgws : enable
fortiview : enable
glbcfg : enable
ha : enable
hcache : enable
incident : enable
iolog : enable
logd : enable
logdb : enable
logdev : enable
logfile : enable
logging : enable
report : enable
system : enable
```

system log

Use these commands to view log configuration.

Syntax

```
get system log alert
get system log device-disable
get system log fos-policy-stats
get system log interface-stats
get system log ioc
get system log mail-domain <id>
get system log pcap-file
get system log ratelimit
get system log settings
get system log topology
```

Example

This example shows the output for `get system log settings`:

```
FAC-custom-field1 : (null)
FCH-custom-field1 : (null)
FCT-custom-field1 : (null)
FDD-custom-field1 : (null)
FFW-custom-field1 : (null)
FGT-custom-field1 : (null)
FML-custom-field1 : (null)
FPX-custom-field1 : (null)
```

```
FSA-custom-field1 : (null)
FWB-custom-field1 : (null)
browse-max-logfiles : 10000
device-auto-detect : enable
dns-resolve-dstip : disable
download-max-logs : 100000
ha-auto-migrate : disable
import-max-logfiles : 10000
keep-dev-logs : disable
legacy-auth-mode : enable
log-file-archive-name: basic
log-interval-dev-no-logging: 15
log-upload-interval-dev-no-logging: 360
rolling-regular:
sync-search-timeout : 60
unencrypted-logging-tcp: disable
unencrypted-logging-udp: disable
```

system log-fetch

Use these commands to view log fetching configuration.

Syntax

```
get system log-fetch client-profile [id]
get system log-fetch server-settings
```

Example

This example shows the output for `get system log-fetch server-settings`:

```
max-conn-per-session: 3
max-sessions : 1
session-timeout : 10
```

system log-forward

Use this command to view log forwarding settings.

Syntax

```
get system log-forward [id]
```

system log-forward-service

Use this command to view log forward service settings.

Syntax

```
get system log-forward-service
```

Example

This example shows the output for `get system log-forward-service`:

```
accept-aggregation : enable
aggregation-disk-quota: 20000
```

system loglimits

Use this command to view log limits on your FortiAnalyzer unit.

Syntax

```
get system loglimits
```

Example

This example shows the output for `get system loglimits`:

```
GB/day : 250
Peak Log Rate : 10000
Sustained Log Rate : 4000
```

Where:

GB/day	Number of gigabytes used per day.
Peak Log Rate	Peak time log rate.
Sustained Log Rate	Average log rate.

system mail

Use this command to view alert email configuration.

Syntax

```
get system mail [mail service id]
```

Example

This example shows the output for an alert email named `Test`:

```
id : Test
auth : disable
auth-type : psk
passwd : *
port : 25
secure-option : default
server : mailServer
ssl-protocol : follow-global-ssl-protocol
user : mailperson@mailServer.com
```

system metadata

Use this command to view metadata settings.

Syntax

```
get system metadata admins [fieldname]
```

Example

This example shows the output for `get system metadata admins 'Contact Email'`:

```
fieldname : Contact Email
fieldlength : 50
importance : optional
status : enabled
```

system ntp

Use this command to view NTP configuration.

Syntax

```
get system ntp
```

Example

This example shows the output for `get system ntp`:

```
ntpserver:
   == [ 1 ]
   id: 1
status : enable
```

system password-policy

Use this command to view the system password policy.

Syntax

```
get system password-policy
```

Example

This example shows the output for `get system password-policy`:

```
status : enable
minimum-length : 8
must-contain : upper-case-letter lower-case-letter number non-alphanumeric
change-4-characters : disable
expire : 60
password-history : 0
login-lockout-upon-downgrade: disable
```

system performance

Use this command to view performance statistics on your FortiAnalyzer unit.

Syntax

```
get system performance
```

Example

This example shows the output for `get system performance`:

```
CPU:
   Used: 100.00%
   Used(Excluded NICE): 100.00%
         %used %user %nice %sys %idle %iowait %irq %softirq
   CPU0 100.00 100.00 0.00 0.00 0.00 0.00 0.00 0.00
Memory:
   Total: 4,134,728 KB
   Used: 2,105,988 KB 50.9%
Hard Disk:
   Total: 82,434,456 KB
   Used: 3,836,324 KB 4.7%
   IOStat: tps r_tps w_tps r_kB/s w_kB/s queue wait_ms svc_ms %util sampling_sec
            1.4 0.1 1.4 1.3 22.8 0.0 4.8 2.4 0.3 448240.73
Flash Disk:
   Total: 499,656 KB
   Used: 112,312 KB 22.5%
   IOStat: tps r_tps w_tps r_kB/s w_kB/s queue wait_ms svc_ms %util sampling_sec
            0.0 0.0 0.0 0.0 0.0 0.0 2.8 0.9 0.0 448240.82
```

system report

Use this command to view report configuration.

Syntax

```
get system report auto-cache
get system report est-browse-time
get system report group [group id]
get system report setting
```

Example

This example shows the output for `get system report setting`:

```
week-start : sun
max-table-rows : 1000000
max-rpt-pdf-rows : 100000
report-priority : auto
aggregate-report : disable
ldap-cache-timeout : 60
```

```
template-auto-install: default
exclude-capwap : by-port
capwap-port : 5246
```

system route

Use this command to view IPv4 routing table configuration.

Syntax

```
get system route [seq_num]
```

Example

This example shows the output for `get system route 66`:

```
seq_num : 66
device : port5
dst : 0.0.0.0 0.0.0.0
gateway : 10.111.1.16
```

system route6

Use this command to view IPv6 routing table configuration.

Syntax

```
get system route6 [seq_num]
```

system saml

Use this command to view SAML configuration.

Syntax

```
get system saml
```

Example

This example shows the output for `get system saml`:

```
status : enable
role : SP
cert : Fortinet_Local2
server-address : 172.27.2.225
login-auto-redirect : enable
entity-id : http://172.27.2.225/metadata/
acs-url : https://172.27.2.225/saml/?acs
sls-url : https://172.27.2.225/saml/?sls
idp-entity-id : http://http://172.27.2.224/saml-idp/sg45/metadata/
idp-single-sign-on-url: https://http://172.27.2.224/saml-idp/sg45/login/
idp-single-logout-url: https://http://172.27.2.224/saml-idp/sg45/logout/
idp-cert : Remote_Cert_1
default-profile : Restricted_User
forticloud-sso : disable
user-auto-create : disable
```

system sniffer

Use this command to view the packet sniffer configuration.

Syntax

```
get system sniffer
```

system snmp

Use these commands to view SNMP configuration.

Syntax

```
get system snmp community [community ID]
get system snmp sysinfo
get system snmp user [SNMP user name]
```

Example

This example shows the output for `get system snmp sysinfo`:

```
contact_info : (null)
description : Test FAZ
```

```
engine-id : (null)
fortianalyzer-legacy-sysoid: disable
location : (null)
status : enable
trap-cpu-high-exclude-nice-threshold: 80
trap-high-cpu-threshold: 80
trap-low-memory-threshold: 80
```

system-soc-fabric

Use this command to view the SOC Fabric configuration.

Syntax

```
get system soc-fabric
```

Example

This example shows the output for `get system soc-fabric`:

```
status : disable
```

system sql

Use this command to view SQL configuration.

Syntax

```
get system sql
```

Example

This example shows the output for `get system sql`:

```
custom-index:
prompt-sql-upgrade : enable
status : local
text-search-index : disable
ts-index-field:
   == [ FGT-app-ctrl ]
   category: FGT-app-ctrl value: user,group,srcip,dstip,dstport,service,app,action,hostname
   == [ FGT-attack ]
   category: FGT-attack value: severity,srcip,dstip,action,user,attack
```

```
    == [ FGT-content ]
    category: FGT-content value: from,to,subject,action,srcip,dstip,hostname,status
    == [ FGT-dlp ]
    category: FGT-dlp value: user,srcip,service,action,filename
    == [ FGT-emailfilter ]
    category: FGT-emailfilter value: user,srcip,from,to,subject
    == [ FGT-event ]
    category: FGT-event value: subtype,ui,action,msg
    == [ FGT-traffic ]
    category: FGT-traffic value: user,srcip,dstip,service,app,utmaction
    == [ FGT-virus ]
    category: FGT-virus value: service,srcip,dstip,action,filename,virus,user
    == [ FGT-voip ]
    category: FGT-voip value: action,user,src,dst,from,to
    == [ FGT-webfilter ]
    category: FGT-webfilter value: user,srcip,dstip,service,action,catdesc,hostname
    == [ FGT-netscan ]
    category: FGT-netscan value: user,dstip,vuln,severity,os
    == [ FGT-fct-event ]
    category: FGT-fct-event value: (null)
    == [ FGT-fct-traffic ]
    category: FGT-fct-traffic value: (null)
    == [ FGT-fct-netscan ]
    category: FGT-fct-netscan value: (null)
    == [ FGT-waf ]
    category: FGT-waf value: user,srcip,dstip,service,action
    == [ FGT-gtp ]
    category: FGT-gtp value: msisdn,from,to,status
    == [ FGT-dns ]
    category: FGT-dns value: (null)
    == [ FGT-ssh ]
    category: FGT-ssh value: (null)
    == [ FML-emailfilter ]
    category: FML-emailfilter value: client_name,dst_ip,from,to,subject
    == [ FML-event ]
    category: FML-event value: subtype,msg
    == [ FML-history ]
    category: FML-history value: classifier,disposition,from,to,client_name,direction,domain,virus
    == [ FML-virus ]
    category: FML-virus value: src,msg,from,to
    == [ FWB-attack ]
    category: FWB-attack value: http_host,http_url,src,dst,msg,action
    == [ FWB-event ]
    category: FWB-event value: ui,action,msg
    == [ FWB-traffic ]
    category: FWB-traffic value: src,dst,service,http_method,msg
background-rebuild : enable
compress-table-min-age : 7
database-type : postgres
device-count-high : disable
event-table-partition-time: 0
fct-table-partition-time: 360
start-time : 00:00 2000/01/01
traffic-table-partition-time: 0
utm-table-partition-time: 0
```

system status

Use this command to view the status of your FortiAnalyzer unit.

Syntax

```
get system status
```

Example

This example shows the output for `get system status`:

```
Platform Type : FAZ3000D
Platform Full Name : FortiAnalyzer-3000D
Version : v6.0.1-build0150 180606 (GA)
Serial Number : F--------------2
BIOS version : 00010005
System Part-Number : P12907-03
Hostname : FAZ3000D
Max Number of Admin Domains : 4000
Admin Domain Configuration : Enabled
FIPS Mode : Disabled
Branch Point : 0150
Release Version Information : GA
Current Time : Tue Sep 29 08:09:05 PDT 2020
Daylight Time Saving : Yes
Time Zone : (GMT-8:00) Pacific Time (US & Canada).
x86-64 Applications : Yes
Disk Usage : Free 3083.01GB, Total 7332.97GB
File System : Ext4
```

system syslog

Use this command to view syslog information.

Syntax

```
get system syslog [syslog server name]
```

Example

This example shows the output for an syslog server named `Test`:

```
name : Test
ip : 10.10.10.1
```

```
port : 514
reliable : disable
```

system web-proxy

Use this command to view the system web proxy.

Syntax

```
get system web-proxy
```

Example

This example shows the output for `get system web-proxy`:

```
status : disable
mode : tunnel
address : (null)
port : 1080
username : (null)
password : *
```

show

The `show` commands display a part of your unit's configuration in the form of the commands that are required to achieve that configuration from the firmware's default state.

Although not explicitly shown in this section, for all `config` commands, there are related `show` commands that display that part of the configuration. The `show` commands use the same syntax as their related `config` command.

CLI commands and variables are case sensitive.

Unlike the `get` command, `show` does not display settings that are in their default state.

Example

```
FAZVM64 # show system global
   config system global
      set adom-mode advanced
      set adom-status enable
      set hostname "FAZVM64"
   end
```

Appendix A - Object Tables

Global object categories

38 "webfilter ftgd-local-cat"	47 "webfilter urlfilter"	51 "webfilter ftgd-local-rating"
52 "vpn certificate ca"	56 "spamfilter bword"	60 "spamfilter dnsbl"
64 "spamfilter mheader"	67 "spamfilter iptrust"	85 "ips custom"
140 "firewall address"	142 "firewall addrgrp"	255 "user adgrp"
145 "user radius"	146 "user ldap"	147 "user local"
148 "user peer"	152 "user group"	167 "firewall service custom"
254 "firewall service predefined"	168 "firewall service group"	170 "firewall schedule onetime"
171 "firewall schedule recurring"	172 "firewall ippool"	173 "firewall vip"
288 "ips sensor"	292 "log custom-field"	293 "user tacacs+"
296 "firewall ldb-monitor"	1028 "application list"	1038 "dlp sensor"
1043 "wanopt peer"	1044 "wanopt auth-group"	1054 "vpn ssl web portal"
1076 "system replacemsg-group"	1097 "firewall mms-profile"	1203 "firewall gtp"
1213 "firewall carrier-endpoint-bwl"	1216 "antivirus notification"	1327 "webfilter content"
1337 "endpoint-control profile"	1338 "firewall schedule group"	1364 "firewall shaper traffic-shaper"
1365 "firewall shaper per-ip-shaper"	1367 "vpn ssl web virtual-desktop-app-list"	1370 "vpn ssl web host-check-software"
1413 "webfilter profile"	1420 "antivirus profile"	1433 "spamfilter profile"
1472 "antivirus mms-checksum"	1482 "voip profile"	150 "system object-tag"
184 "user fortitoken"	273 "web-proxy forward-server"	335 "dlp filepattern"
343 "icap server"	344 "icap profile"	321 "user fsso"
390 "system sms-server"	397 "spamfilter bwl"	457 "wanopt profile"
384 "firewall service category"	474 "application custom"	475 "user device-category"
476 "user device"	492 "firewall deep-inspection-options"	800 "dynamic interface"
810 "dynamic address"	1004 "vpnmgr vpntable"	1005 "vpnmgr node"

1100 "system meta"	820 "report output"	822 "sql-report chart"
824 "sql-report dataset"	825 "sql-report dashboard"	827 "sql-report layout"
1494 "dynamic vip"	1495 "dynamic ippool"	1504 "dynamic certificate local"
1509 "dynamic vpntunnel"		

Device object ID values

1 "system vdom"	3 "system accprofile"	5 "system admin"
8 "system interface"	16 "system replacemsg mail"	17 "system replacemsg http"
18 "system replacemsg ftp"	19 "system replacemsg nntp"	20 "system replacemsg alertmail"
21 "system replacemsg fortiguard-wf"	22 "system replacemsg spam"	23 "system replacemsg admin"
24 "system replacemsg auth"	25 "system replacemsg im"	26 "system replacemsg sslvpn"
28 "system snmp community"	38 "webfilter ftgd-local-cat"	1300 "application recognition predefined"
47 "webfilter urlfilter"	51 "webfilter ftgd-local-rating"	52 "vpn certificate ca"
53 "vpn certificate local"	54 "vpn certificate crl"	55 "vpn certificate remote"
56 "spamfilter bword"	60 "spamfilter dnsbl"	64 "spamfilter mheader"
67 "spamfilter iptrust"	74 "imp2p aim-user"	75 "imp2p icq-user"
76 "imp2p msn-user"	77 "imp2p yahoo-user"	85 "ips custom"
117 "system session-helper"	118 "system tos-based-priority"	124 "antivirus service"
128 "antivirus quarfilepattern"	130 "system ipv6-tunnel"	314 "system sit-tunnel"
131 "system gre-tunnel"	132 "system arp-table"	135 "system dhcp server"
137 "system dhcp reserved-address"	138 "system zone"	140 "firewall address"
142 "firewall addrgrp"	255 "user adgrp"	145 "user radius"
146 "user ldap"	147 "user local"	148 "user peer"
152 "user group"	155 "vpn ipsec phase1"	156 "vpn ipsec phase2"
157 "vpn ipsec manualkey"	158 "vpn ipsec concentrator"	165 "vpn ipsec forticlient"
167 "firewall service custom"	254 "firewall service predefined"	168 "firewall service group"
170 "firewall schedule onetime"	171 "firewall schedule recurring"	172 "firewall ippool"
173 "firewall vip"	178 "firewall ipmacbinding table"	181 "firewall policy"

189 "firewall dnstranslation"	190 "firewall multicast-policy"	199 "system mac-address-table"
200 "router access-list"	202 "router aspath-list"	204 "router prefix-list"
206 "router key-chain"	208 "router community-list"	210 "router route-map"
225 "router static"	226 "router policy"	253 "system proxy-arp"
284 "system switch-interface"	285 "system session-sync"	288 "ips sensor"
292 "log custom-field"	293 "user tacacs+"	296 "firewall ldb-monitor"
297 "ips decoder"	299 "ips rule"	307 "router auth-path"
317 "system wccp"	318 "firewall interface-policy"	1020 "system replacemsg ec"
1021 "system replacemsg nac-quar"	1022 "system snmp user"	1027 "application name"
1028 "application list"	1038 "dlp sensor"	1041 "user ban"
1043 "wanopt peer"	1044 "wanopt auth-group"	1045 "wanopt ssl-server"
1047 "wanopt storage"	1054 "vpn ssl web portal"	1061 "system wireless ap-status"
1075 "system replacemsg-image"	1076 "system replacemsg-group"	1092 "system replacemsg mms"
1093 "system replacemsg mm1"	1094 "system replacemsg mm3"	1095 "system replacemsg mm4"
1096 "system replacemsg mm7"	1097 "firewall mms-profile"	1203 "firewall gtp"
1213 "firewall carrier-endpoint-bwl"	1216 "antivirus notification"	1326 "system replacemsg traffic-quota"
1327 "webfilter content"	1337 "endpoint-control profile"	1338 "firewall schedule group"
1364 "firewall shaper traffic-shaper"	1365 "firewall shaper per-ip-shaper"	1367 "vpn ssl web virtual-desktop-app-list"
1370 "vpn ssl web host-check-software"	1373 "report dataset"	1375 "report chart"
1382 "report summary"	1387 "firewall sniff-interface-policy"	1396 "wireless-controller vap"
1399 "wireless-controller wtp"	1402 "wireless-controller ap-status"	1412 "system replacemsg webproxy"
1413 "webfilter profile"	1420 "antivirus profile"	1433 "spamfilter profile"
1440 "firewall profile-protocol-options"	1453 "firewall profile-group"	1461 "system storage"
1462 "report style"	1463 "report layout"	1472 "antivirus mms-checksum"
1482 "voip profile"	1485 "netscan assets"	1487 "firewall central-nat"
1490 "report theme"	150 "system object-tag"	169 "system dhcp6 server"
180 "system port-pair"	182 "system 3g-modem custom"	183 "application rule-settings"

184 "user fortitoken"	212 "webfilter override"	270 "firewall local-in-policy"
273 "web-proxy forward-server"	330 "system ddns"	331 "system replacemsg captive-portal-dflt"
335 "dlp filepattern"	337 "dlp fp-sensitivity"	338 "dlp fp-doc-source"
342 "webfilter ftgd-warning"	343 "icap server"	344 "icap profile"
352 "system monitors"	354 "system sp"	321 "user fsso"
355 "router gwdetect"	386 "system physical-switch"	388 "system virtual-switch"
390 "system sms-server"	394 "system replacemsg utm"	397 "spamfilter bwl"
406 "vpn certificate ocsp-server"	408 "user password-policy"	412 "webfilter search-engine"
428 "firewall identity-based-route"	431 "web-proxy debug-url"	432 "firewall ttl-policy"
434 "firewall isf-acl"	435 "firewall DoS-policy"	437 "firewall sniffer"
438 "wireless-controller wids-profile"	439 "switch-controller vlan"	441 "switch-controller managed-switch"
453 "firewall ip-translation"	457 "wanopt profile"	269 "firewall multicast-address"
384 "firewall service category"	466 "system ips-urlfilter-dns"	467 "system geoip-override"
474 "application custom"	475 "user device-category"	476 "user device"
483 "system server-probe"	473 "system replacemsg device-detection-portal"	492 "firewall deep-inspection-options"

Appendix B - CLI Error Codes

Some FortiAnalyzer CLI commands issue numerical error codes. The following table lists the error codes and descriptions.

Error Code	Description
0	Success
1	Function called with illegal parameters
2	Unknown protocol
3	Failed to connect host
4	Memory failure
5	Session failure
6	Authentication failure
7	Generic file transfer failure
8	Failed to access local file
9	Failed to access remote file
10	Failed to read local file
11	Failed to write local file
12	Failed to read remote file
13	Failed to write remote file
14	Local directory failure
15	Remote directory failure

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