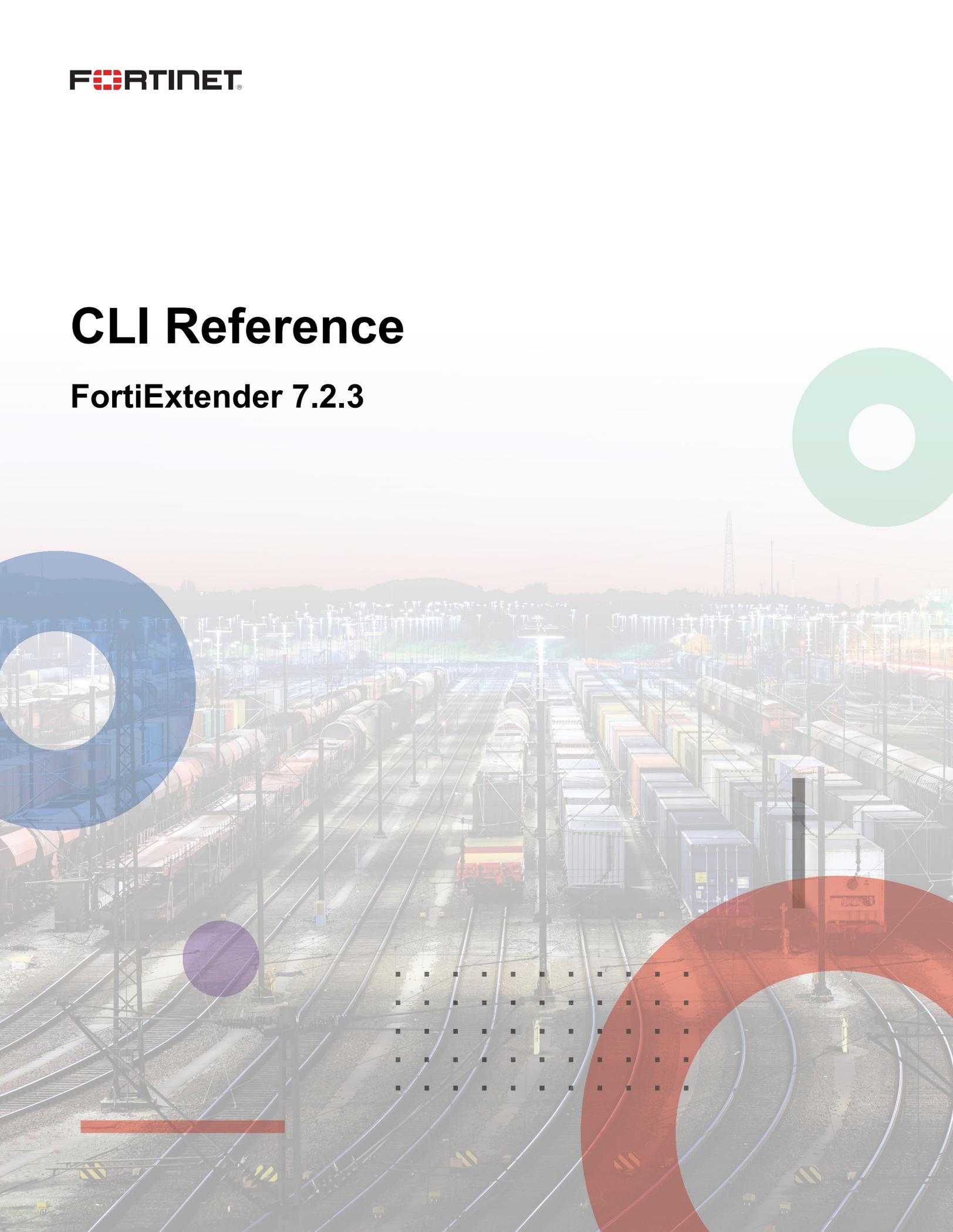


CLI Reference

FortiExtender 7.2.3



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FortiExtender 7.2.3 CLI Reference

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Introduction

The Reference Guide discusses the CLI command syntax of FortiExtender. It introduces the commonly used commands with sample commands for reference.

Connect to the CLI

You can connect to the CLI in one of the following ways:

- a direct serial connection,
- an SSH connection, or
- FortiExtender and FortiCloud GUIs.

You can access the FortiExtender CLI outside of the GUI in either of the following ways:

- Console connection — connect your computer directly to the console port of your FortiExtender
- SSH access — connect your computer through any network interface attached to one of the network ports of your FortiExtender

To access the FortiExtender CLI via FortiCloud GUI, go to the device page of a deployed FortiExtender device and click the “>_Console” section to open a new instance of the FortiExtender console.

To access the FortiExtender CLI via the FortiExtender GUI, click the “>_” tab on the left side of the GUI.



You can open only one console per GUI access.

Console connection

You can establish a direct connection to the CLI by connecting your management computer or console to the FortiExtender through its RJ-45 console port.

Direct console access to the FortiExtender may be necessary if:

- You are installing a FortiExtender device for the first time, and it is not configured to connect to your network.
- You are restoring the firmware using a boot interruption. Network access to the CLI will not be available until after the boot process has been completed, making direct console access the only option.

To connect to the FortiExtender console, you need:

- A console cable to connect the console port on the FortiExtender to the communications port on a computer.

Depending on your device, this may require:

- A USB to RJ-45 cable
- A DB-9 to RJ-45 cable (a DB-9-to-USB adapter may be used)
- A computer with an available communications port
- Terminal emulation software

To connect to the CLI through a direct console connection:

1. Using the console cable, connect the FortiExtender console port to the serial communications (COM) port on your management computer.
2. Start a terminal emulation program on your management computer, select the COM port, and set the Baud speed to 115200 Bits per second.
3. Press Enter on the keyboard to connect to the CLI.
4. Log into the CLI using your username and password ("admin" by default; you will be prompted to create a new password upon your first login).

You can now enter CLI commands, including configuring access to the CLI via SSH.

SSH access

You can establish SSH access to the CLI by connecting your computer to the FortiExtender using one of its network ports. You can either connect directly using a peer connection between the two, or through any intermediary network.

SSH must be enabled on the network interface that is associated with the physical network port that is being used.

If your computer is not connected either directly or through a switch to the FortiExtender, you must also configure the FortiExtender using a static router that can forward packets from the FortiExtender to the computer. This can be done using a local console connection, or in the GUI.

To connect to the FortiExtender using SSH, you need:

- A computer with an available serial communications (COM) port and an RJ-45 port
- An appropriate console cable
- A network cable
- Terminal emulation software
- Prior configuration of the operating mode, network interface, and static route.

Enable SSH access to the CLI using a local console connection:

1. Using the network cable, connect the FortiExtender network port either directly to the network port on your computer or to a network through which your computer can reach the FortiExtender.
2. Note down the port number of the physical network port.

3. Using the direct console connection, connect and log into the CLI.
4. Enter the following command:

```
Config system interface
  Edit <interface_str>
    Set allowaccess ssh
  next
```

where `<interface_str>` is the name of the network interface associated with the physical network port, such as `port4`.

5. Confirm the configuration using the following commands to show the interface settings:

```
Config system interface
Edit port4
Show
For example:
FX511FTQ22002638 # config system interface
FX511FTQ22002638 (interface) # edit port4
FX511FTQ22002638 (port4) # show
edit port4
  set type physical
  set status up
  set mode static
  set ip
  set gateway
  set mtu-override disable
  set distance 51
  set vrrp-virtual-mac enable
  config vrrp
    set status disable
  end
  set allowaccess ssh
next
```

Access the FortiExtender CLI using SSH

Once the FortiExtender is configured to accept SSH connections, use an SSH client on your management computer to connect to the CLI.

The following instructions use PuTTY. The steps may vary in other terminal emulators.

To connect to the CLI using SSH:

1. On your management computer, start PuTTY.
2. In the Host Name (or IP address) field, enter the IP address of the FortiExtender network interface that you are connected to and that has SSH access enabled.
3. Set the port number to 22, if it is not automatically set.
4. Set the Connection type to SSH.
5. Click Open. The SSH client starts to connect to the FortiExtender.



The SSH client may display a warning if this is the first time that you are connecting to the FortiExtender and its SSH key is not yet recognized by the SSH client, or if you previously connected to the FortiExtender using a different IP address or SSH key. This is normal if the management computer is directly connected to the FortiExtender with no network hosts in between.

6. Click Yes to accept the FortiExtender's SSH key.
The CLI will display the log in prompt.
7. Enter the administrator account name, such as admin, then press Enter.
8. Enter the administrator account password, then press Enter.
The CLI console shows the command prompt (FortiExtender hostname followed by a #). You can now enter CLI commands.

CLI commands

This CLI Reference Guide discusses the syntax of the CLI commands to configure and manage a FortiExtender unit.

The CLI syntax was created by processing the schema from FortiExtender models running FortiExtender OS version 7.2.0 and reformatting the resultant CLI output.

This CLI Reference is based on FortiExtender 201E (a FortiExtender device with one built-in Sierra modem EM7455). It covers the following topics:

- [Header on page 11](#)
- [Firewall on page 12](#)
- [LTE on page 16](#)
- [Router on page 22](#)
- [System on page 31](#)
- [SNMP on page 54](#)
- [HMON on page 57](#)
- [VPN on page 59](#)
- [Network on page 63](#)



All CLI commands in this *Reference Guide* are based on FortiExtender 201E, a FortiExtender model that runs on the Sierra Modem EM7455.

Header

This section discusses the CLI commands for configuring the header version.

config version

Description: Configures header version settings

```
Set config {integer}
Set carrier {string}
Set simmap {integer}
Set certificate {integer}
Unset
Show
End
```

Sample Command:

```
FX201E5919000057 (header) # show
config header
    config version
        set config 10517384
        set carrier FEM_06-22-1-2-AMEU|4a29ea
        set simmap 92e21b
        set certificate 3876258
    end
end
```

Firewall

This section discusses the CLI commands for configuring firewall.

config policy

Description: Configures firewall policies.

```
Edit <name>
  Set *srcintf <name1>, <name2>, ...
  Set *dstintf <name1>, <name2>, ...
  Set *srcaddr <name1>, <name2>, ...
  Set dnat [enable | disable]
  Set *dstaddr <name1>, <name2>, ...
  Set action [accept | deny]
  Set status [enable | disable]
  Set *service <name1>, <name2>, ...
  Set nat [enable | disable]

Next
Delete <name>
Move <name1> [after | before] <name2>
End
Purge
Show
```

Sample command:

```
FX201E5919000057 (policy) # show
config firewall policy
  edit test1
    set srcintf lo
    set dstintf any
    set srcaddr all
    set dnat disable
    set dstaddr all
    set action accept
    set status enable
    set service AH
    set nat enable
  next
  edit test2
    set srcintf any
    set dstintf lan
    set srcaddr all
    set dnat disable
    set dstaddr all
```

```
        set action accept
        set status disable
        set service ALL
        set nat enable
    next
edit all-pass
    set srcintf any
    set dstintf any
    set srcaddr all
    set dnat disable
    set dstaddr all
    set action accept
    set status enable
    set service ALL
    set nat enable
next
end

FX201E5919000057 (policy) # move test2 after all-pass
FX201E5919000057 (policy) <M> # show
config firewall policy
    edit test1
        set srcintf lo
        set dstintf any
        set srcaddr all
        set dnat disable
        set dstaddr all
        set action accept
        set status enable
        set service AH
        set nat enable
    next
edit all-pass
    set srcintf any
    set dstintf any
    set srcaddr all
    set dnat disable
    set dstaddr all
    set action accept
    set status enable
    set service ALL
    set nat enable
next
edit test2
    set srcintf any
    set dstintf lan
    set srcaddr all
    set dnat disable
    set dstaddr all
    set action accept
    set status disable
    set service ALL
    set nat enable
next
end
```

```
FX201E5919000057 (policy) <M> # end
```

config shaper

Description: Configure firewall shapers.

```
Config traffic-shaper
  Edit <name>
    Set max-bandwidth (1 - 16776000)
    Set *bandwidth-unit [kbps | mbps | gbps]
  Delete <name>
  Purge
  Show
End
```

Sample command:

```
FX201E5919000057 (traffic-shaper) # show
config firewall shaper traffic-shaper
  edit 1
    set max-bandwidth 34
    set bandwidth-unit kbps
  next
end
```

config shaping-policy

Description: Configure firewall shaping policies.

```
Edit <name>
  Set status [enable | disable]
  Set *dstintf <name1>, <name2>, ...
  Set *traffic-shaper <name1>, <name2>, ...
Delete <name>
Purge
Show
End
```

Sample command:

```
FX201E5919000057 (shaping-policy) # show
config firewall shaping-policy
  edit 1_policy
    set status enable
    set dstintf wan
    set traffic-shaper 1
  next
```

end

config vip

Description: Configures firewall vips.

```
Edit <name >
  Set comment [255]
  Set *extip <name1>
  Set *mappedip <name1>
  Set *extintf <name1>, <name2>, ...
  Set portforward [enable | disable]
  Set *protocol <name1>, <name2>, ... *only accessible when portforward is enabled
  Set *extport (1 - 65535) *only accessible when portforward is enabled
  Set *mappedport (1 - 65535) *only accessible when portforward is enabled
  Unset
  Next
  Show
  Abort
  End
Delete <name >
  Purge
  Show
  End
```

Sample command:

```
FX201E5919000057 (vip) # show
  config firewall vip
    edit 1
      set comment this is a test vip
      set extip 10.153.24.44
      set mappedip 10.153.24.36
      set extintf any
      set portforward enable
      set protocol tcp
      set extport 25
      set mappedport 33
    next
  end
```

LTE

This section discusses the CLI commands for configuring LTE settings.



These commands are NOT applicable to the FortiExtender 200F platform.

config setting

Description: Configures LTE modem settings.

Config controller-report

Description: Configures settings for reporting FortiExtender information to controller devices.

```
Set status [enable | disable]
Set interval (30 - 86400)
Set signal-threshold (10 - 50)
Unset
Show
End
```

Sample command:

```
FX201E5919000057 (controller-report) # show
config lte setting controller-report
    set status enable
    set interval 300
    set signal-threshold 10
end
```

config setting

Description: Configures LTE modem settings.

config modem1

Description: Configures modem settings.

config auto-switch

Description: Configures settings related to SIM card switching.

```

Set by-disconnect [enable | disable]
Set by-signal [enable | disable]
Set by-data-plan [enable | disable]
Set switch-back [by-time | by-timer]
Set switch-back-time (HH:MM) *only available if by-time is set
Set switch-back-timer (3600 - 2147483647)
Set pause-modem-manager [enable | disable]
Set cert-mode [enable | disable]
Set default-sim [sim1 | sim2 | by-carrier | by-cost]
Set preferred-carrier <name > *only available if default-sim is set to by-carrier
Set session-down-detection (1 - 60)
Set gps [enable | disable]
Set sim1-pin [enable | disable]
Set sim1-pin-code {0,4} *only accepts integers [0-9] when sim1-pin is enabled
Set sim2-pin [enable | disable]
Set sim2-pin-code {0,4} *only accepts integers [0-9] when sim2-pin is enabled
Unset
Show
End

```

Sample command:

```

FX201E5919000057 (modem1) # show
config lte setting modem1
    set pause-modem-manager disable
    set default-sim by-carrier
    set preferred-carrier Verizon
    set session-down-detection 3
    set gps enable
    set sim1-pin disable
    set sim2-pin disable
config auto-switch
    set by-disconnect enable
    set by-signal enable
    set by-data-plan enable
    set disconnect-threshold 3
    set disconnect-period 600
    set switch-back by-time by-timer
    set switch-back-time 12:22
    set switch-back-timer 3600
end
end

```

config moden2

Description: Configures modem settings.



Commands in this section apply to FortiExtender platforms with two modems only. Currently, they are applicable to FortiExtender 212F only.

config auto-switch

Description: Configures settings related to SIM card switching.

```

Set by-disconnect [enable | disable]
Set by-signal [enable | disable]
Set by-data-plan [enable | disable]
Set switch-back [by-time | by-timer]
Set switch-back-time (HH:MM) *only available if by-time is set
Set switch-back-timer (3600 - 2147483647)
Set cert-mode [enable | disable]
Set default-sim [sim1 | sim2 | by-carrier | by-cost]
Set preferred-carrier <name > *only available if default-sim is set to by-carrier
Set session-down-detection (1 - 60)
Set gps [enable | disable]
Set sim1-pin [enable | disable]
Set sim1-pin-code {0,4} *only accepts integers [0-9] when sim1-pin is enabled
Set sim2-pin [enable | disable]
Set sim2-pin-code {0,4} *only accepts integers [0-9] when sim2-pin is enabled
Unset
Show
End

```

Sample command:

```

config lte setting modem2
    set pause-modem-manager disable
    set default-sim sim1
    set session-down-detection 3
    set gps enable
    set sim1-pin disable
    set sim2-pin disable
    config auto-switch
        set by-disconnect disable
        set by-signal disable
        set by-data-plan disable
        set switch-back
    end
end
Set Advanced [enable | disable]

```

config advanced-settings



This command is accessible only when Advanced has been enabled.

Description: Configure some specific wireless network or SIM-related parameters.

```
Set Advanced [enable | disable]
  Set sim-activation-delay (5 - 600)
  Set force-ipv4 [enable | disable]
  Set vzw-n77-b48 [enable | disable] **only available on 511F as of 7.2.2
Unset
Show
Abort
End

Unset
Show
End
```

Sample command:

```
FX511FTQ22002638 (setting) # set advanced enable
FX511FTQ22002638 (setting) <M> # config advanced-settings
FX511FTQ22002638 (advanced-settings) # show
config lte setting advanced-settings
  set sim-activation-delay 300
  set force-ipv4 disable
  set vzw-n77-b48 disable
end
```

config carrier

Description: Configure LTE carriers.

```
Edit <name>
  Set firmware {string}
  Set pri {string}
  Set default-profile [enable | disable]
Delete <name>
Purge
Show
End
```

Sample command:

```
FX201E5919000057 (carrier) # show
config lte carrier
  edit AT&T
    set firmware SWI9X30C_02.33.03.00.cwe
    set pri SWI9X30C_02.33.03.00_GENERIC_002.072_001.nvu
    set default-profile disable
  next
FX511FTQ22002638 (carrier) # show
config lte carrier
  edit AT&T
    set firmware RM502QAEAR11A04M4G_01.001.01.001.zip
  next
```

config Simmap

Description: Configures LTE SIM maps.

```
Edit <name>
  Set *mcc {integer}
  Set *mnc {integer}
  Set *carrier <name1>
Delete <name>
Purge
Show
End
```

Sample command:

```
FX201E5919000057 (simmap) # show
config lte simmap
  edit Verizon_sim
    set mcc 310
    set mnc 011
    set carrier Verizon
  next
end
```

config plan

Description: Configure LTE plans for SIM cards.

```
Edit <name>
  Set modem [all | modem1]
  Set type [by-iccid | by-slot | by-carrier | by-default]
  Set apn <name1>
```

```
Set auth [NONE | PAP | CHAP]
Set user <name1>
Set pwd <name1>
Set pdn [ipv4-only | ipv6-only | ipv4-ipv6]
Set signal-threshold (-100 - -50)
Set signal-period (600 - 18000)
Set capacity (0 - 102400000)
Set monthly-fee (0 - 1000000)
Set billing-date (1 - 31)
Set overage [enable | disable]
Set preferred-subnet (0 - 32)
Set private-network [enable | disable]
Set session-dial-timeout (0 - 180)
Unset
Next
Show
End
Abort
Delete <name>
Purge
Show
End
```

Sample command:

```
FX201E5919000057 (plan) # show
config lte plan
  edit Verizon_plan
    set modem all
    set type by-carrier
    set carrier Verizon
    set apn VZWINTERNET
    set auth NONE
    set user
    set pwd
    set pdn ipv4-only
    set signal-threshold -100
    set signal-period 3600
    set capacity 100
    set monthly-fee 0
    set billing-date 14
    set overage enable
    set preferred-subnet 0
    set private-network disable
    set session-dial-timeout 0
  next
end
```

Router

This section discusses the CLI commands for router configuration.

config policy

Description: Configures router policies.

```
Edit <name>
  Set input-device <name1>
  Set srcaddr <name1>
  Set dstaddr <name1>
  Set service <name1>, <name2>, ...
  Set *target <name1>
  Set status [enable | disable]
  Set comment {string}
  Unset
  Next
  Show
  Abort
  End
Delete <name>
Purge
Move <name1> [before | after] <name2>
Show
End
```

Sample command:

```
FX201E5919000057 (policy) # show
config router policy
  edit 1
    set input-device lan
    set srcaddr all
    set dstaddr all
    set service ALL
    set target target.ltel
    set status enable
    set comment this is a test policy
  next
end
```

config static

Description: Configures static routes.

```
Edit <name>
  Set status [enable | disable]
  Set dst {ipv4-address}
  Set gateway {ipv4-address}
  Set distance [1 - 255]
  Set *device <name1>
  Set comment {string}
  Unset
  Next
  Show
  Abort
  End
Delete <name>
Purge
Show
End
```

Sample command:

```
FX201E5919000057 (static) # show
config router static
  edit 1
    set status enable
    set dst 10.124.23.0/24
    set gateway 192.168.200.99
    set distance 1
    set device wan
    set comment this is a sample static route
  next
end
```

config target

Description: Configures router targets.

```
Edit <name>
  Set *target <name1>
  Set next-hop <name1>
  Unset
  Next
  Show
  Abort
  End
Delete <name>
Purge
Show
```

End

Sample command:

```
FX201E5919000057 # config router target
FX201E5919000057 (target) # show
config router target
  edit target.lo
    set interface lo
    set next-hop
next
```

config multicast

Description: Configures multicast router.

```
Set join-prune-interval [1 - 65535]
Set hello-interval [30 - 18724]
Unset
```

config pim-sm-global

Description: Configure PIM sparse-mode interfaces.

config rp-address

Description: Configures static RP addresses.

```
Config rp-address
  Edit <rpaddressip>
    Set *address <name1>
    Set group <name1> *specified IPv4 subnet should be within 224.0.0.0/4 but not
      within 232.0.0.0/8
    Unset
    Next
    Show
    Abort
    End
  Delete <rpaddressip>
  Purge
  Show
  End
Show
End
```

config interface

Description: Configure PIM interfaces.



There's no entry for the "set" command, although "set" is an available option.

```
Config interface
  Edit <name> *must be valid interface id in system interface list
  Next
  Show
  Abort
  End
  Delete <name>
  Purge
  Show
  End
Show
End
```

Sample command:

```
FX201E5919000057 (multicast) # show
config router multicast
  config pim-sm-global
    set join-prune-interval 60
    set hello-interval 30
  config rp-address
    edit 1
      set address 192.168.200.23
      set group 224.0.0.0/4
    next
  end
end
config interface
end
end
```

config OSPF

Description: Configure OSPF settings.

```
Config ospf
  Set status [enable | disable]
  Set router-id <name1>
  Unset
```

config area

Description: Configures OSPF area settings.

```
Config area
  Edit {ipv4-address}
    Set
    Unset
    Next
    Show
    Abort
    End
  Delete {ipv4-address}
  Purge
  Show
  End
```

config network

Description: Configures OSPF network settings.

```
Config network
  Edit <name>
    Set *prefix {integer}
    Set *area <name1>
    Unset
    Next
    Show
    Abort
    End
  Delete <name>
  Purge
  Show
  End
```

config ospf-interface

Description: Configures OSPF interface settings.

```
Config ospf-interface
  Edit <name>
    Set status [enable | disable]
    Set *interface <name1>
    Set mtu-ignore [enable | disable]
    Set cost [0 - 65535]
    Unset
    Next
    Show
    Abort
    End
  Delete <name>
  Purge
  Show
```

```
End
```

config redistribute

Description: Configures redistribute settings.

config connected

Description: Configures redistribute connected routes.

```
Config connected
  Set status [enable | disable]
  Set metric-type [1 | 2]
  Set metric [0 - 16777214]
  Set routemap <name1>
  Unset
  Show
  End
```

config static

Description: Configures redistribute static routes.

```
Config redistribute
  Config static
    Set status [enable | disable]
    Set metric-type [1 | 2]
    Set metric [0 - 16777214]
    Set routemap <name1>
    Unset
    Show
    End
  Show
  End
Show
End
```

Sample command:

```
FX201E5919000057 (ospf) # show
config router ospf
  set status disable
  set router-id 0.0.0.0
  config area
    edit 192.168.200.24
    next
  end
  config network
    edit 1
      set prefix 192.168.200.0/24
      set area 192.168.200.24
    next
```

```
end
config ospf-interface
  edit 1
    set status enable
    set interface lan
    set mtu-ignore enable
    set cost 3400
  next
end
config redistribute
  config connected
    set status disable
    set metric-type 2
    set metric 10
    set routemap
  end
  config static
    set status disable
    set metric-type 2
    set metric 10
    set routemap
  end
end
end
```

config prefix-list

Description: Configures IPv4 prefix lists.

```
Edit <name>
Set
Unset
```



The "set" command is available, but there are no settings to "set" or "unset".

config rule

Description: Configures IPv4 prefix list rule.

```
Config prefix-list
Config rule
  Edit <name>
    Set action [permit | deny]
    Set *prefix {ipv4-subnet}
    Set ge (0 - 32)
    Set le (0 - 32)
```

```

        Unset
        Next
        Show
        Abort
        End
    Delete <name>
    Purge
    Show
    End
Next
Show
Abort
End
Delete <name>
Purge
Show
End

```

Sample command:

```

FX201E5919000057 (prefix-list) # show
config router prefix-list
  edit 1
    config rule
      edit 1
        set action permit
        set prefix 192.168.200.0/24
        set ge 25
        set le 25
      next
    end
  next
end

```

config route-map

Description: Configures route maps.

```

Edit <name>
Set
Unset

```

config rule

Description: Configures route map rule.

```

Config rule
  Edit <name>
    Set action [permit | deny]
    Set match-ip-address {ipv4-address}

```

```
        Unset
        Next
        Show
        Abort
        End
    Delete <name>
    Purge
    Show
    End
Delete <name>
Purge
Show
End
Show
End
```

Sample command:

```
FX201E5919000057 (route-map) # show
config router route-map
  edit 1
    config rule
      edit 1
        set action permit
        set match-ip-address 1
      next
    end
  next
end
```

System

This section discusses CLI commands for configuring system settings.

config global

Description: Configures FortiExtender global settings.

```
Set hostname {string}
Set timezone [0 - 87]
Set auto-install-image [enable | disable]
Set default-image-file {string} *available when auto-install-image is enabled
Set mdm-fw-server {string}
Set os-fw-server {string}
Unset
Show
End
```

Sample command:

```
FX201E5919000057 (global) # show
config system global
    set hostname FX201E5919000057
    set timezone 80
    set auto-install-image disable
    set mdm-fw-server fortiextender-firmware.forticloud.com
    set os-fw-server fortiextender-firmware.forticloud.com
end
```

config accprofile

Description: Configures administration access profiles.

```
Config accprofile
    Edit <name>
        Set header [read-write | read | no-access]
        Set firewall [read-write | read | no-access]
        Set lte [read-write | read | no-access]
        Set router [read-write | read | no-access]
        Set system [read-write | read | no-access]
        Set snmp [read-write | read | no-access]
        Set hmon [read-write | read | no-access]
        Set vpn [read-write | read | no-access]
```

```
Set network [read-write | read | no-access]
Unset
Next
Show
Abort
End
Delete <name>
Purge
Show
End
```

Sample command:

```
FX201E5919000057 (accprofile) # show
config system accprofile
edit some_access
set header read-write
set firewall read
set lte read
set router no-access
set system read-write
set snmp read
set hmon read
set vpn no-access
set network read
next
```

Config admin

Description: Configures user access.

```
Config admin
Edit <name>
Set *accprofile <name1>
Set *password {string}
Set trusthost1 {ipv4-address}
Set trusthost2 {ipv4-address}
Set trusthost3 {ipv4-address}
Set trusthost4 {ipv4-address}
Set trusthost5 {ipv4-address}
Set trusthost6 {ipv4-address}
Set trusthost7 {ipv4-address}
Set trusthost8 {ipv4-address}
Set trusthost9 {ipv4-address}
Set trusthost10 {ipv4-address}
Unset
Next
Show
Abort
End
Delete <name>
Purge
```

```
Show
End
```

Sample command:

```
FX201E5919000057 (admin) # show
config system admin
  edit user1
    set accprofile some_access
    set password ENC $5$w/OU6Xk/agc.DTtv$1MKZL1t9yxzua0JofsJuDLvYmOaGoH0tJpVlt.VDxw5
    set trusthost1 192.168.200.110/24
    set trusthost2
    set trusthost3
    set trusthost4
    set trusthost5
    set trusthost6
    set trusthost7
    set trusthost8
    set trusthost9
    set trusthost10
  next
end
```

Config management

Description: Configures Extender management settings.

```
Set discovery-type [auto | fortigate | cloud | local]
Unset
```

config fortigate

Description: Configures FortiGate settings.

```
config fortigate
  Set ac-discovery-type [static | broadcast]
  Set ac-ctl-port [1024 - 49150]
  Set ac-data-port [1024 - 49150]
  Set discovery-intf <name1>
  Set ingress-intf <name1>
  Unset
  Show
  End
```

config cloud

Description: Configures Cloud settings.

```
Config cloud
  Set dispatcher {string}
  Set dispatcher-port {integer}
  Set mode [ip-passthrough | nat]
  Set proxy [enable | disable]
  Set proxy-server {ipv4-address} *available when proxy is enabled
  Set proxy-port [1 - 65535] *available when proxy is enabled
Unset
Show
End
```

config local

Description: Configures local settings.

```
Config local
  Set mode [ip-passthrough | nat]
Unset
Show
End
```

config local-access

Description: Configures administrative access settings.

```
Config local-access
  Set http [1 - 65535]
  Set https [1 - 65535]
  Set ssh [1 - 65535]
  Set telnet [1 - 65535]
  Set idle-timeout [1 - 480]
Unset
Show
End
```

Config fortigate-backup

Description: Configures backup feature.

```
Config fortigate-backup
  Set vrrp-interface <name1>
  Set status [enable | disable]
Unset
Show
End

Show
End
```

Sample command:

```
FX201E5919000057 (management) # show
config system management
  set discovery-type auto
config fortigate
  set ac-discovery-type broadcast
  set ac-ctl-port 5246
  set ac-data-port 25246
  set discovery-intf lan
  set ingress-intf
end
config cloud
  set dispatcher fortiextender-dispatch.forticloud.com
  set dispatcher-port 443
  set mode nat
  set proxy enable
  set proxy-server 10.107.34.22
  set proxy-port 3453
end
config local
  set mode nat
end
config local-access
  set http 80
  set https 443
  set ssh 22
  set telnet 23
  set idle-timeout 5
end
config fortigate-backup
  set vrrp-interface wan
  set status enable
end
end
```

config interface

Description: Configure interface settings.

```
Config interface
  Edit <name>
    Set *type [loopback | virtual-wan | vlan | capwap | dummy]
    Set status [enable | disable]
    Set mode [static | dhcp]
    Set ip {ipv4-address}
    Set gateway {ipv4-address}
    Set mtu-override [enable | disable]
    Set distance [1 - 512]
    Set vrrp-virtual-mac [enable | disable]
    Set allowaccess <name1>, <name2>, ...
    Set defaultgw [enable | disable]
    Set dns-server-override [enable | disable]
```

```

Set redundant-by [priority | cost]
Set algorithm [redundant | WRR] *available when type is set to virtual-wan
Set FEC [source_ip | dest_ip | source_dest_ip_pair | connection] *available
    when type is set to virtual-wan
Set session-timeout [0 - 86400] *available when type is set to virtual-wan
Set grace-period [0 - 10000000] *available when type is set to virtual-wan
Set members <name1>, <name2>, ...*available when type is set to virtual-wan
Set rid [1 | 2] *available when type is set to capwap
Set *vid [1 - 4089] *available when type is set to vlan
Set *ingress-intf <name1>
Unset

```

config VRRP

Description: Configures the VRRP settings.

```

Config vrrp
    Set status [enable | disable]
    Set version [2]
    Set *ip {ipv4-address}
    Set *id [1 - 255]
    Set priority [1 - 255]
    Set adv-interval [1 - 255]
    Set start-time [1 - 255]
    Set preempt [enable | disable]
    Unset
    Show
    End
Next
Show
Abort
End
Delete <name>
Purge
Show
End

```

Sample command:

```

FX201E5919000057 (interface) # show
config system interface
    edit wan
        set type physical
        set status up
        set mode dhcp
        set mtu-override enable
        set mtu 1500
        set distance 5
        set vrrp-virtual-mac disable
    config vrrp
        set status enable
        set version 2
        set ip 192.168.100.25
        set id 5

```

```
        set priority 1
        set adv-interval 23
        set start-time 33
        set preempt enable
    end
    set allowaccess http https ping snmp ssh telnet
    set defaultgw enable
    set dns-server-override enable
next
end
```

config vxlan

Description: Configures VXLAN devices

```
Config vxlan
  Edit <name>
    Set *vni [1 - 16777215]
    Set *remote-ip {ipv4-address}
    Set *local-ip {ipv4-address}
    Set dstport [1 - 65535]
    Unset
    Next
    Show
    Abort
    End
  Delete <name>
  Purge
  Show
  End
```

Sample command:

```
FX201E5919000057 (vxlan) # show
config system vxlan
  edit 1
    set vni 500
    set remote-ip 192.168.201.1
    set local-ip 192.168.200.1
    set dstport 4789
  next
end
```

Config switch-interface

Description: Configures software switch devices.

```
Config switch-interface
  Edit <name>
    Set members <name1>, <name2>, ...
    Set stp [enable | disable]
    Unset
    Next
```

```
    Show
    Abort
    End
Delete <name>
Purge
Show
End
```

Sample command:

```
FX201E5919000057 (switch-interface) # show
config system switch-interface
    edit 1
        set members lo
        set stp enable
    next
end
```

config aggregate-interface

Description: Configures aggregate interfaces.

```
Config aggregate-interface
    Edit <name>
        Set mode [activebackup | loadbalance]
        Set mapping-timeout [0 - 86400] *available when mode is set to load balance
    Unset
```

config embers

Description: Configure interfaces to be aggregated.

```
Config members
    Edit <name>
        Set *interface <name1>
        Set weight [1 - 256]
        Set health-check-event
        Set health-check-fail-cnt [1 - 10]
        Set health-check-recovery-cnt [1 - 10]
        Unset
        Next
        Show
        Abort
        End
    Delete <name>
    Purge
    Show
    End
Next
Show
Abort
End
Delete <name>
Purge
```

```
Show
End
```

Sample command:

```
FX201E5919000057 (aggregate-interface) # show
config system aggregate-interface
  edit aggl
    set mode loadbalance
    set mapping-timeout 244
    config members
      edit 23
        set interface port4
        set weight 1
        set health-check-event
        set health-check-fail-cnt 5
        set health-check-recovery-cnt 5
      next
    end
  next
end
```

config pppoe-interface

Description: Configure the aggregate interface.

```
config pppoe-interface
  edit <name>
    set status [up | down]
    set device <name1>
    set username {string}
    set password {string}
  unset
```

Sample command:

```
config system pppoe-interface
  edit pppoel
    set status up
    set device port1
    set username test
    set password *****
  next
end
```

Parameter	Description	Type	Size	Default
status	Bring the PPPoE up or down	option	-	up

Parameter	Description	Type	Size	Default						
	<table border="1"> <thead> <tr> <th>Option</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>up</td> <td>Set interface status up.</td> </tr> <tr> <td>down</td> <td>Set interface status down.</td> </tr> </tbody> </table>	Option	Description	up	Set interface status up.	down	Set interface status down.			
Option	Description									
up	Set interface status up.									
down	Set interface status down.									
device	Name of the physical interface	option	-	none						
username	The ISP provided username of the PPPoE account.	string	-	none						
password	The PPPoE account's password.	string	-	none						

config dhcpserver

Description: Configures DHCP servers.

```

Config dhcpserver
  Edit <name>
    Set status [enable | disable]
    Set lease-time [300 - 8640000]
    Set dns-service [default | specify | wan-dns]
    Set dns-server1 {ipv4-address} *available when dns-service is set to specify
    Set dns-server2 {ipv4-address} *available when dns-service is set to specify
    Set dns-server3 {ipv4-address} *available when dns-service is set to specify
    Set ntp-service [specify]
    Set ntp-server1 {ipv4-address}
    Set ntp-server2 {ipv4-address}
    Set ntp-server3 {ipv4-address}
    Set *default-gateway {ipv4-address}
    Set *netmask {netmask}
    Set *interface <name1>
    Set *start-ip {ipv4-address}
    Set *end-ip {ipv4-address}
    Set mtu [512 - 9000]
    Set reserved-address [enable | disable]
  Unset

```

config reserved-addresses

Description: Configures options for the DHCP server to assign IP settings to specific MAC addresses.

```

Config reserved-addresses
  Edit <name>
    Set *ip {ipv4-address}
    Set *mac {mac-address}

```

```

        Set *action [block | reserved]
        Unset
        Next
        Show
        Abort
        End
    Delete <name>
    Purge
    Show
    End
Next
Show
End
Delete <name>
Purge
Show
End

```

Sample command:

```

FX201E5919000057 (dhcpserver) # show
config system dhcpserver
    edit 1
        set status enable
        set lease-time 86400
        set dns-service default
        set ntp-service specify
        set ntp-server1
        set ntp-server2
        set ntp-server3
        set default-gateway 192.168.200.99
        set netmask 255.255.255.0
        set interface port4
        set start-ip 192.168.200.110
        set end-ip 192.168.200.210
        set mtu 1500
        set reserved-address disable
    next
end

```

config dhcprelay

Description: Configures DHCP relay.

```

Config dhcprelay
    Edit <name>
        Set status [enable | disable]
        Set *client-interfaces <name1>, <name2>, ...
        Set *server-interface <name1>
        Set *server-ip {ipv4-address}
        Unset
        Next
        Show
    
```

```
Abort
End
Delete <name>
Purge
Show
End
```

Sample command:

```
FX201E5919000057 (dhcprelay) # show
config system dhcprelay
  edit 1
    set status enable
    set client-interfaces 1 lan
    set server-interface port4
    set server-ip 192.168.200.124
  next
end
```

config dns

Description: Configures DNS settings used to resolve domain names to IP addresses.

```
Config dns
  Set primary {ipv4-address}
  Set secondary {ipv4-address}
  Set timeout [1 - 10]
  Set retry [0 - 5]
  Set dns-cache-limit [0 - 4294967295]
  Set dns-cache-ttl [60 - 86400]
  Set cache-notfound-response [enable | disable]
  Set source-ip {ipv4-address}
  Set server-select-method [least-rtt | failover]
  Unset
  Show
End
```

Sample command:

```
FX201E5919000057 (dns) # show
config system dns
  set primary 208.91.112.53
  set secondary 208.91.112.52
  set timeout 5
  set retry 3
  set dns-cache-limit 5000
  set dns-cache-ttl 1800
  set cache-notfound-responses disable
  set source-ip 0.0.0.0
```

```
set server-select-method least-rtt
end
```

config vwan-member

Description: Configures virtual VWAN interface members.

```
Config vwan-member
  Edit <name>
    Set target <name1>
    Set priority [1 - 7]
    Set weight [1 - 256]
    Set in-bandwidth-threshold [0 - 2147483647]
    Set out-bandwidth-threshold [0 - 2147483647]
    Set total-bandwidth-threshold [0 - 2147483647]
    Set health-check <name1>
    Set health-check-fail-threshold [1 - 10]
    Set health-check-success-threshold [1 - 10]
    Unset
    Next
    Show
    Abort
    End
  Delete <name>
  Purge
  Show
  End
```

Sample command:

```
FX201E5919000057 (vwan-member) # show
config system vwan-member
  edit 1
    set target target.lan
    set priority 2
    set weight 50
    set in-bandwidth-threshold 86400
    set out-bandwidth-threshold 86400
    set total-bandwidth-threshold 23500
    set health-check
    set health-check-fail-threshold 3
    set health-check-success-threshold 5
  next
end
```

config sms-notification

Description: Configures Extender SMS notification settings.

```
Config sms-notification
  Set notification [enable | disable]
  Unset
```

config receiver

Description: Configures SMS receivers.

```
Config receiver
  Edit <name>
    Set receiver [enable | disable]
    Set *phone-number +{country code}{phone number}
    Set alert <name1>, <name2>, ...
    Unset
    Next
    Show
    Abort
    End
  Delete <name>
  Purge
  Move <name1> [before | after] <name2>
  Show
  End
```

config alert

Description: Configures alert type message setting.

```
Config alert
  Set system-reboot {string}
  Set data-exhausted {string}
  Set session-disconnect {string}
  Set low-signal-strength {string}
  Set os-image-fallback {string}
  Set mode-switch {string}
  Set fgt-backup-mode-switch {string}
  Unset
  Show
  End
Show
End
```

Sample command:

```
FX201E5919000057 (sms-notification) # show
config system sms-notification
  set notification disable
  config receiver
    edit re1
      set receiver enable
      set phone-number +15082558657
      set alert data-exhausted fgt-backup-mode-switch low-signal-strength mode-switch
```

```
os-image-fallback session-disconnect
  next
end
config alert
  set system-reboot system will reboot
  set data-exhausted data plan is exhausted
  set session-disconnect LTE data session is disconnected
  set low-signal-strength LTE signal strength is too low
  set os-image-fallback system start to fallback OS image
  set mode-switch system networking mode switched
  set fgt-backup-mode-switch FortiGate backup work mode switched
end
end
```

config sms-remote-diag

Description: Configures Extender SMS remote diagnosis settings.

```
Config sms-remote-diag
  Set remote-diag [enable | disable]
Unset
```

config allowed-user

Description: Configures SMS remote diagnosis-allowed SMS senders.

```
Config allowed-user
  Edit <name>
    Set sender [enable | disable]
    Set *phone-number +{country code}{phone number}
    Set allowed-command-type <name1>, <name2>, ...
    Unset
    Next
    Show
    Abort
    End
  Delete <name>
  Purge
  Show
  End
Show
End
```

Sample command:

```
FX201E5919000057 (sms-remote-diag) # show
config system sms-remote-diag
  set remote-diag disable
config allowed-user
  edit user1
```

```
        set sender enable
        set phone-number +15082558567
        set allowed-command-type factory-reset get-extender-status get-modem-status get-
system-status
        next
    end
end
```

config syslog

Description: Configures syslog server settings.

```
Set remote-server {ipv4-address}
    Set remote-port [1 - 65535]
    Unset
```

config remote-servers

Description: Configures syslog remote servers settings.

```
Config remote-servers
    Edit <name>
        Set ip* {ipv4-address}
        Set port [1 - 65535]
        Unset
        End
        Next
        Show
        Abort
    Delete
    Purge
    End
    Show
```

config statistic-report

Description: Configures syslog statistic report settings.

```
Config statistic-report
    Set status [enable | disable]
    Set interval [1 - 3600]
    Unset
```

config cpu-usage

Description: Configures CPU usage rate statistic report settings.

```
Config cpu-usage
    Set threshold [0 - 120]
```

```
Set variance [0 - 120]
Unset
Show
End
```

config memory-usage

Description: Configures memory usage statistic report settings.

```
Config memory-usage
Set threshold [0 - 120]
Set variance [0 - 120]
Unset
Show
End
```

config cpu-temperature

Description: Configures CPU temperature statistic report settings.

```
Config cpu-temperature
Set threshold [0 - 120]
Set variance [0 - 120]
Unset
Show
End
Show
End
Show
End
```

Sample command:

```
FX201E5919000057 (syslog) # show
config system syslog
  config remote-servers
    edit serv1
      set ip 192.148.200.193
      set port 514
    next
  end
  config statistic-report
    set status enable
    set interval 30
    config cpu-usage
      set threshold 70
      set variance 5
    end
    config memory-usage
      set threshold 50
      set variance 5
    end
    config cpu-temperature
```

```
        set threshold 80
        set variance 5
    end
end
end
```

config virtual-wire-pair

Description: Configures LAN-to-LTE interface mapping.

```
Config virtual-wire-pair
  Set lte-mapping <name1>
  Unset
  Show
  End
```

Sample command:

```
FX201E5919000057 (virtual-wire-pair) # show
config system virtual-wire-pair
  set ltel-mapping lan
end
```

config api-user

Description: Configures API user settings.

```
Config api-user
  Edit <name>
    Set comment {string}
    Unset
    Next
    Show
    Abort
    End
  Delete <name>
  Purge
  Show
  End
```

Sample command:

```
FX201E5919000057 (api-user) # show
config system api-user
  edit 1
    set comment this is a test api user
```

```
    next
end
```

config ntp

Description: Configures NTP synchronization in local management mode.

```
Config ntp
    Set type [fortiguard | custom]
    Unset
```

config ntpserver

Description: Configures available third-party NTP servers (up to 4 servers).

```
Config ntpserver
    Edit <name>
        Set *server {ipv4-address} OR {string}
        Unset
        Next
        Show
        Abort
        End
    Delete <name>
    Purge
    Show
    End
Show
End
```

Sample command:

```
FX201E5919000057 (ntp) # show
config system ntp
    set type custom
    config ntpserver
        edit 1
            set server 10.139.20.54
        next
    end
end
```

config settings

Description: Configures system settings.

```
Config settings
  Set ike-port [1024 - 65535]
  Unset
  Show
  End
```

Sample command:

```
FX201E5919000057 (settings) # show
config system settings
  set ike-port 500
end
```

config dns-server

Description: Configures DNS servers.

```
Config dns-server
  Edit <name>
    Set *interface <name1>
    Set *mode [recursive | non-recursive | forward-only]
    Unset
    Next
    Show
    Abort
    End
  Delete <name>
  Purge
  Show
  End
```

Sample command:

```
FX201E5919000057 (dns-server) # show
config system dns-server
  edit 1
    set interface lan
    set mode recursive
  next
end
```

Config dns-database

Description: Configures DNS databases.

```
Config dns-database
  Edit <name>
```

```

Set status [enable | disable]
Set *domain {string}
Set type [primary]
Set view [shadow | public]
Set primary-name {string}
Set contact {string}
Set ttl [1 - 2147483647]
Set authoritative [enable | disable]
Set forwarder {ipv4-address}, {ipv4-address}, ...
Set source-ip {ipv4-address}
Unset

```

config dns-entry

Description: Configures DNS entries.

```
config dns-entry
```

```
Edit <name>
```

```

Set status [enable | disable]
Set type [A | NS | CNAME | MX | PTR]
Set *hostname {string}
Set *ip {ipv4-address} *available when type is set to A or PTR
Set *canonical-name {string} *available when type is set to CNAME
Set preference [0 - 65535] *available when type is set to MX
Unset
Next
Show
Abort
End

```

```
Delete <name>
```

```
Purge
```

```
Show
```

```
End
```

```
Next
```

```
Show
```

```
Abort
```

```
End
```

```
Delete <name>
```

```
Purge
```

```
Show
```

```
End
```

Sample command:

```

FX201E5919000057 (dns-database) # show
config system dns-database
edit 1
set status enable
set domain example.com
set type primary
set view public
set primary-name dns
set contact host

```

```
set ttl 86400
set authoritative enable
set forwarder 1.2.4.8 8.8.4.4
set source-ip
config dns-entry
  edit 1
    set status enable
    set type A
    set ttl 0
    set hostname host1
    set ip 172.30.145.225
  next
end
next
end
```

config lan-switch

Description: Configures LAN switch settings.

config ports

Description: Configures LAN switch ports.

```
Edit <name>
    Set
    Unset
    Next
    Show
    Abort
    End
Delete <name>
Purge
Show
End
Show
End
Show
End
```

Sample command:

```
FX201E5919000057 # config system lan-switch
FX201E5919000057 (lan-switch) # show
config system lan-switch
  config ports
    edit port1
  next
  edit port2
```

```
    next
  edit port3
  next
end
end
```

SNMP

This section discusses the CLI commands for configuring SNMP settings.

config sysinfo

Description: Configures SNMP system info settings.

```
Config sysinfo
  Set status [enable | disable]
  Set description {string}
  Set contact-info {string}
  Set location {string}
  Unset
  Show
  End
```

config community

Description: Configures SNMP v1/v2 community settings.

```
Config community
  Edit <name>
    Set *name {string}
    Set status [enable | disable]
    Set hosts <name1>, <name2>, ...
    Set query-v1-status [enable | disable]
    Set query-v1-port [1 - 65535]
    Set query-v2-status [enable | disable]
    Set query-v2-port [1 - 65535]
    Set trap-v1-status [enable | disable]
    Set trap-v1-lport [1 - 65535]
    Set trap-v1-rport [1 - 65535]
    Set trap-v2c-status [enable | disable]
    Set trap-v2c-lport [1 - 65535]
    Set trap-v2c-rport [1 - 65535]
    Set events <name1>, <name2>, ...
    Unset
    Next
    Show
    End
  Delete <name>
  Purge
  Show
```

End

config user

Description: Configures SNMP v3 user settings.

```
Config user
  Edit <name>
    Set *name {string}
    Set status [enable | disable]
    Set notify-hosts <name1>, <name2>, ...
    Set trap-status [enable | disable]
    Set trap-lport [1 - 65535]
    Set trap-rport [1 - 65535]
    Set queries [enable | disable]
    Set query-port [1 - 65535]
    Set events <name1>, <name2>, ...
    Set security-level [no-auth-no-priv | auth-no-priv | auth-priv]
    Set auth-proto [md5 | sha1] *available when security level includes auth
    Set *auth-pwd {string} *available when security level includes auth
    Set priv-proto [aes | des] *available when security level includes priv
    Set *priv-pwd {string}*available when security level includes priv
    Unset
    Next
    Show
    Abort
    End
  Delete <name>
  Purge
  Show
  End
```

config hosts

Description: Configures SNMP hosts settings.

```
Config hosts
  Edit <name>
    Set *host-ip {ipv4-address}
    Set host-type [any | query | trap]
    Unset
    Next
    Show
    Abort
    End
  Delete <name>
  Purge
  Show
  End
Show
```

End

Sample command:

```
FX201E5919000057 (snmp) # show
config snmp
  config sysinfo
    set status enable
    set description this is a test comment
    set contact-info +15082558567
    set location
  end
  config community
    edit comm1
      set name 1
      set status enable
      set hosts host1
      set query-v1-status enable
      set query-v1-port 161
      set query-v2c-status disable
      set query-v2c-port 161
      set trap-v1-status disable
      set trap-v1-lport 162
      set trap-v1-rport 162
      set trap-v2c-status disable
      set trap-v2c-lport 162
      set trap-v2c-rport 162
      set events data-exhausted fgt-backup-mode-switch
    next
  end
  config user
    edit user1
      set name user1
      set status enable
      set notify-hosts host1
      set trap-status enable
      set trap-lport 162
      set trap-rport 162
      set queries disable
      set query-port 161
      set events data-exhausted fgt-backup-mode-switch low-signal-strength
      set security-level auth-priv
      set auth-proto sha1
      set auth-pwd *****
      set priv-proto aes
      set priv-pwd *****
    next
  end
  config hosts
    edit host1
      set host-ip 192.168.1.100/24
      set host-type any
    next
  end
end
```

HMON

This section discusses the CLI commands for configuring MHON.

config interface-monitoring

Description: Configures monitoring interfaces.

```
Config interface-monitoring
  Edit <name>
    Set interval [1 - 3600]
    Set *interface <name1>, <name2>, ...
    Set filter <name1>, <name2>, ...
    Unset
    Next
    Show
    Abort
    End
  Delete <name>
  Purge
  Show
  End
```

config hchk

Configures measuring latency/loss/jitter.

```
Config hchk
  Edit <name>
    Set protocol [ping | http | dns]
    Set interval [1 - 3600]
    Set probe-cnt [1 - 10]
    Set probe-tm [1 - 10]
    Set *probe-target {ipv4-address}
    Set port [1 - 65535] *available when protocol is set to http
    Set http-get {string} *available when protocol is set to http
    Set interface <name1>
    Set src-type [none | interface | ip]
    Set *stc-iface <name1> *available when src-type is set to interval
    Set *src-ip {ipv4-address} *available when src-type is set to ip
    Set filter <name1>, <name2>, ...
    Unset
    Next
```

```
        Show
        Abort
        End
    Delete <name>
    Purge
    Show
    End
Show
End
```

Sample command:

```
FX201E5919000057 (hmon) # show
config hmon
    config interface-monitoring
        edit 1
            set interval 30
            set interface wan
            set filter rx-bps rx-bytes rx-dropped rx-packets
        next
    end
config hchk
    edit 1
        set protocol ping
        set interval 5
        set probe-cnt 1
        set probe-tm 2
        set probe-target 8.8.8.8
        set interface wan
        set src-type interface
        set src-iface wan
        set filter rtt loss
    next
end
end
```

VPN

This section discusses the CLI commands for configuring VPN settings.

config ipsec

Description: Configures IPsec settings.

config phase1-interface

Description: Configures the VPN remote gateway.

```

Config ipsec
  Config phase1-interface
    Edit <name>
      Set ike-version [1 | 2]
      Set keylife [120 - 172800]
      Set proposal [des-md5 | des-sha1 | des-sha256 | 3des-md5 | 3des-sha1 | 3des-
        sha256 | aes128-md5 | aes128-sha1 | aes128-sha256 | aes256-md5 |
        aes256-sha1 | aes256-sha256]
      Set dhgrp [1 | 2 | 5 | 14]
      Set *interface <name1>
      Set type [static | ddns]
      Set *remote-gw {ipv4-address}
      Set *remotegw-ddns {string} *available when type is set to ddns
      Set authmethod [psk | signature]
      Set *psksecret {string}
      Set localid {string}
      Set peerid {string}
      Set add-gw-route [enable | disable]
      Set dev-id-notification [enable | disable]
      Set dev-id <name1> *available when dev-id-notification is enabled
      Unset
      Next
      Show
      Abort
      End
    Delete <name>
  Purge
  Show
  End

```

Sample command:

```

FX201E5919000057 (phase1-interface) # show
config vpn ipsec phase1-interface
  edit phase1_1
    set ike-version 2
    set keylife 86400
    set proposal aes128-sha256 aes256-sha256 3des-sha256 aes128-sha1 aes256-sha1 3des-
sha1
    set dhgrp 14 5
    set interface wan
    set type static
    set remote-gw 207.102.148.196
    set authmethod psk
    set psksecret *****
    set localid 92
    set peerid 22
    set add-gw-route disable
    set dev-id-notification disable
  next
end

```

config phase2-interface

Description: Configures VPN autokey tunnel.

```

Edit <name>

Set *phase1name
Set pfs [enable | disable]
Set dhgrp [1 | 2 | 5 | 14]
Set keylife-type [seconds | kbs]
Set keylifeseconds [120 - 172800]
Set encapsulation [tunnel-mode | transport-mode]
Set protocol [0 - 255]
Set src-addr-type [subnet | range | ip | name]
Set src-subnet {ipv4-subnet}
Set *src-start-ip {ipv4-address} *available when src-addr-type is range and ip
Set *src-end-ip {ipv4-address} *available when src-addr-type is range
Set *src-name {string} *available when src-addr-type is name
Set src-port [0 - 65535]
Set dst-addr-type [subnet | range | ip | name]
Set dst-subnet {ipv4-subnet}
Set *dst-start-ip {ipv4-address} *available when dst-addr-type is range and ip
Set *dst-end-ip {ipv4-address} *available when dst-addr-type is range
Set *dst-name {string} *available when dst-addr-type is name
Set dst-port [0 - 65535]
Unset
Next
Show
Abort
End
Delete <name>
Purge
Show

```

```
        End
    Show
End
```

Sample command:

```
FX201E5919000057 (phase2-interface) # show
config vpn ipsec phase2-interface
    edit phase2_1
        set phase1name phase1_1
        set proposal aes128-sha1 aes256-sha1 3des-sha1 aes128-sha256 aes256-sha256 3des-
sha256
        set pfs enable
        set dhgrp 14 5
        set keylife-type seconds
        set keylifeseconds 43200
        set encapsulation tunnel-mode
        set protocol 0
        set src-addr-type subnet
        set src-subnet 0.0.0.0/0
        set src-port 0
        set dst-addr-type subnet
        set dst-subnet 107.204.148.0/24
        set dst-port 234
    next
end
```

config certificate

Description: Configures VPN certificates.

config ca

Description: Configures CA certificates.

```
Config ca
    Edit <name>
        Set comment {string}
        Set *source [factory | user]
        Unset
        Next
        Abort
        Show
        End
    Delete <name>
    Purge
    Show
    End
```

config local

Description: Configures Local keys and certificates.

```
Config local
  Edit <name>
    Set comment {string}
    Set *source [factory | user]
    Unset
    Next
    Show
    Abort
    End
  Delete <name>
  Purge
  Show
  End
```

Sample command:

```
FX201E5919000057 (certificate) # show
config vpn certificate
  config ca
    edit Fortinet_CA
      set comment
      set source factory
    next
    edit Fortinet_CA_Backup
      set comment
      set source factory
    next
    edit Fortinet_Sub_CA
      set comment
      set source factory
    next
  end
config local
  edit Fortinet_Factory
    set comment
    set source factory
  next
  edit Fortinet_Factory_Backup
    set comment
    set source factory
  next
end
end
```

Network

This section discusses the CLI commands for configuring network settings.

config address

Description: Configures IPv4 addresses.

```
Config address
  Edit <name>
    Set type [ipmask | iprange]
    Set subnet {ipv4-address}
    Set start-ip {ipv4-address} *available when type is set to iprange
    Set end-ip {ipv4-address} *available when type is set to iprange
    Unset
    Next
    Show
    Abort
    End
  Delete <name>
  Purge
  Show
  End
```

Sample command:

```
FX201E5919000057 (address) # show
config network address
  edit lan
    set type ipmask
    set subnet 192.168.200.0/24
  next
```

config service

Description: Configures firewall service.

config service-custom

Description: Configures custom services.

```
Config service-custom
Edit <name>
    Set protocol [TCP | UDP | ICMP | IP]
    Set protocol number (0 - 254)
    Set tcp-portrange <dstport_low>[-<dstport_high>:<srcport_low>-<srcport_high>] *a
when protocol is set to TCP
    Set udp-portrange <dstport_low>[-<dstport_high>:<srcport_low>-<srcport_high>] *a
when protocol is set to UDP
    Unset
    Next
    Show
    Abort
    End
    Delete <name>
    Purge
    Show
    End
    Show
End
Show
End
```

Sample ommand:

```
FX201E5919000057 (service) # show
config network service
    config service-custom
        edit ALL
            set protocol IP
            set protocol-number 0
        next
```

Change Log

Date	Change Description
May 20, 2025	Added <code>config pppoe-interface</code> on page 39.
January 18, 2023	Initial release.



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