HP TippingPoint

Next Generation Firewall Command Line Interface Reference Guide

Version 1.0.1

Abstract

This reference manual describes the Next Generation Firewall Command Line Interface (CLI) and the commands you can use to configure and manage a NGFW appliance.

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Next Generation Firewall Command Line Interface Reference Guide

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About This Guide

The Next Generation Firewall command line interface enables you to configure and manage the NGFW Appliance from a command line. The NGFW commands can be used in custom scripts to automate tasks.

This section covers the following topics:

- Target Audience, page 1
- Related Documentation, page 1
- Document Conventions, page 2
- Customer Support, page 3

Target Audience

This guide is intended for security network administrators and specialists that have the responsibility of monitoring, managing, and improving system security. The audience for this material is expected to be familiar with the HP TippingPoint Next Generation Firewall.

Related Documentation

ccess the documentation at http://www.hp.com/support/manuals . For the most recent updates for your products, check the HP Networking Support web site at http://www.hp.com/networking/support.

Document Conventions

This guide uses the following document conventions.

- Typefaces, page 2
- Document Messages, page 2

Typefaces

HP TippingPoint publications use the following typographic conventions for structuring information:

Table 1-1 Document Typographic conventions

Convention	Element
Medium blue text: Figure 1	Cross-reference links and e-mail addresses
Blue, underlined text (http://www.hp.com)	Web site addresses
Bold font	• Key names • Text typed into a GUI element, such as into a box • GUI elements that are clicked or selected, such as menu and list items, buttons, and check boxes. Example: Click **OK** to accept.
Italics font	Text emphasis, important terms, variables, and publication titles.
`Monospace font`	• File and directory names • System output • Code • Text typed at the command-line
`Monospace, italic font`	• Code variables • Command-line variables
`Monospace, bold font`	Emphasis of file and directory names, system output, code, and text typed at the command line

Document Messages

Document messages are special text that is emphasized by font, format, and icons. This reference guide contains the following types of messages:

- Warning
- Caution
- Note
- Tip

⚠ **WARNING!** Warning notes alert you to potential danger of bodily harm or other potential harmful consequences.

△ **CAUTION:** Caution notes provide information to help minimize risk, for example, when a failure to follow directions could result in damage to equipment or loss of data.

NOTE: Notes provide additional information to explain a concept or complete a task. Notes of specific importance in clarifying information or instructions are denoted as such.

IMPORTANT: Another type of note that provides clarifying information or specific instructions.

TIP: Tips provide helpful hints and shortcuts, such as suggestions about how you can perform a task more easily or more efficiently.

Customer Support

HP is committed to providing quality customer support to all of its customers. Each customer is provided with a customized support agreement that provides detailed customer and support contact information. When you need technical support, use the following information to contact Customer Support.

Contact Information

For additional information or assistance, contact the HP Networking Support:

http://www.hp.com/networking/support

Before contacting HP, collect the following information:

- Product model names and numbers
- Technical support registration number (if applicable)
- Product serial numbers
- Error messages
- Operating system type and revision level
- Detailed questions

HP Contact Information

For the name of the nearest HP authorized reseller, see the contact HP worldwide web site:

http://www.hp.com/country/us/en/wwcontact.html

1 Command Line Interface

In addition to the Local System Manager (LSM) and the Centralized Management Capability of the Security Management System (SMS), a Command-line Interface (CLI) can be used to configure and manage the NGFW Appliance. The CLI is accessed directly through the console or remotely through SSH. Non-secure connections, such as Telnet, are not permitted. For the initial set up, the "superuser" account is set for the appliance. Once that is set, you can login from the console and set the management port IP address. SSH and HTTPS are then accessible at the management port IP address.

NOTE: To access the most recent updates to the NGFW product documentation, go to http://www.hp.com/support/manuals.

This chapter covers the following topics:

- "Overview" on page 5
- "Command Modes" on page 7
- "Configuration File Versions" on page 9

Overview

This chapter covers the hierarchical structure of the CLI, the command line syntax, and an overview on how to edit, save and manage configuration files. Also provided, are a list of unix like utilities for monitoring and troubleshooting the system. The **`show`** command provides easy to read sections from log files. The **`display`** command displays sections of the running configuration file, or can be used to list a preview of your configuration file edits before making a commitment to save.

Access to the NGFW is through the console to initially configure management access. The management port is enabled by default for SSH and LSM management access. All access is determined by group membership and the management of their roles. To configure granular levels of access, the aaa (Authentication and Authorization and Auditing) context has the necessary utilities to modify users, groups, roles, and their capabilities.

Command Line Interface Syntax

The following syntax is used in the CLI.

Table 1-1 Command Line Syntax

Syntax Convention	Explanation
UPPERCASE	Uppercase replaced by a value that you supply
(x)	Parentheses indicate a mandatory argument.
[x]	Brackets indicate an optional argument.
|	A vertical bar indicates a logical OR - such as alternatives within parentheses or brackets.

Example:

```
NGFW{}traceroute ? (displays help information)
NGFW{}traceroute (A.B.C.D|HOSTNAME) [from A.B.C.D] [mgmt]
```

In the above example, arguments for the Traceroute command must either use a IP address or the hostname. An optional argument can either be “from” a source IP address or the argument “mgmt”.

```
NGFW{}traceroute 198.162.0.1 from 198.162.0.2
NGFW{}traceroute 198.162.0.1 mgmt
```

Shortcut Navigation Keys

The CLI has the ability to store typed commands in a circular memory. Typed commands can be recalled with the UP and DOWN arrow keys.

The TAB key may be used to complete partial commands. If the partial command is ambiguous, pressing the TAB key twice gives a list of possible commands.

Following is a list of shortcuts.

Table 1-2 Shortcut Keys

Shortcut	Description
ENTER	Run the command
TAB	Complete partial command
?	Question mark at the root prompt or after a command (separated by space) will list next valid sub-commands or command arguments. Question mark can also be used after sub-commands for more information. A question mark immediately following a character(s) (no space) will list commands beginning with those characters.
!	Exclamation mark before a command allows you to execute the command from any feature context or sub-level. For example, `NGFW{running-gen}!ping 203.0.113.0`
UP ARROW	Show the previous command
DOWN ARROW	Show the next command
Ctrl + P	Show the previous command
Ctrl + N	Show the next command
Ctrl + L	Clear the screen, does not clear history
Ctrl + A	Return to the start of the command you are typing
Ctrl + E	Go to the end of the command you are typing
Ctrl + U	Cut the whole line to a special clipboard
Ctrl + K	Cut everything after the cursor to a special clipboard
Ctrl + Y	Paste from the special clipboard used by Ctrl + U and Ctrl + K

Hierarchical Menu and Prompt display

Prompts will be displayed based on the context level as shown in the following table.

Table 1-3 Root, Edit and Log configuration modes

Command Line prompt	Description
`NGFW{}`	Top level root command mode
`NGFW{}edit`	From the root command line mode, enter the edit command to access configuration mode.
`NGFW{running}`	Configuration mode - indicated with the prompt change
`NGFW{running}firewall`	Enters the firewall configuration context
`NGFW{running}display`	View current configuration and your changes
`NGFW{running}commit`	Commits changes to the running configuration
`NGFW{running}exit`	Leaves the current context mode

Table 1-3 Root, Edit and Log configuration modes

Command Line prompt	Description
`NGFW{}log-configure`	From the root command line mode, enter the log-configure command to access the log configuration mode.
`NGFW{log-configure}`	log configuration mode
`NGFW{log-configure}help`	display list of valid commands and syntax usage
`NGFW{log-configure}exit`	leave the log configuration mode

Help

The **`help`** command provides a list of commands within the current context and the command line usage. The **`help`** command can be executed with or without an argument.

- Enter **`help`** or **`?`** to see a list of all commands. (question mark at any context level generates a list of available commands within the context, along with a brief description)
- Enter **`help`** ***commandname*** to see the syntax for a command.
- Enter ***commandname*** **`?`** to list the options for a command. For example, **`ping ?`**.
- Enter ***string*****`?`** to show the commands or keywords that match the string. For example, **`s?`**.

Command Modes

The NGFW uses a hierarchical menu structure. Within this structure, commands are grouped by functional area within one of three command modes: *Root Command mode*, *Edit Configuration mode (***`edit`***)*, and *Log Configuration mode (***`log-configure`***)*. At the top of the hierarchy is the Root command mode.

```
NGFW{} Root command line mode
NGFW{running} Edit configuration mode
NGFW{log-configure} Log configuration mode
```

A *context* is an environment in which a set of parameters can be configured for a feature or named object. A context can be the name of an instance of an object set by the administrator, or can be the feature itself. The current context is indicated in the command prompt, and it's visibility is determined by the user's role.

Administrative access allows the ability to modify the configuration of the NGFW appliance. Not all contexts may be visible.

The **`help`** and **`display`** commands are useful in becoming familiar with the context options. The question mark (?) lists the next valid entry and help for this entry.

If the appliance is controlled by SMS, only read-only access will be available to the system resources. To determine if the SMS controls the unit, or to change the control, see the **`sms`** command usage.

Root Command Mode

When you initially enter the NGFW Appliance, either through the console or SSH, you will be placed at the top level root command line mode with the NGFW{} prompt. The commands at this level are used for managing and monitoring system operations for the various subsystems. From the root command mode, you can access the configuration mode, and the available operational commands that apply to the unit as a whole. To view the commands available at this level, type **`help[full|COMMAND]`** at the command prompt.

```
NGFW{}help
```

The default `NGFW{}` command prompt can be changed using the **`host name`** command in the **`interface mgmt`** context of the edit mode. For example:

```
NGFW{}edit
NGFW{running}interface mgmt
NGFW{running-mgmt}help host (displays valid entries for configuring management port host settings)
NGFW{running-mgmt}host ? (displays valid entries for host command)
NGFW{running-mgmt}host name yourhostname
```

For a list of root commands and their usage see the Root Commands section.

NOTE: Your membership role determines your command line interface.

Edit Configuration Mode

The configuration mode enables administrators with the appropriate credentials to write configuration changes to the active (running) configuration. The logon account used to configure the device must either be associated with the Superuser role or the Administrator role to edit the configuration context. The configuration mode has different context levels that provide access to a specific set of configuration commands. To enter the configuration mode, use the **edit** command. Once you have executed the **edit** command the CLI prompt will indicate that you are in the Edit mode, and can make configuration changes. Configuration options, and sub contexts are available for use until you exit. To exit the edit configuration mode, type **exit**.

When exiting the configuration mode, the following warning appears:

```
"WARNING: Modifications will be lost. Are you sure to exit (y/n)? [n]"
```

y will discard any uncommitted changes you made to the configuration file, and **n** will keep you in the edit context.

The **display** command is a helpful utility to view the current running configuration and to review your configuration changes before you save the changes.

```
NGFW{running} display
```

A **commit** command must be used to save your changes to the running configuration.

The command hierarchy has two types of statements. The *Container statement,* which contain objects and the *Object statement,* which are actual commands with options.

For example:

- Container statement in edit mode:

  ```
  NGFW{running}log
  NGFW{running-log}? (help will list all the available entries)
  ```

- Object statement:

  ```
  NGFW{running} application-visibility enable|disable (help will display command options)
  ```

A brief overview of what you can do within the edit configuration mode:

- Issue a command that configures a setting in the *candidate configuration* setting. The candidate configuration allows you to make configuration changes without causing changes to the active configuration until you can review your changes and issue the **commit** command.
- Enter into a container context to access additional configuration settings.
- Run the **display** command to see your *candidate* configuration settings for a context. Any modifications you make can be viewed using the **display** command.
- Run the **Commit** command to save any changes from your *candidate* configuration to the *running* configuration.
- **Exit** from a context.

NOTE: As you move through the context menu hierarchies, the command prompt changes accordingly. The **help** or **display** command can be entered at any level.

Configuration File Versions

When troubleshooting or needing to rollback a configuration, the current configuration setup can be viewed. Reviewing network configuration files should be a necessary step to becoming knowledgeable about your current system setup. When the device is initially configured, make sure the settings are saved to the *persistent* configuration with the **NGFW{}save-config** command. It's also advisable to create a snapshot using the following command:

```
NGFW{}snapshot create orig_conf
```

Snapshots capture the configuration of a device, which can then be delivered to technical support for troubleshooting. Users can also use snapshots to save and re-apply configurations. Snapshots include the currently installed OS version, and cannot be restored on a device that is not running the same version of the OS. If a snapshot restore needs to be completed, use the following command:

```
NGFW{}snapshot restore orig_conf
```

A warning message is displayed, followed by an automatic reboot when snapshot restore is completed.

The NGFW Appliance CLI uses the *deferred-commit* model. In this capacity, the architecture maintains a set of configuration files to ensure that a working configuration is persistently maintained. This configuration set includes the following configuration files.

- *Running* configuration — this version is currently executing on the system. Any changes that administrators make from the **edit** mode *(except for IPS features, action sets and notification contacts)* will take effect once they have been committed, by issuing the **Commit** command. If changes are not committed, all modifications are discarded on `exit` from the running context. If multiple administrators are on the system, the version that was last committed is used as the current running configuration and is visible to other administrators, once they have exited the **edit** mode. A warning prompt is displayed if the committed changes would overwrite configuration that was made by another administrator since the configuration was edited.
- *Saved (persistent)* configuration — this is the running configuration that was last committed prior to executing the **save-config** command. NGFW copies the saved configuration to the start configuration when the system reboots.
- *Start* configuration — This is a backup copy of the configuration file saved at the time of system startup, and is loaded at the next system bootup. The **rollback-config** command can be used to rollback to a persistent and running configuration that was the last known good configuration.

NOTE: Future versions of the product will support multiple named saved configuration sets.

Utilities

The **Display** and **Show** commands are helpful for troubleshooting and monitoring the operational status of the system. Command line usage can be found in Root Commands.

Display

Enter **display** to see your candidate configuration settings for a context. Any modifications you make can be viewed using the **display** command. The output of the display command depends on where the command is executed. If executed at the configuration level, it displays the entire configuration of the unit. Executing the display command with a configuration name parameter, or from within a context displays the contents of that particular configuration.

Show

The **show** command is most efficient in providing critical information, such as traffic usage, router platform type, operating system revision, amount of memory, and the number of interfaces. The **show** command can also be used to evaluate logging, troubleshooting, tracking resources, sessions, and security settings. To view all the available **show** utilities, enter the **help show** command at the root command level. All the available commands along with the correct command line usage are displayed.

2 Global Commands

Global commands can be used in any context.

commit

Initiates all pending configuration changes in the edit mode.

NOTE: This command does not write the modifications to the startup configuration file. However, the **`save-config`** command can be run from the edit configuration context by using the exclamation mark.

Syntax

```
commit
```

Example

```
NGFW{running}commit
NGFW{running}!save-config
```

exit

Exits the current context.

Syntax

```
exit
```

Example

```
NGFW{running-aaa}exit
NGFW{running}
```

help

Displays help information.

Syntax

```
help [full|COMMAND]
```

Example

```
NGFW{running}help log
Enter log context
Syntax: log
  log   Enter log context
```

Example

```
NGFW{running-firewall}help
Valid commands are:
  default-block-rule DEFACTIONSET
  delete rule all|XRULEID
  help [full|COMMAND]
  rename rule XRULEID NEWRULEID
  rule (auto|RULEID) [POSITION_VALUE]
```

more

Set session to display output page by page.

Syntax

```
more (enable|disable)
```

Example

```
NGFW{running}more enable
```

display

Displays the current configuration, or the candidate configuration before a commit is issued. Display options vary by context, enter the "help display" command in a context to view the available options.

Syntax

```
display
display [xml]
```

Example

```
NGFW{running-aaa-user-myuser1}display
# USER ID
user myuser1
```

3 Root Commands

The top level root command line mode displays the `NGFW{}` prompt. Commands at this level are used for managing and monitoring system operations for the various subsystems. From the root command mode, you can access the configuration mode, and the available commands that apply to the appliance as a whole. Enter **`help full`** or **`help`** ***`COMMANDNAME`*** at the command prompt to display a list of available commands or help on a specific command.

```
NGFW{}help
```

The default `NGFW{}` command prompt can be changed using the **`host name`** command in the **`interface mgmt`** context of the edit mode. For example:

```
NGFW{}edit
NGFW{running}interface mgmt
NGFW{running-mgmt}help host (displays valid entries for configuring management port host settings)
NGFW{running-mgmt}host ? (displays valid entries for host command)
NGFW{running-mgmt}host name yourhostname
```

boot

Manages software packages.

Syntax

```
boot (list-image|rollback)
```

Example

```
NGFW{}boot list-image
Index                          Version
-------------------------------------------------------
0                              1.0.0.3935
1                              1.0.0.2923
2                              1.0.0.3932
3                              1.0.0.3917
Oldest Index is   2
Factory Reset Index is 3
```

clear

Clears system information.

Syntax

```
clear connection-table (blocks|trusts)
clear high-availability state-sync (all|firewall|ips|routing)
clear ip bgp (A.B.C.D|ASNUMBER|all|external) [soft] [in|out]
clear ip bgp peer-group NAME [soft] [in|out]
clear log-file
(audit|fwAlert|fwBlock|ipsAlert|ipsBlock|quarantine|reputationAlert|reputationBlock|
system|visibility|vpn)
clear np engine filter
clear np engine packet
clear np engine parse
clear np engine reputation dns
clear np engine reputation ip
clear np engine rule
clear np reassembly ip
clear np reassembly tcp
clear np rule-stats
```

```
clear np softlinx
clear np tier-stats
clear counter policy
clear rate-limit streams
clear users all [locked|ip-locked]
clear users (NAME|A.B.C.D|X:X::X:X) [locked]
```

Example

```
NGFW{}clear log-file vpn
```

Example

```
NGFW{}clear ip bgp 10.10.10.10 soft in
Not cleared BGP is not active
```

Example

```
NGFW{}clear ip bgp external soft
```

Example

```
NGFW{}clear users fred
```

date

Used alone to display the current date, or with arguments to configure the date in a 24 hour format. The date command shows the current time in the time zone configured on the device and the "gmt" argument shows the time in GMT (UTC).

Syntax

```
date [MMDDhhmm[[CC]YY][.ss]])
date gmt
```

Example

`NGFW{}date 071718202013.59` (sets date to July 17 2013 6:20PM 59 seconds)

edit

The edit context modifies the configuration that identifies the security policy and interfaces that you can configure for your firewall. **`Edit`** takes an instance of the running configuration file. This instance is your version. After making modifications to this *candidate configuration* version, you have the option of saving it to the running configuration, or discarding any changes you made. To discard, simply **`exit`**. To save your candidates configuration, enter the **`commit`** command before exiting the edit context. To see commands under the edit context, see edit configuration.

```
NGFW{}
NGFW{}edit
NGFW{running}
NGFW{running}commit
NGFW{running}exit
NGFW{}
```

flush

Flushes the following configuration items.

Syntax

```
flush (arp|ndp)
flush ipsec sa policy NAME [id ID]
flush ike sa [policy NAME [id ID]]
flush bgp [ip] A.B.C.D [(in prefix-filter)|in|out|(soft [in|out])|rsclient]
```

```
flush bgp ip A.B.C.D [ipv4 (unicast|multicast) (in prefix-filter)|in|out|(soft
[in|out])]
flush bgp ip A.B.C.D [vpnv4 unicast in|out|(soft [in|out])]
flush bgp ipv6 X:X::X:X [(in prefix-filter)|in|out|(soft [in|out])|rsclient]
flush bgp [ip] dampening [A.B.C.D/M|(A.B.C.D [A.B.C.D])]
flush bgp [ip] external [(in prefix-filter)|in|out|(soft [in|out])]
flush bgp ip external [ipv4 (unicast|multicast) (in prefix-filter)|in|out|(soft
[in|out])]
flush bgp ipv6 external [(in prefix-filter)|(soft [in|out])]
flush bgp ipv6 external [peer WORD (in|out)]
flush bgp [ip] view WORD [soft [in|out]]
flush bgp [ip|ipv6] view WORD (A.B.C.D|X:X::X:X|all) rsclient
flush bgp ip view WORD [ipv4 (unicast|multicast)] (in prefix-filter)|(soft [in|out])
flush bgp [ip|ipv6] PEERAS [(in prefix-filter)|in|out|(soft [in|out])]
flush bgp ip PEERAS [ipv4 (unicast|multicast) (in prefix-filter)|in|out|(soft
[in|out])]
flush bgp ip PEERAS [vpnv4 unicast in|out|(soft [in|out])]
flush bgp [ip|ipv6] all [(in prefix-filter)|in|out|(soft [in|out])|rsclient]
flush bgp ip all [ipv4 (unicast|multicast) (in prefix-filter)|in|out|(soft
[in|out])]
flush bgp ip all [vpnv4 unicast in|out|(soft [in|out])]
flush bgp [ip|ipv6] peer-group [(in prefix-filter)|in|out|(soft [in|out])]
flush firewall-session (all|ID) [family (ipv4|ipv6)]
```

Example

```
NGFW{}flush firewall-session 134217756
Success
NGFW{}flush ipsec sa policy mytunnel
```

help

Displays help information at any context level.

high-availability

Manage high-availability devices.

Syntax

```
high-availability force (active|passive)
high-availability segment force (normal|fallback)
```

Example

```
NGFW{}high-availability segment force normal
Status: OK
```

list

Displays traffic capture file list.

Syntax

```
list traffic-file
```

Example

```
NGFW{}list traffic-file
```

log-configure

Enter log configuration context.

Syntax

```
log-configure
```

Example

```
NGFW{}log-configure
NGFW{log-configure}help
NGFW{log-configure}show log-file summary
```

Related Commands

Log Configure Commands

logout

Logs you out of the system.

Syntax

```
logout
```

Example

```
NGFW{} logout
```

master-key

The system master-key is used to encrypt the removable user-disk (the external CFast), and the system keystore. The user-disk holds traffic logs, packet capture data, and system snapshots. The keystore retains data such as device certificates and private keys.

The master-key has the following complexity requirements:

- Must be between 9 and 32 characters in length.
- Combination of upper and lower case alpha and numbers.
- Must contain at least one “special” char (eg: !@#$%)
- Set or clear the master key for keystore and external Cfast user-disk encryption.

Syntax

```
master-key (clear|get|set)
```

Example

Get the master key for keystore and user-disk encryption

```
NGFW{}master-key set
   WARNING: Master key will be used to encrypt the keystore and external user disk.
   Do you want to continue (y/n)? [n]: y
   Enter Master Key   : ***************
   Re-enter Master Key: ***************
   Success: Master key has been set.
```

Example

```
NGFW{}master-key get
Success: My.1.MasterKey!!
```

Example

```
NGFW{}master-key clear
   WARNING: Clearing master key will remove encryption from the keystore and
   external user disk.
   Do you want to continue (y/n)? [n]: y
   Success: Master key has been cleared.
```

ping

Test connectivity with ICMP traffic. The mgmt option uses the management interface.

Syntax

```
ping (A.B.C.D|HOSTNAME) [count INT] [maxhop INT] [from A.B.C.D] [mgmt] [datasize INT]
ping (A.B.C.D|HOSTNAME) [count (1-900000)] [maxhop (1-800)] [from A.B.C.D] [mgmt]
[datasize (64-65468)]
ping6 (X:X::X:X|HOSTNAME) [count INT] [maxhop INT] [interface INTERFACE] [from
X:X::X:X] [datasize INT]
ping6 (X:X::X:X|HOSTNAME) [count (1-900000)] [maxhop (1-800)] [interface INTERFACE]
[from X:X::X:X] [datasize (64-65468)]
```

Example

```
NGFW{}ping 192.168.1.1  mgmt
ping using mgmt port
PING 192.168.1.1 (192.168.1.1): 56 data bytes
64 bytes from 192.168.1.1: icmp_seq=1 ttl=64 vrfid=500 time=0.4 ms
64 bytes from 192.168.1.1: icmp_seq=2 ttl=64 vrfid=500 time=0.1 ms
64 bytes from 192.168.1.1: icmp_seq=3 ttl=64 vrfid=500 time=0.1 ms
64 bytes from 192.168.1.1: icmp_seq=4 ttl=64 vrfid=500 time=0.1 ms
--- 192.168.1.1 ping statistics ---
4 packets transmitted, 4 packets received, 0% packet loss
round-trip min/avg/max = 0.1/0.1/0.4 ms
```

ping6

Test connectivity with ICMPv6 traffic

Syntax

```
ping6 (X:X::X:X|HOSTNAME) [count (1-900000)] [maxhop (1-800)] [interface INTERFACE]
[from X:X::X:X] [datasize (64-65468)]
```

Example

```
NGFW{}ping6 100:0:0:0:0:0:0:1
ping using data ports
PING 100:0:0:0:0:0:0:1 (100:0:0:0:0:0:0:1): 56 data bytes
64 bytes from 100:0:0:0:0:0:0:1: icmp_seq=1 ttl=64 vrfid=0 time=0.3 ms
64 bytes from 100:0:0:0:0:0:0:1: icmp_seq=2 ttl=64 vrfid=0 time=0.1 ms
64 bytes from 100:0:0:0:0:0:0:1: icmp_seq=3 ttl=64 vrfid=0 time=0.1 ms
64 bytes from 100:0:0:0:0:0:0:1: icmp_seq=4 ttl=64 vrfid=0 time=0.1 ms

--- 100:0:0:0:0:0:0:1 ping statistics ---
4 packets transmitted, 4 packets received, 0% packet loss
round-trip min/avg/max = 0.1/0.1/0.3 ms
```

reboot

Reboots the system.

Syntax

```
reboot
```

Example

```
NGFW{}reboot
WARNING: Are you sure you want to reboot the system (y/n) [n]:
```

Reports

Configure data collection for on-box reports.

Syntax

```
reports (reset|enable|disable)
[all|cpu|disk|fan|memory|network|rate-limiter|temperature|traffic-profile|vpn]

Valid entries:
reset             Delete report data
enable            Start data collection for reports
disable           Stop data collection for reports
all               All reports (default)
cpu               CPU utilization report
disk              Disk utilization report
fan               Fan speed report
memory            Memory utilization report
network           Network bandwidth report
rate-limiter      Rate Limiter report
temperature       Temperature report
traffic-profile   Traffic Profile report
vpn               VPN report
```

Example

```
NGFW{}reports enable cpu
NGFW{}reports reset cpu
WARNING: Are you sure you want to reset cpu reports (y/n)? [n]:
```

Related Commands

show reports

save-config

Saves the running configuration to a persistent configuration.

Syntax

```
save-config
```

Example

```
NGFW{}save-config
WARNING: Saving will apply this configuration at the next system start. Continue
(y/n)? [n]:
```

service-access

Enable or disable service access.

Syntax

```
service-access (enable|disable)
```

Example

```
NGFW{}service-access enable
Serial: X-NGF-S1020F-GENERIC-001
Salt:   Zk0lenyg
NGFW{}service-access disable
```

set

Syntax

```
set cli filtering rule (auto-comment|no-auto-comment|(last-auto-comment-value INT))
```

Example

```
NGFW{}set cli filtering rule auto-comment
NGFW{}set cli filtering rule no-auto-comment
```

show

The show command enables you to view current system configuration, status, and statistics.

Table 3-1 Show command

Command	Description
show aaa	show AAA information
show agglink	Show agglink status
show arp	Show Address Resolution Protocol entries
show autoconf dhcpv4 client	IPv4 Dynamic Host Configuration Protocol
show autoconf dhcpv6 client	IPv6 Dynamic Host Configuration Protocol
show autoconf ra	Show autoconfig Router Advertisement information
show cluster	Show cluster status
show date	Show the current router date and time
show dhcp relay	Show DHCPv4 Relay information
show dhcp server lease	Display DHCP server leases history
show dhcpv6	Show DHCPv6 client lease
show dns	Show Domain Name Service
show firewall	Displays firewall rules and sessions.
show high-availability	Show high-availability status
show interface	Show network interface
show ip bgp	Show the Border Gateway Protocol information
show ip igmp	Show Internet Group Management Protocol
show ip mroute	Show Multicast Static IP route
show ip ospf	Show Open Shortest Path First (OSPF) information
show ip pim-sm	Show PIM-SM routing information
show ip rip	Show the RIP routes
show ip route	Show the unicast routes
show ip smr	Show SMR routing information
show ipv6 mld	Show IPv6 routing information for MLD group or interface
show ipv6 mroute	Show IPv6 routing information for multicast routes
show ipv6 ospfv3	Show the OSPFv3 unicast routes

Table 3-1 Show command

Command	Description
show ipv6 pim-sm	Show ipv6 Protocol Independent Multicast - Sparse Mode (PIM-SM) routing information
show ipv6 ripng	Show RIPng routing information
show ipv6 route ripng	Show ripng route information
show (ip|ipv6) route	Show the unicast routes
show key	Show local server SSH key information
show l2tp	Show Layer 2 Tunneling Protocol information
show license	Shows the license number and status
show log-file	Shows the logfiles
show log-file boot	Shows the boot file
show mfg-info	Show manufacturing information
show ndp	Show Neighbor Discovery Protocol
show np engine	Show net processor statistics
show np general statistics	Show general network processor information
show np protocol-mix	Show network processor protocol-level statistics
show np reassembly	Show network processor reassembly statistics
show np rule-stats	Show network processor rules, number of flows, successful matches
show np softlinx	Show network processor softlinx statistics
show np tier-stats	Show network processor throughput and utilization for each tier
show quarantine-list	Show quarantine list information
show reports	Show status of data collection for reports
show service	Show network service information
show sms	Show status of SMS control
show snmp	Show SNMP information
show system buffers	Show Forwarding buffer state
show system connections	Show active socket information
show system processes	Show system processes
show system statistics	Show system-wide protocol-related statistics
show system usage	Show system usage
show system virtual-memory	Show system virtual memory
show system xms memory	Show xms memory usage
show terminal	Show terminal settings
show traffic-file	Show network traffic from file
show tse connection-table	Show TSE connection-table information

Table 3-1 Show command

Command	Description
show users	Show users information
show version	Show device version information

show aaa

Syntax

```
show aaa capabilities USER
```

Example

```
show aaa capabilities fred
NGFW{}show aaa capabilities fred
ID        NAME                      STATE
-------------------------------------------
1         NGFW                      full
2         SECURITY                  full
3         FIREWALLRULES             full
4         SECURITYZONES             full
5         APPLICATIONGROUPS         full
6         ADDRESSGROUPS             full
7         SERVICES                  full
8         SCHEDULES                 full
9         INSPECTIONPROFILES        full
10        IPS                       full
11        IPREPUTATION              full
12        PROFILEGROUPS             full
13        CAPTIVEPORTALRULES        full
14        NATRULES                  full
15        ACTIONSETS                full
16        SYSTEM                    full
17        SMSMANAGED                full
18        MANAGEMENT                full
19        DNS                       full
20        IPFILTERS                 full
21        UPGRADE                   full
22        NOTIFICATION              full
23        LOGGING                   full
24        HIGHAVAILABILITY          full
25        HACONFIGURATION           full
26        HASTATE                   full
27        SNMP                      full
28        TIME                      full
29        FIPS                      full
30        UPDATE                    full
31        PACKAGES                  full
32        AUTODV                    full
33        SNAPSHOT                  full
34        USERAUTH                  full
35        LOCALUSER                 full
36        USERGROUP                 full
37        ROLES                     full
38        RADIUS                    full
39        LDAP                      full
```

```
40        CAPTIVEPORTAL            full
41        GENERAL                  full
42        X509CERT                 full
43        VPN                      full
44        IKE                      full
45        IKECONFIGURATION         full
46        IKESTATUS                full
47        IPSEC                    full
48        IPSECCONFIGURATION       full
49        IPSECSTATUS              full
50        L2TP                     full
51        L2TPCONFIGURATION        full
52        L2TPSTATUS               full
53        REPORTING                full
54        LOG                      full
55        FIREWALLLOG              full
56        IPSLOG                   full
57        REPUTATIONLOG            full
58        VPNLOG                   full
59        SYSTEMLOG                full
60        AUDITLOG                 full
61        SECURITYREPORTS          full
62        NETWORKREPORTS           full
63        DEBUGTOOLS               full
64        REBOOT                   full
65        SHUTDOWN                 full
66        SERVICEACCESS            full
67        NETWORK                  full
68        INTERFACES               full
69        SEGMENTS                 full
70        DHCPSERVER               full
71        DHCPRELAY                full
72        ARPNDP                   full
73        STATICROUTES             full
74        STATICMONITOREDROUTES    full
75        DYNAMICROUTING           full
76        ACCESSLISTS              full
77        ROUTEMAPS                full
78        OSPF                     full
79        RIP                      full
80        BGP                      full
81        MULTICAST                full
82        ROUTINGTABLE             full
83        COMPACTFLASH             full
84        CUSTOMCATEGORIES         full
85        APPLICATIONVISIBILITY    full
86        GLOBALINSPECTIONPROFILE  full
87        DEBUGNP                  full
```

show agglink

Displays information about whether or not the member ports are up in the aggregated link.

Syntax

```
show (agglink|INTERFACE)
```

Example

```
NGFW{}show agglink
#AGGLINK TABLES
Service ETHGRP is inactive
```

show arp

Syntax

```
show arp
```

Example

```
NGFW{}show arp
IP Address                Mac-Address         Interface     State
15.226.140.254            3c:e5:a6:13:7f:2a   mgmt          delay
```

show ndp

Syntax

```
show ndp
```

Example

```
NGFW{}show ndp
IP Address                Mac-Address         Interface     State
fe80::3ee5:a6ff:fe13:7f2a 3c:e5:a6:13:7f:2a   mgmt          stale
```

show autoconf dhcpv4 client

Syntax

```
show autoconf dhcpv4 client (current|history)
```

Example

```
NGFW{}show autoconf dhcpv4 client
```

Example

```
NGFW{}show autoconf dhcpv4 client history
   # DHCPCLIENT LEASES HISTORY
   Service  DHCP            is inactive
```

show autoconf dhcpv6 client

Syntax

```
Show autoconf dhcpv6 client
```

Example

```
NGFW{}show autoconf dhcpv6 client
Service DHCPv6 client is inactive
```

show autoconf ra

Syntax

```
show autoconf ra (INTERFACE|all)
```

Example

```
NGFW{}show autoconf all
```

```
no data
```

show cluster

Syntax

```
show cluster
```

Example

```
cluster.3-device23{} show cluster
Cluster Status
--------------
Name:       cluster
Identifier: 3
State:      Enabled
Segment HA: Normal
Master:     cluster.3-device23
Members
-------
Name:                      cluster.3-device23
HA State:                  Active
```

show date

This command shows the GMT time or the local time and timezone for the appliance.

Syntax

```
show date [gmt]
```

Example

```
NGFW{}show date
Sun Sept 15 04:29:59 2013  GMT
NGFW{}show date gmt
Wed Aug 21 21:51:13 2013  GMT
NGFW{}show date
Wed Aug 21 14:51:16 2013  America/Los_Angeles
```

show dhcp relay

Shows DHCPv4 Relay information.

Syntax

```
show dhcp relay
```

Example

```
NGFW{}show dhcp relay
DHCP Relay is not running
```

show dhcp server lease

Syntax

```
show dhcp server lease (current | history)
```

Example

```
NGFW{}show dhcp server lease current
Status: Inactive
```

```
IP Address    Mac Address        Start date & time    End date & time
```

show dhcpv6

Syntax

```
show dhcpv6
```

Example

```
NGFW{}show dhcpv6
Service DHCPv6 client is inactive
```

show dns

Syntax

```
show dns
```

Example

```
NGFW{}show dns
# DNS PROXY
  Proxy Disabled
# STATIC DNS
# DYNAMIC V4 DNS
# DYNAMIC V6 DNS
```

show firewall

Displays firewall rules and sessions.

Syntax

```
show firewall rules [count MAX-RULES] [rule all|ID] [action-set ACTIONSET]
[src-zones SRC-ZONE] [dst-zones DST-ZONE] [services SERVICES] [schedules SCHEDULE]
[application APPS] [more]

show firewall sessions [count MAX-SESSIONS] [family FAMILY] [protocol PROTOCOL]
[direction DIRECTION] [more]
```

Example

```
NGFW{}show firewall sessions
ID  Protocol  State   Direction  Source(IP:PORT) Destination(IP:PORT) Bytes  Expires
-------------------------------------------------------------------------------
3469 IGMP(2) unreplied original  192.168.1.1     224.0.0.2             32     75
                       reply     224.0.0.2       192.168.1.1            0


NGFW{}show firewall rules
1.      Rule:                              20000
        Action set:                        Permit + Notify
2.      Rule:                              20010
        Action set:                        Permit + Notify
```

show high-availability

Syntax

```
show high-availability (state-sync (all|FEATURE))
```

Example

```
NGFW{}show high-availability state-sync firewall
  HA Synchronization State
```

```
  ------------------------
  Name: firewall
  State: enabled
  Synchronization State: Not initialized
  Reason: Unable to determine synchronization state
  Total Entries: 353
  Added  Entries: 324
  Deleted Entries: 0
```

Related Commands

```
high-availability force (active|passive)
high-availability segment force (normal|fallback)
```

show interface

Syntax

```
show interface [INTERFACE [statistics [update INT]]]
show interface [INTERFACE] multicast-registration
```

Examples

```
NGFW{}show interface ha
Interface         ha
  MAC Address     00:10:f3:2c:81:df
  Enabled         Yes
  Link            Down
  Speed           10Mbps
  Auto Negotiate  Enabled
  Duplex          Half
  MTU             9216

NGFW{}show interface mgmt
Interface         mgmt
  IP Address      A.B.C.D/24
  IPv6 Address    fe80::210:f3ff:fe2c:81de/64 (Link Local)
  MAC Address     00:10:f3:2c:81:de
  Enabled         Yes
  Link            Up
  Speed           1000Mbps
  Auto Negotiate  Enabled
  Duplex          Full
  MTU             1500

NGFW{}show interface bridge1
Interface         bridge1
  IPv6 Address    fe80::210:f3ff:fe2c:81e2/64 (Link Local)
  MAC Address     00:10:f3:2c:81:e2
  Enabled         Yes
  Link            Up
  MTU             1500

NGFW{}show interface multicast-registration
default:
    IGMP: igmpv3
    MLD : mldv2
force:
    IGMP: igmpv3
    MLD : mldv2
```

show ip bgp

Syntax

```
show ip bgp
show ip bgp debug
show ip bgp A.B.C.D/M
show ip bgp summary
show ip bgp neighbors
show ip bgp neighbors A.B.C.D
show ip bgp neighbors A.B.C.D (advertised-routes|routes)
show ip bgp filter-list FILTER-LIST-NAME
show ip bgp prefix-list PREFIX-LIST-NAME
show ip bgp route-map ROUTE-MAP-NAME
show ip bgp community-list COMMUNITY-LIST-NAME
show ip bgp community AA:NN|internet|local-as|no-export|no-advertise
```

Example

```
NGFW{}show ip bgp
BGP Router Default Instance (ASN 230)

BGP table version is 0, local router ID is 172.16.30.230
Status codes: s suppressed, d damped, h history, * valid, > best, i - internal,
              r RIB-failure, S Stale, R Removed
Origin codes: i - IGP, e - EGP, ? - incomplete

   Network          Next Hop            Metric LocPrf Weight Path
*> 99.1.0.0/24      172.16.30.99            11         32768  ?
*> 99.2.0.98/32     172.16.30.99            11         32768  ?
*> 172.16.40.0/24   172.16.20.98             0             0 98  i

Total number of prefixes 3
```

show ip igmp

Shows IGMP interface information or group information.

Syntax

```
show ip igmp (interface|groups)
```

Example

```
NGFW{}show ip igmp interface
ethernet2 is up
  Interface address: 172.16.30.230/24
  IGMP on this interface: enabled
  Multicast routing on this interface: enabled
  Multicast TTL threshold: 1
  Current IGMP router version: 3
  IGMP query interval: 125 seconds
  IGMP max query response time: 100 deciseconds
  Last member query response interval: 10 deciseconds
  IGMP Querier: 172.16.30.230
  Robustness: 2
  Require Router Alert: enabled
  Startup Query Interval: 312 deciseconds
  Startup Query Count: 2
  General Query Timer Expiry: 00:00:07
  Startup Query Timer Expiry: 00:00:07
  Multicast groups joined:
```

show ip mroute

Shows the multicast routes.

Syntax

```
show ip mroute
```

Example

```
NGFW{}show ip mroute
Source          Group           In-interface    Out-interface(s)
152.168.1.2     239.255.255.2   pimreg          ethernet1
```

show ip ospf

Displays general information about Open Shortest Path First (OSPF) routing processes.

Syntax

```
show ip ospf ?
show ip ospf (database|interface[IFACE]|neighbor [debug]|redistribute|route[debug])
```

Example

```
NGFW{}show ip ospf
OSPF Router with ID (15.255.125.122)

OSPF Routing Process 0 [VRF 0], Router ID: 15.255.125.122
Supports only single TOS (TOS0) routes
This implementation conforms to RFC2328
RFC1583Compatibility flag is disabled
OpaqueCapability flag is enabled
SPF schedule delay 200 secs, Hold time between two SPFs 1000 secs
Refresh timer 10 secs
Kernel delay 50 ms
This router is an ASBR (injecting external routing information)
Redistribute Configuration
     Maximum-Prefix is not configured
Number of external LSA 0. Checksum Sum 0x00000000
Number of opaque AS LSA 0. Checksum Sum 0x00000000
Number of areas attached to this router: 1

Area ID: 0.0.0.0 (Backbone)
   Number of interfaces in this area: Total: 1, Active: 1
   Number of fully adjacent neighbors in this area: 1
   Area has no authentication
   SPF algorithm executed 8 times (in 0 ms)
   Number of LSA 3
   Number of router LSA 2. Checksum Sum 0x00015328
   Number of network LSA 1. Checksum Sum 0x00000b59
   Number of summary LSA 0. Checksum Sum 0x00000000
   Number of ASBR summary LSA 0. Checksum Sum 0x00000000
   Number of NSSA LSA 0. Checksum Sum 0x00000000
   Number of opaque link LSA 0. Checksum Sum 0x00000000
   Number of opaque area LSA 0. Checksum Sum 0x00000000
```

show ip pim-sm

Syntax

```
show ip pim-sm (interface|neighbor|rp|bsr-router)
```

Example

```
NGFW{}show ip pim-sm interface
Address         Interface    Mode       Neighbor   Hello DR         DR Address
                                        Count      Intvl Pri
182.168.1.10    ethernet5    sparse     1          30    1          182.168.1.20
```

Example

```
ngfw{}show ip pim-sm neighbor
Interface       Address
ethernet5       182.168.1.20

ngfw{}show ip pim-sm bsr-router
PIMv2 Bootstrap information
This system is the Bootstrap Router (BSR)
  BSR address: 182.168.1.10
  Uptime:      00:00:26, BSR Priority: 10, Hash mask length: 30
  Next bootstrap message in 00:00:34

ngfw{}show ip pim-sm rp
The PIM RP Set
Group: 239.255.255.2/32
  RP: 182.168.1.10
    Uptime: 00:00:51, Expires: 00:01:39, Priority: 10
```

show ip rip

Shows the RIP routes.

Syntax

```
show ip rip
```

Example

```
NGFW{}show ip rip
RIP Router Default Instance

Routing Protocol is "rip"
  Sending updates every 30 seconds with +/-50%, next due in 29 seconds
  Timeout after 180 seconds, garbage collect after 120 seconds
Mesage load balancing using 1 time slots
  Default redistribution metric is 1
  Redistributing:
  Default version control: send version 2, receive any version
    Interface        Send  Recv  Pri  RIPv1BorderGW  RIPv1IngrSumy  Key-chain
    ethernet1        2     1 2   7    Enable         Enable
      Split horizon
      No authentication
  Routing for Networks:
    ethernet1
  Routing Information Sources:
    Gateway          BadPackets BadRoutes  Distance Last Update
  Distance: (default is 120)
```

show ip route

Syntax

```
show ip route (bgp|connected|debug|mgmt|ospf|rip|smr|static)
```

Example

```
NGFW{}show ip route debug
   Codes: K - kernel route, C- connected, S - static, R - RIP, O - OSPF,
          B - BGP, > - selected route, * - FIB route

   K * 127.0.0.0/8 is directly connected, unknown(0) inactive, rej
   C>* 127.0.0.0/8 is directly connected, lo
   C>* 192.168.1.0/24 is directly connected, ethernet13
   C>* 192.168.100.0/24 is directly connected, ethernet14
   K>* 224.0.0.2/32 is directly connected, lo501
   S>* 0.0.0.0/0 [1/0] [vrf 500] via 15.220.140.254, mgmt
   C>* 15.220.140.0/24 [vrf 500] is directly connected, mgmt
   C>* 127.0.0.0/8 [vrf 500] is directly connected, lo500
   C>* 127.0.0.0/8 [vrf 501] is directly connected, lo501
   C>* 169.254.0.0/24 [vrf 501] is directly connected, ha
```

show ip smr

Show SMR routing information.

Syntax

```
show ip smr [status]
```

Example

```
NGFW{}show ip smr
Type  Prefix          NextHop         Distance    Probe Target
*     1.1.1.0/24      172.16.20.220   10
*     2.2.2.0/24      172.16.20.220   10
*     3.3.3.0/24      172.16.20.220   10
      4.4.4.0/24      172.16.20.30    10

NGFW{} show ip smr status
3 route(s) active
1 route(s) inactive
Global round-trip  avg/max  0.5/29.2 msec
10 packets/640 bytes sent last second
```

show ipv6 mld

Shows IPv6 routing information for MLD group or interface.

Syntax

```
show ipv6 mld (interface|groups)
```

Example

```
NGFW{}show ipv6 mld interface
ethernet1 is up
  Interface address: fe80::210:f3ff:fe24:5b7e%ethernet1/64
  MLD on this interface: enabled
  Multicast routing on this interface: disabled
  Current MLD router version: 2
  MLD query interval: 125 seconds
  MLD max query response time: 10 seconds
  Last member query response interval: 10 deciseconds
  MLD Querier: fe80::210:f3ff:fe24:5b7e%ethernet1
  Robustness: 2
  Require Router Alert: enabled
  Startup Query Interval: 312 deciseconds
```

```
  Startup Query Count: 2
  General Query Timer Expiry: 00:01:19
  Multicast groups joined:

NGFW{}show ipv6 mld groups
MLD Connected Group Membership
Group Address  Interface   Uptime     Expires    Last Reporter
ff1e:11::1     ethernet1   00:00:04   00:04:16   fe80::215:17ff:fe3c:edea%ethernet1
```

show ipv6 mroute

Shows IPv6 routing information for multicast routes.

Syntax

```
show ipv6 mroute
```

Example

```
NGFW{}show ipv6 mroute
Source Group In-interface Out-interface(s)
2001:300::2 ff1e:11::1 pimreg ethernet1
```

show ipv6 ospfv3

Shows the OSPFv3 unicast routes.

Syntax

```
show ipv6 ospfv3 (database|interface[IFACE]|neighbor[debug]|route)
```

Example

```
NGFW{}show ipv6 ospfv3
OSPFv3 Router with ID (172.16.30.230)

OSPFv3 Routing Process 0 [VRF 0] with Router-ID 172.16.30.230
Running 00:00:07
Graceful Restart: Enabled with interval 120
     Status: restarting (left time 113s)
Graceful Restart Helper: Enabled
Redistribute Configuration
     Maximum-Prefix is not configured
Number of AS scoped LSAs is 0
Number of AS scoped LSAs is 0
Number of areas in this router is 2
Area 0.0.0.0
     Number of Area scoped LSAs is 0
     Interface attached to this area: ethernet1
Area 0.0.0.9
     Number of Area scoped LSAs is 0
     Interface attached to this area:
```

show ipv6 pim-sm

Protocol Independent Multicast - Sparse Mode (PIM-SM) provides efficient communication between members of sparsely distributed groups that are common. PIM-SM is designed to limit multicast traffic so only switches interested in receiving traffic for a particular group receive the traffic.

Syntax

```
show ipv6 pim-sm (interface|neighbor|rp|bsr-router)
```

Example

```
NGFW{}show ipv6 pim-sm interface
Interface                          Mode       Neighbor   Hello    DR
                                              Count      Interval Priority
ethernet5                          sparse     1          30       1
    Address:    fe80::210:f3ff:fe24:5b82
    DR Address: this system

NGFW{}show ipv6 pim-sm neighbor
Interface       Address
ethernet5       fe80::210:f3ff:fe24:5b5b

PIM6v2 Bootstrap information
This system is the Bootstrap Router (BSR)
  BSR address: 2001:200::10
  Uptime:      00:20:00, BSR Priority: 10, Hash mask length: 126
  Next bootstrap message in 00:00:00

NGFW{}show ipv6 pim-sm rp
The PIM6 RP Set
Group: ff1e:11::1/128
  RP: 2001:200::10
    Uptime: 00:20:22, Expires: 00:01:59, Priority: 0
```

show ipv6 ripng

Shows the RIPng routes.

Syntax

```
show ipv6 ripng
```

Example

```
NGFW{}show ipv6 ripng
RIPng Router Default Instance
Routing Protocol is "RIPng"
  Sending updates every 30 seconds with +/-50%, next due in 37 seconds
  Timeout after 180 seconds, garbage collect after 120 seconds
  Default redistribution metric is 1
  Redistributing:
  Default version control: send version 1, receive version 1
    Interface        Send  Recv
    ethernet1        1     1
    Split horizon
  Routing for Networks:
    ethernet1
  Routing Information Sources:
    Gateway  ReceivedPackets BadPackets  BadRoutes  Distance   Last Update
  Distance: (default is 120)
```

show ipv6 route ospfv3

Shows the OSPFv3 unicast routes.

Syntax

```
show ipv6 route ospfv3
```

Example

```
NGFW{}show ipv6 route ospfv3
```

```
Codes: O - ospfv3, > - selected route, * - FIB route
O>* 1:1::/64 [110/2] via fe80::20c:29ff:fee0:c919, ethernet2, 00:00:28
O>* 2:2::2:2/128 [110/1] via fe80::72ca:9bff:fe76:16b1, ethernet2, 00:00:28
O>* 2100::/64 [110/2] via fe80::72ca:9bff:fe76:16b1, ethernet2, 00:00:28
O>* 2100::2/128 [110/1] via fe80::72ca:9bff:fe76:16b1, ethernet2, 00:00:28
```

show ipv6 route ripng

Shows the RIPng routes.

Syntax

```
show ipv6 route ripng
```

Example

```
NGFW{}show ipv6 route ripng
Codes: K - kernel route, C - connected, S - static, R - RIPng, O - OSPFv3,
       I - ISIS, B - BGP, N - NAT-PT, D - Delegated Prefix, > - selected route,
        * - FIB route, b - Backup route, < - delayed route, Q - Untyped route

R>* 4100::/64 [120/2] via fe80::210:f3ff:fe26:f375, ethernet2, 00:00:07
```

show (ip|ipv6) route

Syntax

```
show (ip|ipv6) route (debug|mgmt|static|connected)
```

Example

```
NGFW{}show ipv6 route static
Codes: S - static, > - selected route, * - FIB route
```

show key

Shows local server SSH key.

Syntax

```
show key
```

Example

```
NGFW{}show key
```

show l2tp

Shows layer 2 tunneling protocol information.

Syntax

```
show l2tp
```

Example

```
NGFW{}show l2tp
=============
Current sessions for L2TP:
L2TP server is not running.
```

show license

Syntax

```
show license
```

Example

```
NGFW{}show license
License: 1.0.0.11 (Transitional)

Feature                 Status   Permit   Expiration   Details
--------                ------   -------  ----------   --------
License                 OK       Allow    10/3/2013    Using the transitional license.
Update TOS              OK       Allow    10/3/2013
Update DV               OK       Allow    10/3/2013
Auxiliary DV            Info     Deny     Never        Not licensed to use feature.
ReputationDV            Info     Deny     Never        Not licensed to use feature.
```

show log-file

The following log files are available:

- system
- audit
- fwAlert
- fwBlock
- vpn
- ipsAlert
- ipsBlock
- reputationAlert
- reputationBlock
- quarantine

show log-file FILE_NAME

Syntax

```
show log-file audit [raw|tab|csv|rawcsv] [addUUID] [ASC|DESC|(tail [COUNT])]
[seqnum] [more]

show log-file fwAlert [raw|tab|csv|rawcsv] [addUUID] [ASC|DESC|(tail [COUNT])]
[seqnum] [more]

show log-file fwBlock [raw|tab|csv|rawcsv] [addUUID] [ASC|DESC|(tail [COUNT])]
[seqnum] [more]

show log-file ipsAlert [raw|tab|csv|rawcsv] [addUUID] [ASC|DESC|(tail [COUNT])]
[seqnum] [more]

show log-file ipsBlock [raw|tab|csv|rawcsv] [addUUID] [ASC|DESC|(tail [COUNT])]
[seqnum] [more]

show log-file quarantine [raw|tab|csv|rawcsv] [addUUID] [ASC|DESC|(tail [COUNT])]
[seqnum] [more]

show log-file reputationAlert [raw|tab|csv|rawcsv] [addUUID] [ASC|DESC|(tail
[COUNT])] [seqnum] [more]

show log-file reputationBlock [raw|tab|csv|rawcsv] [addUUID] [ASC|DESC|(tail
[COUNT])] [seqnum] [more]
```

```
show log-file summary [raw|tab|csv|rawcsv] [addUUID] [ASC|DESC|(tail [COUNT])]
[seqnum] [more]

show log-file system [raw|tab|csv|rawcsv] [addUUID] [ASC|DESC|(tail [COUNT])]
[seqnum] [more]

show log-file vpn [raw|tab|csv|rawcsv] [addUUID] [ASC|DESC|(tail [COUNT])] [seqnum]
[more]

show log-file boot [raw|tab|csv|rawcsv] [addUUID] [ASC|DESC|(tail [COUNT])] [seqnum]
[more]

show log-file audit [raw|tab|csv|rawcsv] [addUUID] [ASC|DESC] [search
[(options)]{0,2} PATTERN] [start-time START] [end-time END] [seqnum[ [begin BEGIN]
[end END]]] [count COUNT] [more]

show log-file fwAlert [raw|tab|csv|rawcsv] [addUUID] [ASC|DESC] [search
[(options)]{0,2} PATTERN] [start-time START] [end-time END] [seqnum[ [begin BEGIN]
[end END]]] [count COUNT] [more]

show log-file fwBlock [raw|tab|csv|rawcsv] [addUUID] [ASC|DESC] [search
[(options)]{0,2} PATTERN] [start-time START] [end-time END] [seqnum[ [begin BEGIN]
[end END]]] [count COUNT] [more]

show log-file ipsAlert [raw|tab|csv|rawcsv] [addUUID] [ASC|DESC] [search
[(options)]{0,2} PATTERN] [start-time START] [end-time END] [seqnum[ [begin BEGIN]
[end END]]] [count COUNT] [more]

show log-file ipsBlock [raw|tab|csv|rawcsv] [addUUID] [ASC|DESC] [search
[(options)]{0,2} PATTERN] [start-time START] [end-time END] [seqnum[ [begin BEGIN]
[end END]]] [count COUNT] [more]

show log-file quarantine [raw|tab|csv|rawcsv] [addUUID] [ASC|DESC] [search
[(options)]{0,2} PATTERN] [start-time START] [end-time END] [seqnum[ [begin BEGIN]
[end END]]] [count COUNT] [more]

show log-file reputationAlert [raw|tab|csv|rawcsv] [addUUID] [ASC|DESC] [search
[(options)]{0,2} PATTERN] [start-time START] [end-time END] [seqnum[ [begin BEGIN]
[end END]]] [count COUNT] [more]

show log-file reputationBlock [raw|tab|csv|rawcsv] [addUUID] [ASC|DESC] [search
[(options)]{0,2} PATTERN] [start-time START] [end-time END] [seqnum[ [begin BEGIN]
[end END]]] [count COUNT] [more]

show log-file summary [raw|tab|csv|rawcsv] [addUUID] [ASC|DESC] [search
[(options)]{0,2} PATTERN] [start-time START] [end-time END] [seqnum[ [begin BEGIN]
[end END]]] [count COUNT] [more]

show log-file system [raw|tab|csv|rawcsv] [addUUID] [ASC|DESC] [search
[(options)]{0,2} PATTERN] [start-time START] [end-time END] [seqnum[ [begin BEGIN]
[end END]]] [count COUNT] [more]

show log-file vpn [raw|tab|csv|rawcsv] [addUUID] [ASC|DESC] [search [(options)]{0,2}
PATTERN] [start-time START] [end-time END] [seqnum[ [begin BEGIN] [end END]]] [count
COUNT] [more]

show log-file boot [raw|tab|csv|rawcsv] [addUUID] [ASC|DESC] [search
[(options)]{0,2} PATTERN] [start-time START] [end-time END] [seqnum[ [begin BEGIN]
[end END]]] [count COUNT] [more]

show log-file audit [raw|tab|csv|rawcsv] [addUUID] [ASC|DESC] [search COLUMN cmp
PATTERN [and|or COLUMN cmp PATTERN]{1,25}] [start-time START] [end-time END]
[seqnum[ [begin BEGIN] [end END]]] [count COUNT] [more]

show log-file fwAlert [raw|tab|csv|rawcsv] [addUUID] [ASC|DESC] [search COLUMN cmp
PATTERN [and|or COLUMN cmp PATTERN]{1,25}] [start-time START] [end-time END]
[seqnum[ [begin BEGIN] [end END]]] [count COUNT] [more]

show log-file fwBlock [raw|tab|csv|rawcsv] [addUUID] [ASC|DESC] [search COLUMN cmp
PATTERN [and|or COLUMN cmp PATTERN]{1,25}] [start-time START] [end-time END]
[seqnum[ [begin BEGIN] [end END]]] [count COUNT] [more]
```

```
show log-file ipsAlert [raw|tab|csv|rawcsv] [addUUID] [ASC|DESC] [search COLUMN cmp
PATTERN [and|or COLUMN cmp PATTERN]{1,25}] [start-time START] [end-time END]
[seqnum[ [begin BEGIN] [end END]]] [count COUNT] [more]

show log-file ipsBlock [raw|tab|csv|rawcsv] [addUUID] [ASC|DESC] [search COLUMN cmp
PATTERN [and|or COLUMN cmp PATTERN]{1,25}] [start-time START] [end-time END]
[seqnum[ [begin BEGIN] [end END]]] [count COUNT] [more]

show log-file quarantine [raw|tab|csv|rawcsv] [addUUID] [ASC|DESC] [search COLUMN
cmp PATTERN [and|or COLUMN cmp PATTERN]{1,25}] [start-time START] [end-time END]
[seqnum[ [begin BEGIN] [end END]]] [count COUNT] [more]

show log-file reputationAlert [raw|tab|csv|rawcsv] [addUUID] [ASC|DESC] [search
COLUMN cmp PATTERN [and|or COLUMN cmp PATTERN]{1,25}] [start-time START] [end-time
END] [seqnum[ [begin BEGIN] [end END]]] [count COUNT] [more]

show log-file reputationBlock [raw|tab|csv|rawcsv] [addUUID] [ASC|DESC] [search
COLUMN cmp PATTERN [and|or COLUMN cmp PATTERN]{1,25}] [start-time START] [end-time
END] [seqnum[ [begin BEGIN] [end END]]] [count COUNT] [more]

show log-file summary [raw|tab|csv|rawcsv] [addUUID] [ASC|DESC] [search COLUMN cmp
PATTERN [and|or COLUMN cmp PATTERN]{1,25}] [start-time START] [end-time END]
[seqnum[ [begin BEGIN] [end END]]] [count COUNT] [more]

show log-file system [raw|tab|csv|rawcsv] [addUUID] [ASC|DESC] [search COLUMN cmp
PATTERN [and|or COLUMN cmp PATTERN]{1,25}] [start-time START] [end-time END]
[seqnum[ [begin BEGIN] [end END]]] [count COUNT] [more]

show log-file vpn [raw|tab|csv|rawcsv] [addUUID] [ASC|DESC] [search COLUMN cmp
PATTERN [and|or COLUMN cmp PATTERN]{1,25}] [start-time START] [end-time END]
[seqnum[ [begin BEGIN] [end END]]] [count COUNT] [more]

show log-file boot [raw|tab|csv|rawcsv] [addUUID] [ASC|DESC] [search COLUMN cmp
PATTERN [and|or COLUMN cmp PATTERN]{1,25}] [start-time START] [end-time END]
[seqnum[ [begin BEGIN] [end END]]] [count COUNT] [more]

show log-file audit [raw|tab|csv|rawcsv] [addUUID] follow [seqnum] [more]
show log-file fwAlert [raw|tab|csv|rawcsv] [addUUID] follow [seqnum] [more]
show log-file fwBlock [raw|tab|csv|rawcsv] [addUUID] follow [seqnum] [more]
show log-file ipsAlert [raw|tab|csv|rawcsv] [addUUID] follow [seqnum] [more]
show log-file ipsBlock [raw|tab|csv|rawcsv] [addUUID] follow [seqnum] [more]
show log-file quarantine [raw|tab|csv|rawcsv] [addUUID] follow [seqnum] [more]
show log-file reputationAlert [raw|tab|csv|rawcsv] [addUUID] follow [seqnum] [more]
show log-file reputationBlock [raw|tab|csv|rawcsv] [addUUID] follow [seqnum] [more]
show log-file summary [raw|tab|csv|rawcsv] [addUUID] follow [seqnum] [more]
show log-file system [raw|tab|csv|rawcsv] [addUUID] follow [seqnum] [more]
show log-file vpn [raw|tab|csv|rawcsv] [addUUID] follow [seqnum] [more]
show log-file boot [raw|tab|csv|rawcsv] [addUUID] follow [seqnum] [more]
show log-file audit stat
show log-file fwAlert stat
show log-file fwBlock stat
show log-file ipsAlert stat
show log-file ipsBlock stat
show log-file quarantine stat
show log-file reputationAlert stat
show log-file reputationBlock stat
show log-file summary stat
show log-file system stat
show log-file vpn stat
show log-file boot stat
show log-file summary [verbose]
show log-file boot [tail COUNT] [more]
show log-file boot [search [(options)]{0,2} PATTERN] [count COUNT] [more]
```

Example

```
NGFW{}show log ipsAlert
```

Example

```
NGFW{}show log quarantine
```

show log-file FILE_NAME stat

Shows the beginning sequence number, ending sequence number, and number of messages for the given log file.

Syntax

```
show log-file FILE_NAME stat
```

Example

```
NGFW{}show log ipsBlock stat
Display limited to 500 lines...
1
241097
241097
```

show log-file summary

Syntax

```
show log-file summary [verbose]
```

Example

```
NGFW{}show log-file summary
File            Total Entries  First Entry    Last Entry     Allocated  Used Location
--------------- -------------- -------------- -------------- ---------- ---- ------
system                   2902              1           2902  174.32 MB   0% internal
audit                     411              1            411  174.32 MB   0% internal
fwAlert                2135781       42054583       44190363  700.23 MB  66% ramdisk
fwBlock                      0              0              0  700.23 MB   0% ramdisk
ipsAlert                     0              0              0  350.11 MB   0% ramdisk
ipsBlock                     0              0              0  350.11 MB   0% ramdisk
reputationAlert              0              0              0  175.06 MB   0% ramdisk
reputationBlock              0              0              0  175.06 MB   0% ramdisk
visibility                   0              0              0  700.23 MB   0% ramdisk
quarantine                   0              0              0  175.06 MB   0% ramdisk
vpn                          0              0              0  175.06 MB   0% ramdisk
```

show log-file boot

Syntax

```
show log-file boot [tail [COUNT]] [more]
show log-file boot [search [<options>]{0,2} PATTERN] [count COUNT] [more]
```

If using the **more** option, the colon will display in the output, to indicate more information is available. Press the Enter key for the scroll to continue, or enter a 'q' to exit and return to the NGFW{} prompt.

Example

```
NGFW{} show log-file audit more
   2013-07-05 ...(log info is displayed)
   2013-07-05 ...
   ...
   :q
NGFW{}show log-file boot search nocase ethernet7 count 7
NGFW{}show log-file boot search invert ethernet7 count 3
NGFW{}show log-file boot search ethernet7 count 2
```

```
ADDRCONF(NETDEV_UP): ethernet7: link is not ready
device ethernet7 entered promiscuous mode
```

Example

To tail the last 5 lines of the boot log file:

```
NGFW{}show log-file boot tail 5
   bridge1: port 8(ethernet7) entering disabled state
   bridge1: port 8(ethernet7) entering disabled state
   ADDRCONF(NETDEV_UP): ethernet7: link is not ready
   device ethernet8 left promiscuous mode
   device ethernet7 left promiscuous mode
```

show mfg-info

Shows manufacturing information.

Syntax

```
show mfg-info
```

Example

```
NGFW{}show mfg-info
device34{}show mfg-info
ECO Version             : 40AA
Manufacturer S/N        : TBBC10021827
PCBA Assembly Date      : 01/11/2012
Chassis Version         : 00
Mfg System Revision     : A905
HP Base Unit P/N        : 5066-2732
HP Base Unit Revision   : A1
Number of MACs          : 12
MAC Address             : 00:10:F3:2C:81:DE
Mgmt Port MAC Address   : 00:10:F3:2C:81:DE
Ethernet1 MAC Address   : 00:10:F3:2C:81:E2
HP Base Unit S/N        : PR2AFQY003
Internal Disk Model     : 4GB SATA Flash Drive
Internal Disk S/N       : 11001420994500582125
External Disk Model     : 4GB SATA Flash Drive
External Disk S/N       : 00224192122400702578
BIOS Version            : Z513-021
IPM Version             : 1.d (working)
```

show np engine

Shows network processor information.

Syntax

```
show np engine(filter|packet|parse|reputation(ip|dns)|rule)
   filter - Show filter-level statistics
   packet - Show packet-layer statistics
   parse - Show packet parsing statistics
   reputation - Show reputation statistics on either IP or DNS
   rule - Show rule statistics
```

Example

```
NGFW{}show np engine packet
   Packet Statistics:
   Rx packets OK             =        275263890
   Rx packets dropped        =                0
```

```
 Rx packets dropped no pcb =               0
 Tx packets OK             =       275262516
 Tx packets dropped        =            1374
 Tx packets dropped no pcb =               0
 Rx bytes OK               =     14864242660
 Tx bytes OK               =     16515754024
```

show np general statistics

Shows general network processor information.

Syntax

```
show np general statistics
```

Example

```
NGFW{}show np general statistics
General Statistics:
Incoming           =               0
Outgoing           =               0
Dropped            =               0
Interface discards =               0
Second Tier        =               0
Matched            =               0
Blocked            =            1376
Trusted            =               0
Permitted          =               0
Invalid            =               0
Rate Limited       =               0
```

show np protocol-mix

Syntax

```
show np protocol-mix
```

Example

```
NGFW{}show np protocol-mix
Network Traffic Protocol Statistics:

                          Packets                 Bytes
                 =================     =================
EthType:
  ARP                      289096              17363292
  IP                     75851320           16817451395
  IPv6                     110966              91605367
  Other                     47087              31256790
IpVersion:
  IPv4                   75851320           16817451395
  IPv6                     110966              91605367
  Other                      9010               5444502
IpProtocol:
  TCP                    24779397            4847827560
  UDP                    49956647           11260655728
  ICMP                     112057              42551652
  IPv4 in IPv4                0                     0
  IPv6 In IPv4              4536                597024
  GRE                      276372              45779027
  AH                          414                 63180
```

```
  Other                        132843               65240426
Ipv6Protocol:
  TCP                            378                  265014
  UDP                           1350                 1135803
  ICMPv6                        3908                 1406824
  ICMP                             0                       0
  IPv6 in IPv6                 89760                77281416
  IPv4 in IPv6                  2442                 1938618
  GRE                           1398                 1106502
  AH                               0                       0
  Other                        53034                44444961
```

show np reassembly

Syntax

```
show np reassembly (ip|tcp)
```

Example

```
NGFW{}show np reassembly ip
    Summary:
    Frags incoming             =               0
    Frags kept                 =               0
    Frags outgoing             =               0
    Frags passed thru          =               0
    Frags dropped (duplicate)  =               0
    Frags recently reassembled =               0
    Frags dropped (other)      =               0
    Dgrams completed           =               0
```

show np rule-stats

Syntax

```
show np rule-stats
```

Example

```
NGFW{}show np rule-stats
      Filter       Flows  Success  % Total  % Success
        6281           9        0       21       0.00
        6310           9        0       21       0.00
         633           8        3       19      37.50
        5337           8        0       19       0.00
        2768           7        0       16       0.00
        5881           1        0        2       0.00
    Total number of flows: 42
```

show np softlinx

Syntax

```
show np softlinx
```

Example

```
NGFW{}show np softlinx
SoftLinx Statistics:
Matched both softlinx and a rule     =               0
Matched softlinx, but not a rule     =               0
Matched a rule, but not softlinx     =               0
```

```
Sleuth inspected packets             =                0
Sleuth matched packets               =                0
Matched HW (Sleuth) but not softLinx =                0
Sleuth gave up                       =                0
Sleuth bypassed                      =                0
Sleuth bypassed zero payload length  =                0
Sleuth overflow                      =                0
Matched nothing                      =        281567607
Linx rules created                   =                0
Linx rules deleted                   =                0
Discarded by the softlinx            =                0
Total packets sent to softlinx       =               80
Embedded Trigger matches             =                0
Engine Trigger matches               =                0
Trigger matches                      =                0
False pkt matches                    =               80
Good pkt matches                     =                0
SoftLinx trigger match roll over     =                0
Highest flow based trigger match     =                0
```

show np tier-stats

Syntax

```
show np tier-stats
```

Example

```
NGFW{}show np tier-stats
   ------------------------------------------------------------
   Tier 1:
   ------------------------------------------------------------
   Rx Mbps               =          0.0  (0.0)
   Tx Mbps               =          0.0  (0.0)
   Rx Packets/Sec        =          0.0  (0.0)
   Tx Packets/Sec        =          0.0  (0.0)
   Utilization           =          0.0% (0.0%)
   Ratio to next tier    =          0.0% (100.0%)
   ------------------------------------------------------------
   Tier 2:
   ------------------------------------------------------------
   Rx Mbps               =          0.0  (0.0)
   Rx Packets/Sec        =          0.0  (0.0)
   Tx trust packets/sec  =          0.0  (0.0)
   Utilization           =          0.0% (0.0%)
   Ratio to best effort  =          0.0% (0.0%)
   Ratio to next tier    =          0.0% (0.0%)
   ------------------------------------------------------------
   Tier 3:
   ------------------------------------------------------------
   Rx Mbps               =          0.0  (0.0)
   Rx Packets/Sec        =          0.0  (0.0)
   Rx Trigger match      =          0.0  (0.0)
   Rx Reroute            =          0.0  (0.0)
   Rx TCP sequence       =          0.0  (0.0)
   Tx trust packets/sec  =          0.0  (0.0)
   Utilization           =          0.0% (0.0%)
   Ratio to best effort  =          0.0% (0.0%)
   Ratio to next tier    =          0.0% (0.0%)
```

show quarantine-list

Syntax

```
show quarantine-list
```

Example

```
NGFW{}show quarantine-list
IP     Reason
```

show reports

Show the status of the data collection for reports.

Syntax

```
show reports
```

Example

```
NGFW{}show reports
CPU Utilization:     enabled
Disk Utilization:    enabled
Fan Speed:           enabled
Memory Utilization:  enabled
Network Bandwidth:   enabled
Rate Limiter:        enabled
Temperature:         enabled
Traffic Profile:     enabled
VPN:                 enabled
```

show service

Shows the state of all the services.

Syntax

```
show service
```

Example

```
NGFW{}show service
   Service  SSH             is active
   Service  TELNET          is inactive
   Service  HTTP            is active
   Service  IP Forwarding   is active
   Service  IPv6 Forwarding is active
   Service  SNMP            is inactive
   Service  DNS-PROXY       is inactive
   Service  RIP             is inactive
   Service  RIPng           is inactive
   Service  OSPFv2          is inactive
   Service  OSPFv3          is inactive
   Service  BGP             is inactive
   Service  SMR             is inactive
   Service  PIM4SM          is inactive
   Service  PIM6SM          is inactive
   Service  VRRP            is inactive
   Service  Multicast-proxy is inactive
   Service  DHCPSERVER      is inactive
   Service  DHCP            is inactive
   Service  DHCP RELAY      is inactive
   Service  DHCPv6-CLIENT   is inactive
```

```
   Service  NTP             is inactive
   Service  PPP-CtrlPlane   is inactive
   Service  ETHGRP-LACP     is inactive
```

show sms

Syntax

```
show sms
```

Example

```
NGFW{}show sms
Device is not under SMS control
```

show snmp

Syntax

```
show snmp
```

Example

```
NGFW{}show snmp
   #SNMP Status
   Enabled           : Yes
   Version           : 2c, 3
   Engine ID         : 0x800029ee030010f327fe2e
   Auth. Traps       : Yes
   System Name       : S8020F
   System Object ID  : .1.3.6.1.4.1.10734.1.9.7
   System ID         : NGFW
   System Contact    : Administrator
   System Location   : Data Center

   #SNMP Trap Sessions
   Host              : A.B.C.D
   Version           : 3
   Port              : 162
   Security Name     : trap
   Level             : authPriv
   Authentication    : SHA
   Privacy           : AES
   Inform            : Yes
```

show system buffers

Shows forwarding buffer state information, if you have administrator privileges.

Syntax

```
show system buffers
```

Example

```
NGFW{}show system buffers
```

show system connections

Syntax

```
show system connection [ipv4|ipv6|sctp|unix]
```

Example

```
NGFW{}show system connections ipv4
   Active Internet connections (servers and established)
   vrfid Proto Recv-Q Send-Q Local Address           Foreign Address         State
       0 tcp        0      0 127.0.0.1:60000         0.0.0.0:*               LISTEN
       0 tcp        0      0 127.0.0.1:616           0.0.0.0:*               LISTEN
```

Example

```
NGFW{}show system connections unix
   Active UNIX domain sockets (servers and established)
   Proto RefCnt Flags       Type       State         I-Node Path
   unix  2      [ ACC ]     STREAM     LISTENING     40709
   /var/tmp/apache2/logs/fcgidsock/7095.0
   unix  2      [ ACC ]     STREAM     LISTENING     3871   /var/tmp/segmentdsock
   unix  2      [ ACC ]     STREAM     LISTENING     2080   /var/run/nscd/socket
   unix  2      [ ACC ]     STREAM     LISTENING     379    @/com/ubuntu/upstart
   unix  2      [ ACC ]     STREAM     LISTENING     16968  /var/run/.xms.default
   unix  2      [ ]         DGRAM                    16970  /tmp/.server.sockname
   unix  2      [ ]         DGRAM                    17575  @/tmp/.has_xmsd
   unix  2      [ ACC ]     STREAM     LISTENING     1436
   /usr/local/var/syslog-ng.ctl
```

Example

```
NGFW{}show system connections sctp
ASSOC     SOCK   STY SST ST HBKT ASSOC-ID TX_QUEUE RX_QUEUE UID INODE LPORT RPORT
LADDRS <-> RADDRS HBINT INS OUTS MAXRT T1X T2X RTXC VRF
```

show system processes

Syntax

```
show system processes [LEVEL]
brief       Brief process information
detail      Detailed process information
extensive   Extensive process information
summary     Active process information
```

Example

```
NGFW{}show system processes brief
   top - 02:23:22 up  5:08,  2 users,  load average: 16.20, 16.23, 16.16
   Tasks: 349 total,   6 running, 343 sleeping,   0 stopped,   0 zombie
   Cpu(s): 37.8% us,  2.4% sy,  0.0% ni, 52.8% id,  0.0% wa,  0.0% hi,  6.9% si
   Mem:  28681276k total, 10367048k used, 18314228k free,   100416k buffers
   Swap:        0k total,        0k used,        0k free,  1638220k cached

   PID USER      PR  NI  VIRT  RES  SHR S %CPU %MEM    TIME+  COMMAND
    3656 root      20   0 11.1g 4.6g 3.7g R 1200 16.7   3691:24 n0
    3731 root      20   0     0    0    0 R  100  0.0 307:25.33 dpvi-task3
    3730 root      20   0     0    0    0 R   98  0.0 303:42.33 dpvi-task2
    3729 root      20   0     0    0    0 R   96  0.0 300:14.52 dpvi-task1
    2941 root      20   0 84516 3976 2852 R    2  0.0   4:18.44 syslog-ng
    4436 root      20   0     0    0    0 D    2  0.0   1:44.56 fpm-nfct-hf-tas
    4216 root      20   0 21496 1112  772 D    0  0.0   0:21.46 sensormond
   17380 root      20   0 13084 1292  800 R    0  0.0   0:00.01 top
```

show system statistics

Syntax

```
show system statistics [PROTO] [non-zero]
```

Example

```
NGFW{}show system statistics
```

show system usage

Show system usage displays the overall system usage. You can run once, or display an updated version every INT seconds. Ctrl-C will exit a re-occurring update.

Syntax

```
show system usage [update INT]
```

Example

```
NGFW{} show system usage update 12
```

show system virtual-memory

Shows the system's kernel memory usage in a table with the following column headings.

- name
- active_objs
- num_objs
- objsize
- objperslab
- pagesperslab
- tunables
  - limit
  - batchcount
  - sharedfactor
- slabdata
  - active_slabs
  - num_slabs
  - sharedavail

Syntax

```
show system virtual-memory
```

Example

```
NGFW{}show system virtual-memory
```

show system xms memory

Shows xms memory statistics.

Syntax

```
show system xms memory (all| SERVICE)
```

Example

```
NGFW{}show system xms memory captive-portals
   xmsd memory usage:
```

```
+ Service: captive-portals
           + captive-portal-config: 48 Bytes
             Maximum amounts: 175 Bytes
             Calls to alloc : 1 times
+ Service: misc
           + miscellaneous: 1383 Bytes
             Maximum amounts: 1585 Bytes
             Calls to alloc : 10 times
           + xmlMem: 4341373 Bytes
             Maximum amounts: 85010535 Bytes
             Calls to alloc : 53906 times
```

show terminal

Shows terminal type information.

Syntax

```
show terminal
```

Example

```
NGFW{}show terminal
   =============
   Terminal configuration:
   type 6wind
   columns 164
   lines 46
```

show traffic-file

Syntax

```
show traffic-file FILENAME [verbose INT] [proto PROTO] [without PROTO] [pcap FILTER]
[pager]
```

Options

```
   traffic-file   Show network traffic from file
     FILENAME       Capture file name
     verbose        Configure verbosity level
     INT            Verbosity level (0: minimum verbosity)
     proto          Configure captured packets protocol
     PROTO          Protocol name (default: all)
     without        Configure excluded packets protocol
     PROTO          Protocol name (default: all)
     pcap           Configure pcap-syntax filter
     FILTER         Pcap filter string (e.g. "src port 22")
     pager          Show all messages
```

Example

```
NGFW{}show traffic-file myfilename
```

show tse connection-table

Syntax

```
show tse connection-table TYPE
```

Example:

This example displays the basic IPS state synchronization by viewing the connection table on the active and passive device.

```
NGFW{}show tse connection-table blocks
```

Second device:

```
NGFW{}show tse connection-table blocks
```

The 'TRHA' indicates this is a connection created by state synchronization.

show tse

Shows threat suppression engine information.

Syntax

```
show tse (connection-table(blocks|trusts)|rate-limit)
```

Example

```
NGFW{}show tse connection-table blocks
Blocked connections: None found.
NGFW{}show tse rate-limit
```

show user-disk

Syntax

```
show user-disk
```

Example

```
NGFW{}show user-disk
External User Disk
  Status:     Mounted
  Encryption: None
  Capacity:   3952263168 bytes
  Used:       784158720 bytes
  Free:       2907357184 bytes
```

show users

Syntax

```
show users [locked|ip-locked]
```

Example

```
NGFW{}show users
USER             IDLE    INTERFACE  LOGIN                    IP ADDRESS         TYPE
myadminuser      00:00   SSH        2013-07-19 23:42:56      198.51.100.139     LOCAL
```

show version

Syntax

```
show version
```

Example

```
NGFW{}show version
              Serial: X-NGF-S8020F-GENERIC-0001
            Software: 1.0.0.3911 Build Date: "Apr 12 2013 02:13:12" Production
     Digital Vaccine: 3.2.0.15172
               Model: S8020F
           HW Serial: PR2AFQ300P
         HW Revision: A603
```

```
            Failsafe: 1.0.0.1801
  System Boot Time: Sun Sept 15 21:14:57 2013
            Uptime: 05:17:01
```

shutdown

Allows you to shutdown the system.

Syntax

```
shutdown
```

Example

```
NGFW{}shutdown
You are about to shutdown the device.
Please use the front panel buttons to restart the device manually.
Make sure you have Committed all your changes, and clicked the Save
Configuration button if you wish these changes to be applied when the
device is restarted.

WARNING: Are you sure you want to shutdown the system (y/n) [n]:
```

sms

Allows you to configure SMS settings and release SMS.

Syntax

```
sms must-be-ip (A.B.C.D|A.B.C.D/M)
sms unmanage
```

Example

```
NGFW{}sms unmanage
NGFW{}sms must-be-ip 192.168.1.1
```

Related commands

show sms

snapshot create

Allows you to manage system snapshots.

Syntax

```
snapshot create NAME [(reputation|manual|network)]

Default is do not include the following:
manual        Include manually defined reputation entries in snapshot
network       Include Management port configuration in snapshot
reputation    Include reputation package in snapshot
nonet         Does not restore management port configuration if present in snapshot
```

Example

```
NGFW{}snapshot create s_041713
```

snapshot list

Syntax

```
snapshot list
```

Example

```
NGFW{}snapshot list
      Name                  Date            OS Version DV Version  Model  Restore
--------------- ------------------------- ---------- ---------- ------- ------
s_041713           Wednesday, April 17 2013 1.0.0.3913 3.2.0.15172 S1020F   Yes
```

snapshot remove

Syntax

```
snapshot remove
```

Example

```
NGFW{}snapshot remove s_041713
Success
```

snapshot restore

Restore system from saved snapshot.

Syntax

```
snapshot restore NAME
```

Example

```
NGFW{}snapshot restore s_041713
Success
```

tcpdump

Allows you to capture network traffic to the terminal or a file. You can specify a maximum packet count or a maximum capture file size. If you record the capture to a file you must specify a maximum packet count or maximum capture file size. Maxsize is the maximum size of the capture file in millions of bytes, which is limited by the currently available disk allocation.

Syntax

```
tcpdump INTERFACE [record FILENAME [maxsizebytes 1-10000000]] [packetcount
1-10000000] [verbose 0-990000] [proto
(icmp|igmp|tcp|udp|esp|ah|pim|snp|vrrp|stp|isis|sctp)] [without
(icmp|igmp|tcp|udp|esp|ah|pim|snp|vrrp|stp|isis|sctp)] [pcap FILTER] [cponly]
[pager] [background]
tcpdump stop
```

Example

```
NGFW{}tcpdump mgmt count 2
NGFW{}tcpdump bridge0 record mycapturefile count 100 proto tcp without udp pcap "dst
port 443" background

NGFW{}tcpdump6: listening on bridge0, link-type EN10MB (Ethernet), capture size
65535 bytes
100 packets captured
100 packets received by filter
0 packets dropped by kernel

NGFW{}tcpdump stop
All tcpdump processes stopped.
```

traceroute

Traceroute shows you the path a packet of information takes from your computer to your designation. It lists all the routers it passes through until it reaches its destination, or fails. Traceroute tells you how long router to router hops take.

Syntax

```
traceroute (A.B.C.D|HOSTNAME) [from A.B.C.D] [mgmt]
(traceroute|traceroute6) X:X::X:X [from X:X::X:X] [mgmt]
```

Example

```
NGFW{}traceroute 192.168.140.254
traceroute: Warning: ip checksums disabled
traceroute to 192.168.140.254 (192.168.140.254), 30 hops max, 46 byte packets
 1  192.168.140.254 (192.168.140.254)  0.256 ms  0.249 ms  0.233 ms
```

traceroute6

Trace IPv6 network routes.

Example

```
NGFW{}traceroute6 192.168.140.1
```

user-disk

The external user-disk is available to mount, unmount, and format. Only a user-disk that the user manually formats and mounts will be “auto-mounted” by the device at boot. The one exception to this is after an initial install, the external cfast present in the box at the time of install will be “auto-mounted”.

The user-disk can be encrypted, but only if the system **`master-key`** has been set. Changing the encryption status on the user-disk causes a ‘format’ to occur and erases any existing data.

User-disk encryption can also be enabled and disabled from the LSM at **System->Settings->Log Configuration**.

Modify settings for the external user-disk.

Syntax

```
user-disk (encryption (enable|disable) | format | mount | unmount)
```

Example

```
NGFW{}user-disk unmount
WARNING: Unmounting the external user disk will disable snapshot and packet capture,
and traffic related logs will be stored in memory only.
Do you want to continue (y/n)? [n]: y
Success: User disk unmounted.
```

Example

```
NGFW{}user-disk mount
Note: The external user disk will be used for snapshots, packet captures and traffic
related logs. The external user disk will be automatically mounted on rebooted.
Do you want to continue (y/n)? [n]: y
Success: User disk mounted.
```

Example

```
NGFW{}user-disk format
WARNING: This action will erase all existing data on the external user disk!
Do you want to continue (y/n)? [n]: y
Success: User disk format completed.
```

Example

```
NGFW{}user-disk encryption enable
WARNING: Changing the encryption status of the user disk will erase all traffic log,
snapshot, and packet capture data on the disk.
Do you want to continue (y/n)? [n]: y
Success: User disk encryption enabled.
```

Related commands

show user-disk
master-key

4 Log Configure Commands

Enter the **log-configure** command to access the log configuration context. Enter a question mark (?) at the NGFW{log-configure} prompt to display a list of valid command entries. Then enter **help** ***commandname*** to display help for a specific command.

display

Displays log configuration settings.

Syntax

```
display [log-sessions] [xml|verbose]
```

Example

```
NGFW{log-configure}display
# LOG EMAIL SETTINGS
email set sleepSeconds   300
email set maxRequeue     2016

# LOG ROTATE SETTINGS
rotate set sleepSeconds         600
rotate set defaultFiles         5
rotate set defaultCheckRecords  500
rotate set maxFileSize          100 MB

# LOG FILE DISK ALLOCATION
log-storage external 90%
log-storage ramdisk  25%

# LOG FILE ALLOCATION SETTINGS
# INTERNAL DISK
log-file-size system          50%
log-file-size audit           50%
#                            ----
#                     Total 100%

# EXTERNAL DISK (USER-DISK)
log-file-size fwAlert         20%
log-file-size fwBlock         20%
log-file-size ipsAlert        10%
log-file-size ipsBlock        10%
log-file-size reputationAlert  5%
log-file-size reputationBlock  5%
log-file-size visibility      20%
log-file-size quarantine       5%
log-file-size vpn              5%
#                            ----
#                     Total 100%
```

email

Allows you to set logging email daemon parameters.

Syntax

```
email set sleepSeconds SLEEPSEC
email set maxRequeue MAXREQUEUE
```

```
email set queueFile QUEUEFILE
email set deadletter DEADLETTER
email delete (sleepSeconds|maxRequeue|queueFile|deadletter)
```

Example

```
NGFW{log-configure}email set sleepSeconds 600
NGFW{log-configure}email delete sleepSeconds
NGFW{log-configure}email set maxRequeue 1
NGFW{log-configure}email delete maxRequeue
NGFW{log-configure}email set queueFile myqueuefile
NGFW{log-configure}email delete queueFile
NGFW{log-configure}email set deadletter mydeadletterfile
NGFW{log-configure}email delete deadletter
```

log-file-size

Set log file allocation as a percentage of the total 100 percent allowed for all log files.

```
# LOG FILE ALLOCATION SETTINGS
# INTERNAL DISK
log-file-size system          50%
log-file-size audit           50%
#                            ----
#                     Total 100%
```

Syntax

```
log-file-size FILE_NAME USAGE[%]
log-file-size
(audit|fwAlert|fwBlock|ipsAlert|ipsBlock|quarantine|reputationAlert|reputationBlock|
system|visibility|vpn) USAGE[%]
system and audit log files are kept on the internal disk
fwAlert, fwBlock, ipsAlert, ipsBlock, quarantine, reputationAlert, reputationBlock,
visibility, and vpn log files are kept on the external or ramdisk drive
```

Example

```
NGFW{log-configure}log-file-size system 50
NGFW{log-configure}log-file-size fwAlert 20
NGFW{log-configure}log-file-size audit 60
ERROR: This would over allocate (110%) the Internal log disk!
```

log-storage

Set local log file allocation of external CFast disk space. Usage value can range from 50 to 99 percent.

Syntax

```
log-storage external USAGE[%]
log-storage ramdisk USAGE[%]
```

Example

```
NGFW{log-configure}log-storage external 90
```

log-test

Sends a test message to the logging system(s).

Syntax

```
log-test (all|audit|vpn|quarantine|logID LOGID) [emergency [MESSAGE]]
log-test (all|audit|vpn|quarantine|logID LOGID) [alert [MESSAGE]]
```

```
log-test (all|audit|vpn|quarantine|logID LOGID) [critical [MESSAGE]]
log-test (all|audit|vpn|quarantine|logID LOGID) [error [MESSAGE]]
log-test (all|audit|vpn|quarantine|logID LOGID) [warning [MESSAGE]]
log-test (all|audit|vpn|quarantine|logID LOGID) [notice [MESSAGE]]
log-test (all|audit|vpn|quarantine|logID LOGID) [info [MESSAGE]]
log-test (all|audit|vpn|quarantine|logID LOGID) [debug [MESSAGE]]
log-test (all|audit|vpn|quarantine|logID LOGID) [msg MESSAGE]

Valid entries:
all         All log systems
audit       Audit system
vpn         VPN (IPsec) system
quarantine  Quarantine system
logID       LogID system
LOGID       Log-session ID to test
SEVERITY    Set Severity level for log message (default: INFO)
Possible values for SEVERITY are:
   emergency   EMERG level
   alert       ALERT level
   critical    CRIT level
   error       ERR level
   warning     WARNING level
   notice      NOTICE level
   info        INFO level (default)
   debug       DEBUG level
msg         Override default message
MESSAGE     Message to send to logging system
```

Example

```
NGFW{log-configure}log-test logID 1 msg "my test message for logging"
NGFW{log-configure}log-test all
```

rotate

Sets log rotation parameters.

Syntax

```
rotate (set|delete) defaultCheckRecords (100-65535)
rotate (set|delete) defaultFiles (2-20)
rotate (set|delete) maxFileSize (10-500MB)
rotate (set|delete) sleepSeconds (1-65535)
rotate (set|delete) audit [Files (2-20)] [Records (100-65535)]
rotate (set|delete) fwAlert [Files (2-20)] [Records (100-65535)]
rotate (set|delete) fwBlock [Files (2-20)] [Records (100-65535)]
rotate (set|delete) ipsAlert [Files (2-20)] [Records (100-65535)]
rotate (set|delete) ipsBlock [Files (2-20)] [Records (100-65535)]
rotate (set|delete) quarantine [Files (2-20)] [Records (100-65535)]
rotate (set|delete) reputationAlert [Files (2-20)] [Records (100-65535)]
rotate (set|delete) reputationBlock [Files (2-20)] [Records (100-65535)]
rotate (set|delete) system [Files (2-20)] [Records (100-65535)]
rotate (set|delete) visibility [Files (2-20)] [Records (100-65535)]
rotate (set|delete) vpn [Files (2-20)] [Records (100-65535)]

sleepSeconds          Logrotation sleep time between checks
SLEEPSEC              Number of seconds logrotation waits between checks
defaultFiles          Default number of logrotation files
NUMFILES              Number of logrotation files (2 - 20)
defaultCheckRecords   Default number of records between log daemon size checks
NUMRECORDS            Number of records between log daemon size checks (100 - 65535)
```

```
maxFileSize           Max size a 'rotated' log file
MAXFILESIZE           Max log rotation file size in MB (10 - 500)
MB                    Megabytes
FILE_NAME             Local log file name
Files                 Number of logrotation files
Records               Number of records between log daemon size checks
delete                Delete the logrotation parameter
```

Example

```
NGFW{log-configure}rotate set sleepSeconds 10
NGFW{log-configure}rotate set visibility Files 5 Records 500
NGFW{log-configure}rotate set vpn Files 5 Records 500
NGFW{log-configure}rotate delete vpn Records
NGFW{log-configure}rotate delete vpn Files
NGFW{log-configure}rotate delete visibility
NGFW{log-configure}rotate set defaultCheckRecords 500
NGFW{log-configure}rotate set defaultFiles 5
```

5 Edit Running Configuration Commands

Enter the **edit** command to access the configuration mode. In edit mode, you can perform numerous configurations, such as firewall rules and policies, and authentication. Once you have executed the **edit** command the CLI prompt will appear as `NGFW{running}`. Configuration options, and sub contexts are available until you exit. To exit the edit configuration mode, enter **exit**.

The configuration mode enables administrators with the appropriate credentials to write configuration changes to the active (running) configuration. The logon account used to configure the device must either be associated with the Superuser role or the Administrator role to edit the configuration context. The configuration mode has different context levels that provide access to a specific set of configuration commands.

Configuration Contexts by Function

Monitor/System

Table 5-1 Monitor and System Commands

running-blockedStreams Context Commands	`NGFW{running}blockedStreams`
running-cluster Context Commands running-cluster-tct Context Commands	`NGFW{running}cluster` `NGFW{running-cluster}tct`
running-dns Context Commands	`NGFW{running}dns`
running-gen Context Commands	`NGFW{running}gen`
running-high-availability Context Commands	`NGFW{running}high-availability`
running-log Context Commands	`NGFW{running}log`
running-mgmt Context Commands	`NGFW{running}interface mgmt`
running-ntp Context Commands	`NGFW{running}ntp`
running-snmp Context Commands	`NGFW{running}snmp`

Network

Table 5-2 Network Commands

running-agglinkX Context Commands	`NGFW{running}interface agglink0`
running-bridgeX Context Commands	`NGFW{running}interface bridge0`
running-greX Context Commands	`NGFW{running}interface gre0`
running-l2tp-serverX Context Commands	`NGFW{running}l2tp-server0`
running-l2tpX Context Commands	`NGFW{running}interface l2tp0`
running-loopbackX Context Commands	`NGFW{running}interface loopback0`
running-pppoeX Context Commands	`NGFW{running}interface pppoe0`
running-pptpX Context Commands	`NGFW{running}interface pptp0`
running-vlanX Context Commands	`NGFW{running}interface vlan0`
running-ethernetX Context Commands	`NGFW{running}interface ethernet1`
running-segmentX Context Commands	`NGFW{running}segment0`

Table 5-2 Network Commands

running-dhcp-relay Context Commands	`NGFW{running}dhcp relay`
running-dhcp-server Context Commands	`NGFW{running}dhcp server`
running-dhcp-server-X Context Commands	`NGFW{running-dhcp-server}scope myscope`

Policy

Table 5-3 Policy Commands

(**immediate commit context**) running-actionsets Context Commands running-actionsets-X Context Commands	`NGFW{running}actionsets` `NGFW{running-actionsets}actionset myactionset1`
running-addressgroups Context Commands running-addressgroups-X Context Commands	`NGFW{running}addressgroups` `NGFW{running-addressgroups}addressgroup myaddressgroups`
(**immediate commit context**) running-app-filter-mgmt Context Commands	`NGFW{running}application-filter-mgmt`
(**immediate commit context**) running-app-groups Context Commands running-app-groups-X Context Commands	`NGFW{running}application-groups` `NGFW{running-app-groups}application-group FaceBook`

(**immediate commit context**)
running-autodv Context Commands
running-autodv-calendar Context Commands
running-autodv-periodic Context Commands
	`NGFW{running}autodv`
	`NGFW{running-autodv}calendar`
	`NGFW{running-autodv}periodic`

running-captive-portal Context Commands running-captive-portal-rule-X Context Commands	`NGFW{running}captive-portal` `NGFW{running-captive-portal}rule 20000`
running-dnat Context Commands running-dnat-rule-X Context Commands	`NGFW{running}dst-nat` `NGFW{running-dnat}rule 1`
running-firewall Context Commands running-firewall-rule-X Context Commands	`NGFW{running}firewall` `NGFW{running-firewall}rule myrule1`
running-global-inspection Context Commands	`NGFW{running}global-inspection`
(**immediate commit context**) running-ips Context Commands running-ips-X Context Commands	`NGFW{running}ips` `NGFW{running-ips}profile 1`
(**immediate commit context**) running-notifycontacts (email) Context Commands running-notifycontacts-X (SNMP) Context Commands	`NGFW{running-notifycontacts}contact mycontact1 email` `NGFW{running-notifycontacts}contact mycontact1 snmp secret 192.168.1.1`

(**immediate commit context**)
running-rep Context Commands
running-rep-X (group X) Context Commands
running-rep-X (profile X) Context Commands
	`NGFW{running}rep`
	`NGFW{running-rep}group 1`
	`NGFW{running-rep}profile abc`

running-schedules Context Commands running-schedules-X Context Commands	`NGFW{running}schedules` `NGFW{running-schedules}schedule myhours1`
running-services Context Commands running-services-X Context Commands	`NGFW{running}services` `NGFW{running-services}service myservice1`

Table 5-3 Policy Commands

running-snat Context Commands running-snat-rule-X Context Commands	NGFW{running}src-nat NGFW{running-snat}rule snat1
running-zones Context Commands running-zones-X Context Commands	NGFW{running}zones NGFW{running-zones}zone myzone1

Authentication

Table 5-4 Authentication Commands

running-aaa Context Commands running-aaa-ldap-group-X Context Commands running-aaa-radius-group-X Context Commands	NGFW{running-aaa} NGFW{running-aaa}ldap-group mygroup NGFW{running-aaa}radius-group mygroup
running-certificates Context Commands running-certificates-crl Context Commands	NGFW{running}certificates NGFW{running-certificates}crl

Routing

Table 5-5 Routing Commands

running-bgp-X Context Commands	NGFW{running}router bgp 1
running-multicast-registration Context Commands	NGFW{running}multicast-registration
running-ospf Context Commands	NGFW{running}router ospf
running-ospfv3 Context Commands	NGFW{running}router ospfv3
running-pim-smv4 Context Commands	NGFW{running}router pim-smv4
running-pim-smv6 Context Commands	NGFW{running}router pim-smv6
running-rip Context Commands	NGFW{running}router rip
running-ripng Context Commands	NGFW{running}router ripng
running-route-map Context Commands	NGFW{running}route-map mymap permit 10
running-smr Context Commands	NGFW{running}router smr

VPN

Table 5-6 VPN Commands

running-ipsec Context Commands	NGFW{running}vpn ipsec
running-manual-sa Context Commands	NGFW{running}vpn ipsec NGFW{running-ipsec}manual

Edit Context Commands

aaa

Enter Authentication and Authorization and Auditing context mode.

Syntax

```
aaa
```

Example

```
NGFW{}edit
NGFW{running}aaa
NGFW{running-aaa}help

NGFW{running-aaa}display user fred xml
<?xml version="1.0"?>
<record>
  <index>
    <user>fred</user>
  </index>
  <parameters>
    <password>$password$</password>
    <epoch>1373049840</epoch>
  </parameters>
</record>
NGFW{running-aaa}exit
```

Related commands

running-aaa Context Commands

actionsets

Enters action sets context mode. Changes are committed and take effect immediately.

Syntax

```
actionsets
```

Example

```
NGFW{}edit
NGFW{running}actionsets
NGFW{running-actionsets}help
```

Example

```
NGFW{running-actionsets}actionset myactionset
NGFW{running-actionsets-myactionset}help
NGFW{running-actionsets-myactionset}?
Valid entries at this position are:
action              Set action type, available value: permit, rate-limit, block, trust
allow-access        Allow quarantined host to access defined IP
bytes-to-capture    Set bytes to capture for packet trace
contact             Add a notify contact
delete              Delete file or configuration item
display             Display file or configuration item
help                Display help information
http-block          Set quarantine option to block HTTP traffic
http-custom         Set or clear HTTP custom text display option
http-redirect       Set redirect URL for HTTP redirect option
http-showdesc       Set or clear HTTP show desc display option
http-showname       Set or clear HTTP show name display option
limit-quarantine    Add IP for limit quarantine
limit-rate          Set the rate value for rate-limit action
no-quarantine       Add IP for no quarantine
nonhttp-block       Set quarantine option to block non-HTTP traffic
packet-trace        Enable/disable packet trace option
priority            Set packet trace priority
quarantine          Set quarantine option, available value: no, immediate, threshold
tcp-reset           Set tcp reset option for block action, can be disable, source,
                    dest or both
```

```
threshold          Set quarantine threshold value
verbosity          Set packet trace verbosity
```

Related commands

running-actionsets Context Commands

addressgroups

Enters address group context.

Syntax

```
addressgroups
```

Example

```
NGFW{running}addressgroups
NGFW{running-addressgroups}help
NGFW{running-addressgroups}?
Valid entries at this position are:
addressgroup              Create or enter an address group context
delete                    Delete address group parameters
help                      Display help information
rename                    Rename address group
```

Related commands

running-addressgroups Context Commands

application-filter-mgmt

Enters application filter management context.

Syntax

```
application-filter-mgmt
```

Example

```
NGFW{}edit
NGFW{running}application-filter-mgmt
Entering Immediate Commit Feature. Changes take effect immediately.
NGFW{running-app-filter-mgmt}help
Valid commands are:
  display
  filter FILTERNUMBER SYS_ENABLE_OR_DISABLE
  filter FILTERNUMBER afcstate AFC_ENABLE_OR_DISABLE
  filter FILTERNUMBER SYS_ENABLE_OR_DISABLE afcstate AFC_ENABLE_OR_DISABLE
  help [full|COMMAND]
```

Related commands

running-app-filter-mgmt Context Commands

application-groups

Enters the application-group context mode. Application groups can be associated with firewall rules and can only be defined by the LSM not the CLI. There are CLI commands that are similar in syntax to security categories, but the criteria parameter is deliberately obfuscated. Also, like security categories, application group queries are not editable from the CLI.

NOTE: Attempting to create an application group from the CLI will result in an error while parsing the CRITERIASTRING parameter.

The CRITERIASTRING format is deliberately obfuscated and not supported to prevent users from creating or editing application group criteria from the CLI. Support for setting and getting criteria through the obfuscated format is included so that users can still copy output of CLI display commands and paste them back in.

Syntax

```
application-groups
```

Example

```
NGFW{running}application-groups
Entering Immediate Commit Feature. Changes take effect immediately.
NGFW{running-app-groups}help
Valid commands are:
  application-group NEWAPPNAME CRITERIASTRING
  application-group APPNAME
  delete application-group APPNAME
  display
  help [full|COMMAND]
  rename application-group APPNAME NEWAPPNAME
```

Related commands

running-app-groups Context Commands

application-visibility

Enables or Disables application visibility.

Syntax

```
application-visibility (enable|disable)
```

Example

```
NGFW{running}application-visibility ?
Valid entries at this position are:
  disable   Disable application visibility
  enable    Enable application visibility
```

autodv

Enters auto digital vaccine context mode.

Syntax

```
autodv
```

Example

```
NGFW{running}autodv
Entering Immediate Commit Feature. Changes take effect immediately.
NGFW{running-autodv}help
Valid commands are:
  calendar
  delete proxy
  delete proxy-password
  delete proxy-username
  disable
```

```
  display
  enable
  help [full|COMMAND]
  list
  periodic
  proxy ADDR port PORT
  proxy-password PASSWD
  proxy-username USER
  update

NGFW{running-autodv}?
Valid entries at this position are:
  calendar                  Enter Calender Style
  delete                    Delete file or configuration item
  disable                   Disable service
  display                   Display file or configuration item
  enable                    Enable service
  help                      Display help information
  list                      List Installed DVs
  periodic                  Enter Periodic Style
  proxy                     Configure proxy
  proxy-password            Proxy password
  proxy-username            Proxy username
  update                    Update AutoDV
```

Related commands

running-autodv Context Commands

blockedStreams

Enters blockedStreams context mode.

Syntax

```
blockedStreams
```

Example

```
NGFW{running}blockedStreams
NGFW{running-blockedStreams}help
Valid commands are:
  flushallstreams
  flushstreams
  help [full|COMMAND]
  list
```

Related command

running-blockedStreams Context Commands

captive-portal

Enters captive portal context mode.

Syntax

```
captive-portal
```

Example

```
NGFW{running}captive-portal
NGFW{running-captive-portal}help
Valid commands are:
```

```
  delete rule all|RULEID
  help [full|COMMAND]
  rename rule RULEID NEWRULEID
  rule (auto|RULEID) [POSITION_VALUE]
  set max-session-time MINUTES
  set inactive-timeout MINUTES
  set port PORT
  set certificate CERTNAME
  set login-page|status-page foreground-color|background-color HEX|COLOR
  set login-page header-HTML|footer-HTML|failed-HTML
  set status-page foreground-color|background-color HEX|COLOR
  set status-page main-HTML
  reset max-session-time|inactive-timeout|port|certificate
  reset login-page|status-page foreground-color|background-color
  reset login-page header-HTML|footer-HTML|failed-HTML
  reset status-page main-HTML
```

Related commands

running-captive-portal Context Commands

certificates

Enters certificates context mode.

Syntax

```
certificates
```

Example

```
NGFW{running}certificates
NGFW{running-certificates}help
Valid commands are:
  # Enter context
  crl

  # Other commands
  ca-certificate CANAME
  cert-request CERTREQUEST [key-size SIZE]
  certificate CERTNAME
  delete ca-certificate (all|CANAME)
  delete cert-request (all|CERTREQUEST)
  delete certificate (all|CERTNAME)
  display ca-certificate CANAME [pem|text]
  display cert-request CERTNAME
  display certificate CERTNAME [pem|text]
  display private-key CERTNAME
  help [full|COMMAND]
  private-key CERTNAME
```

Related commands

running-certificates Context Commands

cluster

Enters cluster context mode.

Syntax

```
cluster
```

Example

```
NGFW{running}cluster
NGFW{running-cluster}help
Valid commands are:
  check CHECK_TYPE enable|disable
  cluster-name NAME
  delete standby
  enable|disable
  help [full|COMMAND]
  member-id ID
  member-name NAME
  standby
  tct

NGFW{running-cluster}?
Valid entries at this position are:
  check                     Perform consistency check
  cluster-name              Apply Cluster Name
  delete                    Delete file or configuration item
  disable                   Disable clustering
  enable                    Enable clustering
  help                      Display help information
  member-id                 Cluster Member ID
  member-name               Cluster member name
  standby                   Set the device on standby
  tct                       Enter cluster traffic context
```

Related commands

running-cluster Context Commands

delete

Deletes file or configuration item.

Syntax

```
delete SEGNAME
delete interface agglinkX
delete interface bridgeX
delete interface greX
delete interface l2tpX
delete interface loopbackX
delete interface pppoeX
delete interface pptpX
delete interface vlanX
delete interface vrrpvXgY
delete ip access-list NAME (permit|deny) A.B.C.D/M
delete ip prefix-list NAME (permit|deny) A.B.C.D/M [ge GE-VALUE] [le LE-VALUE]
delete ipv6 access-list NAME (permit|deny) X.X.X.X/M
delete l2tp-serverX
delete route-map ROUTE-MAP-NAME
delete route-map ROUTE-MAP-NAME permit|deny ENTRY-POSITION
delete router bgp
delete router ospf
delete router ospfv3
delete router pim-smv6
delete router rip
delete router ripng
delete router smr
```

Example

```
NGFW{running}delete segment78
NGFW{running}delete interface agglink0
NGFW{running}delete interface bridge0
NGFW{running}delete interface gre0
NGFW{running}delete interface l2tp0
NGFW{running}delete interface loopback0
NGFW{running}delete interface pppoe0
NGFW{running}delete interface pptp0
NGFW{running}delete interface vlan0
NGFW{running}delete ip access-list myaccesslist permit 0.0.0.0/0
NGFW{running}delete ip prefix-list myprefixlist permit 192.168.0.0/16 ge 24 le 24
NGFW{running}delete ipv6 access-list myipv6accesslist permit 100:0:0:0:0:0:0:0/64
NGFW{running}delete l2tp-server0
NGFW{running}delete route-map myroutemap
NGFW{running}delete route-map myroutemap permit 1
NGFW{running}delete router bgp
NGFW{running}delete router ospf
NGFW{running}delete router ospfv3
NGFW{running}delete router pim-smv6
NGFW{running}delete router rip
NGFW{running}delete router ripng
NGFW{running}delete router smr
```

dhcp

Enters DHCP context mode.

Syntax

```
dhcp relay
dhcp server
```

Example

```
NGFW{running}dhcp
Valid entries at this position are:
  relay    Enter DHCP relay context
  server   Server
```

Related commands

running-dhcp-relay Context Commands

running-dhcp-server Context Commands

dns

Enters DNS context mode.

Syntax

```
dns
```

Example

```
NGFW{running}dns
NGFW{running-dns}help
Valid commands are:
  delete domain-name
  delete name-server all|A.B.C.D|X:X::X:X
  delete proxy cache cleaning interval
  delete proxy cache forwarder all|A.B.C.D|X:X::X:X
```

```
  delete proxy cache maximum negative ttl
  delete proxy cache maximum ttl
  delete proxy cache size
  domain-name NAME
  domain-search primary NAME
  help [full|COMMAND]
  name-server A.B.C.D|X:X::X:X
  proxy cache cleaning interval cache cleaning interval in minutes
  proxy cache forwarder A.B.C.D|X:X::X:X
  proxy cache maximum negative ttl cache maximum negative TTL in minutes
  proxy cache maximum ttl cache maximum TTL in minutes
  proxy cache size cache size in megabytes
  proxy enable|disable

NGFW{running-dns}?
Valid entries at this position are:
  delete                    Delete file or configuration item
  domain-name               Configure domain name
  domain-search             Configure domain search
  help                      Display help information
  name-server               Configure DNS server
  proxy                     Configure proxy
  proxy                     Enable or disable proxy
```

Related commands

running-dns Context Commands

dst-nat

Enters destination NAT context mode.

Syntax

```
dst-nat
```

Example

```
NGFW{running}dst-nat
NGFW{running-dnat}help
Valid commands are:
  delete rule all|DSTNATRULEID
  help [full|COMMAND]
  rule (auto|DSTNATRULEID) [POSITION_VALUE]

NGFW{running-dnat}?
Valid entries at this position are:
  delete                    Delete destination NAT rule(s)
  help                      Display help information
  rename                    Rename destination NAT rule
  rule                      Create or enter a rule context
```

Related commands

running-dnat Context Commands

firewall

Enters firewall context mode.

Syntax

```
firewall
```

Example

```
NGFW{running}firewall
NGFW{running-firewall}help
Valid commands are:
  default-block-rule DEFACTIONSET
  delete rule all|XRULEID
  help [full|COMMAND]
  rename rule XRULEID NEWRULEID
  rule (auto|RULEID) [POSITION_VALUE]

NGFW{running-firewall}?
Valid entries at this position are:
  default-block-rule        Apply action set for default block rule
  delete                    Delete firewall rule
  help                      Display help information
  rename                    Rename a firewall rule
  rule                      Create or enter a rule context
```

Related commands

running-firewall Context Commands

gen

Enters general context mode.

Usage

```
gen
```

Example

```
NGFW{running}gen
NGFW{running-gen}help
Valid commands are:
# System commands
timezone (GMT|(REGION CITY))

# Manage context
display [xml]

# Other commands
arp A.B.C.D INTERFACE MAC
auto-restart enable|disable
delete arp all|(ENTRY INTERFACE)
delete host NAME|all
delete ndp all|(ENTRY INTERFACE)
ephemeral-port-range default|(LOWRANGE HIGHRANGE)
forwarding ipv4|ipv6 enable|disable
help [full|COMMAND]
host NAME A.B.C.D|X:X::X:X
https enable|disable
inband-management enable|disable
management-service all|dns|email|ldap|ntp|radius|remote-syslog|snmp management
                   |network
ndp X:X::X:X INTERFACE MAC
ssh enable|disable
xmsd remote (port PORT [address A.B.C.D])|disable

NGFW{running-gen}?
Valid entries at this position are:
```

```
arp                    Configure static ARP entry
auto-restart           Enable/disable automatic restart on detection of critical
                       problem
delete                 Delete file or configuration item
display                Display general context
ephemeral-port-range   Set the range of the ephemeral port (default is 32768-61000)
forwarding             Enable or disable IPv4/IPv6 forwarding
help                   Display help information
host                   Configure static address to host name association
https                  Enable or disable WEB server configuration
inband-management      Inband Management
management-service     Management of a service to use management port or network port
ndp                    Configure static NDP entry
ssh                    Enable or disable ssh service
timezone               Display or configure time zone
```

Related commands

running-gen Context Commands

global-inspection

Enters global-inspection context mode.

Syntax

```
global-inspection
```

Example

```
NGFW{running}global-inspection
NGFW{running-global-inspection}help
Valid commands are:
default-inspection (ips-profile IPSPROFILE|none)|(reputation-profile
                   REPPROFILE|none)
unknown-app (ips-profile IPSPROFILE|none)|(reputation-profile REPPROFILE|none)
display [xml]
help [full|COMMAND]

NGFW{running-global-inspection}?
Valid entries at this position are:
default-inspection     Apply default inspection profile
display                Display global inspection profile configuration
help                   Display help information
unknown-app            Apply inspection profile during application detection phase
```

Related commands

running-global-inspection Context Commands

high-availability

Enters high-availability context mode.

Syntax

```
high-availability
```

Examples

```
NGFW{running}high-availability
NGFW{running-high-availability}help
Valid commands are:
delete failover-group base-mac
```

```
delete failover-group name
enable|disable
failover-group base-mac X:X:X:X:X:X
failover-group name NAME
help [full|COMMAND]
state-sync (global [enable|disable])|(FEATURE [enable|disable|(log-level SEVERITY)])

NGFW{running-high-availability}?
Valid entries at this position are:
delete              Delete file or configuration item
disable             Disable high-availability
enable              Enable high-availability
failover-group      Failover Group
help                Display help information
state-sync          State synchronization

NGFW{running-high-availability}help state-sync
Enable or disable high-availability (enable|disable)
Syntax: state-sync  (global [enable|disable])|(FEATURE [enable|disable|(log-level
                    SEVERITY)])
  state-sync   State synchronization
  global       Turn state synchronization on or off
  enable       Enable state synchronization
  disable      Disable state synchronization
  FEATURE      Specify a state synchronization table
    Possible values for FEATURE are:
    firewall     Firewall state synchronization table
    ips          IPS state synchronization table
    routing      Routing state synchronization table
  log-level    Specify logging level
  SEVERITY     Log service severity
    Possible values for SEVERITY are:
    emergency    Panic condition messages
    alert        Immediate problem condition messages
    critical     Critical condition messages
    error        Error messages
    warning      Warning messages
    notice       Special condition messages
    info         Informational messages
    debug        Debug messages
    none         Turn off messages

NGFW{running-high-availability}state-sync ?
Valid entries at this position are:
  firewall   Firewall state synchronization table
  ips        IPS state synchronization table
  routing    Routing state synchronization table
  global     Turn state synchronization on or off
```

Related commands

running-high-availability Context Commands

interface

Enters interface context mode. The X represents a number to be entered, such as bridge2.

Syntax

```
# Enter context
interface agglinkX
```

```
interface bridgeX
interface ethernetX
interface greX
interface l2tpX
interface loopbackX
interface mgmt
interface pppoeX
interface pptpX
interface vlanX
```

Example

```
NGFW{running}interface bridge2
NGFW{running-bridge2}?
Valid entries at this position are:
arp/ndp                    Enable or disable ARP and NDP on interface
autoconfv6                 Enable or disable IPv6 autoconfiguration on interface
bind                       Bind bridged network interface over ethernet/VLAN/agglink
delete                     Delete file or configuration item
description                Enter description for the interface
help                       Display help information
ip                         Configure IP settings
ipaddress                  Configure IP address
ipv6                       Configure IPv6 settings
mtu                        Configure interface MTU
prefix                     Configure IPv6 prefix
ra-autoconf-level          Modify IPv6 Router Advertisement autoconfiguration level
ra-interval                Modify IPv6 Router Advertisement interval value
ra-interval-transmit       Modify IPv6 Router Advertisement interval transmit
ra-lifetime                Modify IPv6 Router Advertisement prefix lifetime
ra-mtu                     Modify IPv6 Router Advertisement MTU value
ra-transmit-mode           Modify IPv6 Router Advertisement transmit mode
router-advert              Configure IPv6 Router Advertisement parameters
shutdown                   Shutdown logical interface state
tcp4mss                    Configure interface TCP MSS for IPv4
tcp6mss                    Configure interface TCP MSS for IPv6

NGFW{running-bridge2}help
```

Related commands

running-agglinkX Context Commands

running-bridgeX Context Commands

running-ethernetX Context Commands

running-greX Context Commands

running-l2tpX Context Commands

running-loopbackX Context Commands

running-mgmt Context Commands

running-pppoeX Context Commands

running-pptpX Context Commands

running-vlanX Context Commands

ip

IP configuration mode.

Syntax

```
ip access-list NAME (permit|deny) A.B.C.D/M
ip as-path access-list NAME (permit|deny) ASN_FILTER
delete ip as-path access-list NAME (permit|deny) ASN_FILTER
ip community-list NAME (permit|deny)
                       ((AA:NN)|internet|local-as|no-advertise|no-export)
delete ip community-list NAME (permit|deny)
                       ((AA:NN)|internet|local-as|no-advertise|no-export)
ip prefix-list NAME (permit|deny) A.B.C.D/M [ge GE-VALUE] [le LE-VALUE]
ip route A.B.C.D/M A.B.C.D|INTERFACE [DISTANCE]
ipv6 route X:X::X:X/M (X:X::X:X[%INTERFACE])|INTERFACE [DISTANCE]
display ip route
```

```
Valid entries:
access-list      Access list
as-path          AS Path access list
community-list   Community list
prefix-list      Prefix list
route            Add an IPv4 static route
```

Example

```
NGFW{running}ip access-list myaccesslist permit 0.0.0.0/0
NGFW{running}ip as-path access-list myasnaccesslist permit ^64496$
NGFW{running}delete ip as-path access-list myasnaccesslist permit ^64496$
NGFW{running}ip community-list mycommunitylist permit 64496:100
NGFW{running}ip community-list mycommunitylist permit internet
NGFW{running}delete ip community-list mycommunitylist permit 64496:100
NGFW{running}ip prefix-list myprefixlist permit 192.168.0.0/16 ge 24 le 24
NGFW{running}ip route 192.168.1.0/24 192.0.2.1 1
NGFW{running}ip route 192.168.1.0/24 ethernet5 1
NGFW{running}display ip route
# IPV4 ROUTES
  ip route 192.168.1.0/24 192.0.2.1 1
  ip route 192.168.1.0/24 ethernet5
```

ips

Enters IPS profile context mode.

Syntax

```
ips
```

Example

```
NGFW{running}ips
Entering Immediate Commit Feature. Changes take effect immediately.
NGFW{running-ips}help
Valid commands are:
# Enter context
display-categoryrules

# Other commands
afc-mode AFCMODE
afc-severity SEVERITY
connection-table TIMEOUTTYPE SECONDS
delete profile XPROFILENAME
deployment-choices
display
gzip-decompression enable|disable
help [full|COMMAND]
```

```
profile PROFILENAME
quarantine-duration DURATION
rename profile XPROFILENAME NEWPROFILENAME

NGFW{running-ips}?
Valid entries at this position are:
afc-mode                  AFC mode
afc-severity              AFC severity
connection-table          Connection table timeout
delete                    Delete a profile
deployment-choices        Get deployment choices
display                   Display all ips configuration and profiles
display-categoryrules     Display category rules for all profiles
gzip-decompression        GZIP decompression mode
help                      Display help information
profile                   Create/enter a IPS profile
quarantine-duration       Quarantine duration
rename                    Rename a profile
```

Related commands

running-ips Context Commands

ipv6

IPv6 configuration

Syntax

```
ipv6 access-list NAME (permit|deny) X:X::X:X/M
ipv6 route X:X::X:X/M (X:X::X:X[%INTERFACE])|INTERFACE [DISTANCE]
display ipv6 route

Valid entries:
ipv6         IPv6 configuration
route        Add static route
X:X::X:X/M   Unicast IPv6 prefix address
X:X::X:X     IPv6 address
INTERFACE    Interface name
DISTANCE     The distance value (1-255)
```

Example

```
NGFW{running}ipv6 access-list myipv6accesslist permit 100:0:0:0:0:0:0:0/64
NGFW{running}ipv6 route 2001:2:0:0:0:0:0:0/48 ethernet5 1
NGFW{running}ipv6 route 2001:2:0:0:0:0:0:0/48 100:0:0:0:0:0:0:1 1
NGFW{running}display ipv6 route
# IPV6 ROUTES
  ipv6 route 2001:2::/48 ethernet5
  ipv6 route 2001:2::/48 100::1
```

l2tp-serverX

Enters L2TP Server context mode. The X represents a number, for example server0.

Syntax

```
l2tp-serverX
```

Example

```
NGFW{running}l2tp-server0
NGFW{running-l2tp-server0}help
```

```
Valid commands are:
auth enable|disable
auth shared-secret A.B.C.D|any secret-key
bind none|any|(A.B.C.D [port])
delete auth shared-secret A.B.C.D|all
help [full|COMMAND]
hiding enable|disable
sequencing enable|disable

NGFW{running-l2tp-server0}?
Valid entries at this position are:
auth                    Authenticated configuration
bind                    Configure bind service of L2TP server
delete                  Delete file or configuration item
help                    Display help information
hiding                  Enable or disable hiding configuration
sequencing              Enable or disable sequence configuration
```

Related commands

running-l2tp-serverX Context Commands

log

Enters log context mode. Note that the 'Management Console' notification contact for the Audit log can not be modified.

Syntax

```
log
```

Example

```
NGFW{running}log
NGFW{running-log}help
Valid commands are:
delete log audit CONTACT-NAME
delete log quarantine CONTACT-NAME
delete log system CONTACT-NAME
delete log vpn CONTACT-NAME
delete log-option fib events|kernel|memory|packet [recv|send]
delete log-option ppp( all)|( DEL-PPP-LOG-OPTION){1,10}
delete log-option xmsd( all)|( LOG_OPTION)
help [full|COMMAND]
log audit CONTACT-NAME [ALL|none]
log quarantine CONTACT-NAME [ALL|none]
log system CONTACT-NAME [SEVERITY]
log vpn CONTACT-NAME [SEVERITY]
log-option fib events|kernel|memory|packet [recv|send]
log-option ppp( all)|( PPP-LOG-OPTION){1,255}
log-option xmsd( all)|( LOG_OPTION)
sub-system SUBSYSTEM [SEVERITY]

NGFW{running-log}?
Valid entries at this position are:
delete                  Delete file or configuration item
help                    Display help information
log                     Add a Notification Contact to a log service
log-option              Add service log option
sub-system              set sub-system log level
```

```
NGFW{running-log}display
# LOG SERVICES
  log system     "Management Console" notice
 #log audit      "Management Console" ALL
  log vpn        "Management Console" info
  log quarantine "Management Console" ALL

  # SUB-SERVICES
  sub-system INIT       info
  sub-system XMS        notice
  sub-system TOS        info
  sub-system HTTPD      notice
  sub-system GATED      none
  sub-system LOGIN      notice
  sub-system PACEMAKER  error
  sub-system COROSYNC   notice
  sub-system CRMADMIN   none
```

Related commands

running-log Context Commands

multicast-registration

Enters multicast registration context mode.

Syntax

```
multicast-registration
```

Example

```
NGFW{running}multicast-registration
NGFW{running-multicast-registration}help
Valid commands are:
help [full|COMMAND]
igmp-version default|(mode MODE IGMPvX)
mld-version default|(mode MODE MLDvX)

NGFW{running-multicast-registration}?
Valid entries at this position are:
help                      Display help information
igmp-version              Configure system IGMP version
mld-version               Configure system MLD version

NGFW{running-multicast-registration}igmp-version mode ?
Valid entry at this position is:
  MODE   Define IGMP mode (force or default)
```

Related commands

running-multicast-registration Context Commands

notifycontacts

Enters notify contacts context mode.

Syntax

```
notifycontacts
```

Example

```
NGFW{running}notifycontacts
```

```
Entering Immediate Commit Feature. Changes take effect immediately.
NGFW{running-notifycontacts}help
Valid commands are:
contact CONTACTNAME
contact NEWNAME email
contact NEWNAME snmp COMMUNITY IP [PORT]
delete contact XCONTACTNAME
display
email-from-address EMAIL
email-from-domain DOMAIN
email-server IP
email-threshold THRESHOLD
email-to-default-address EMAIL
help [full|COMMAND]
rename contact XCONTACTNAME NEWNAME

NGFW{running-notifycontacts}?
Valid entries at this position are:
contact                    Create or edit a notify contact
delete                     Delete file or configuration item
display                    Display all available contacts
email-from-address         From email address
email-from-domain          From domain name
email-server               Set mail server IP
email-threshold            Set email threshold
email-to-default-address   Default to email address
help                       Display help information
rename                     Rename contact with new name
```

Related commands

running-notifycontacts (email) Context Commands

ntp

Enters NTP context mode.

Syntax

```
ntp
```

Example

```
NGFW{running}ntp
NGFW{running-ntp}help
Valid commands are:
delete key all|ID
delete server all|HOST
help [full|COMMAND]
key (1-65535) VALUE
ntp enable|disable
polling-interval SECONDS
server dhcp|NAME [key ID] [prefer]

NGFW{running-ntp}?
Valid entries at this position are:
delete                   Delete file or configuration item
help                     Display help information
key                      Configure NTP authentication key
ntp                      Enable or disable NTP
polling-interval         Configure minimum polling interval
```

```
server                    Configure remote NTP server
```

Related commands

running-ntp Context Commands

reputation

Enters Reputation context mode.

Syntax

```
reputation
```

Example

```
NGFW{running}reputation
Entering Immediate Commit Feature. Changes take effect immediately.
NGFW{running-rep}help
Valid commands are:
delete group USERGROUP
delete profile XPROFILENAME
display
group USERGROUP
help [full|COMMAND]
profile PROFILENAME
rename group USERGROUP NEWUSERGROUP
rename profile XPROFILENAME NEWPROFILENAME

NGFW{running-rep}?
Valid entries at this position are:
delete           Delete file or configuration item
display          Display all reputation profiles and groups
group            Create/enter reputation group context
help             Display help information
profile          Create/enter reputation profile context
rename           Rename a reputation profile or group
```

Related commands

running-rep Context Commands

route-map

Allows you to configure the route-map.

Syntax

```
route-map ROUTE-MAP-NAME (permit|deny) ENTRY-POSITION
```

Example

```
NGFW{running}help route-map
Enter the route-map context
Syntax: route-map ROUTE-MAP-NAME permit|deny ENTRY-POSITION
  route-map        Enter the route-map context
  ROUTE-MAP-NAME   Route-map name
  permit           Permit the network prefix
  deny             Deny the network prefix
  ENTRY-POSITION   Position of the route-map entry (1-65535)
```

Related commands

running-route-map Context Commands

router

Enters the specified router protocol context.

Syntax

```
router bgp ASNUMBER
router ospf
router ospfv3
router pim-smv4
router pim-smv6
router rip
router ripng
router smr
```

```
Valid entries:
bgp         Enter the BGP context
ASNUMBER    The autonomous system number (1-2147483647)
ospf        Enter the OSPF context
ospfv3      Enter the OSPFv3 context
pim-smv4    Enter the PIM-SM IPv4 context
pim-smv6    Enter the PIM-SM IPv6 context
rip         Enter the RIP context
ripng       Enter the RIPng context
smr         Enter the SMR context
```

Example

```
NGFW{running}router ospf
NGFW{running}router ospfv3
NGFW{running}router pim-smv4
NGFW{running}router pim-smv6
NGFW{running}router rip
NGFW{running}router ripng
NGFW{running}router smr
NGFW{running}router bgp
```

Related commands

running-ospf Context Commands

running-ospfv3 Context Commands

running-bgp-X Context Commands

running-rip Context Commands

running-ripng Context Commands

running-pim-smv4 Context Commands

running-pim-smv6 Context Commands

running-smr Context Commands

schedules

Enters schedules context mode.

Syntax

```
schedules
```

Example

```
NGFW{running}schedules
NGFW{running-schedules}help
Valid commands are:
```

```
  delete schedule all|SCHEDULENAME
  help [full|COMMAND]
  rename schedule SCHEDULENAME NEWSCHEDULENAME
  schedule SCHEDULENAME

NGFW{running-schedules}?
Valid entries at this position are:
  delete                    Delete a schedule
  help                      Display help information
  rename                    Rename a schedule
  schedule                  Create or enter a schedule context
```

Related commands

running-schedules Context Commands

segmentX

Enters Segment context mode. The X represents a segment number, for example segment0.

Syntax

```
segmentX
```

Example

```
NGFW{running}segment0
NGFW{running-segment0}help
Valid commands are:
# Enter context
bind bind
delete bind|high-availability|link-down
high-availability mode
link-down breaker [wait-time WAIT-TIME]
link-down hub
link-down wire [wait-time WAIT-TIME]
restart

# Other commands
description TEXT
help [full|COMMAND]

NGFW{running-segment0}?
Valid entries at this position are:
bind                      Bind ethernet port pairs to segment
delete                    Delete file or configuration item
description               Enter description for the segment
help                      Display help information
high-availability         Intrinsic HA Layer 2 Fallback action
link-down                 Link down synchronization mode
restart                   Restart both Ethernet ports of segment

NGFW{running-segment0}help bind
Bind ethernet port pairs to segment
Syntax: bind bind
  bind   Bind ethernet port pairs to segment
  bind   ethernet port pairs
```

Related commands

running-segmentX Context Commands

services

Enters services context mode.

Syntax

```
services
```

Example

```
NGFW{running}services
NGFW{running-services}help
Valid commands are:
  delete service all|USERSERVICENAME
  help [full|COMMAND]
  rename service USERSERVICENAME NEWSERVICENAME
  restore-default
  service SERVICENAME

NGFW{running-services}?
Valid entries at this position are:
  delete                    Delete service(s)
  help                      Display help information
  rename                    Rename service
  restore-default           Restore default services
  service                   Create or enter a service context
```

Related commands

running-services Context Commands

snmp

Enters SNMP context mode.

Syntax

```
snmp
```

Example

```
NGFW{running}snmp
NGFW{running-snmp}help
Valid commands are:
  authtrap enable|disable
  community COMMUNITY SOURCE
  delete community COMMUNITY|all
  delete trapsession (HOST ver VERSION)|all
  delete username (USERNAME|all)
  engineID ENGINE-ID
  help [full|COMMAND]
  snmp enable|disable
  trapsession HOST [port PORT] ver 2c COMMUNITY [inform]
  trapsession HOST [port PORT] ver 3 USERNAME level noAuthNoPriv [inform]
  trapsession HOST [port PORT] ver 3 USERNAME level authNoPriv authtype AUTHTYPE
                   AUTHPASS [inform]
  trapsession HOST [port PORT] ver 3 USERNAME level authPriv authtype AUTHTYPE
                   AUTHPASS privproto PRIVPROTO [PRIVPASS] [inform]
  username USERNAME level noAuthNoPriv
  username USERNAME level authNoPriv authtype AUTHTYPE AUTHPASS
  username USERNAME level authPriv authtype AUTHTYPE AUTHPASS privproto PRIVPROTO
                   [PRIVPASS]

NGFW{running-snmp}?
```

```
Valid entries at this position are:
  authtrap                  Configure SNMP authentication failure trap
  community                 Configure SNMP read-only community
  delete                    Delete file or configuration item
  engineID                  Configure SNMPv3 engine ID
  help                      Display help information
  snmp                      Enable or disable SNMP
  trapsession               Configure a trap/inform
  username                  Configure SNMPv3 USM read-only user
```

Related commands

running-snmp Context Commands

src-nat

Enters source NAT context mode.

Syntax

```
src-nat
```

Example

```
NGFW{running}src-nat
NGFW{running-snat}help
Valid commands are:
  delete rule all|SRCNATRULEID
  help [full|COMMAND]
  rule (auto|SRCNATRULEID) [POSITION_VALUE]

NGFW{running-snat}?
Valid entries at this position are:
  delete                    Delete source NAT rule(s)
  help                      Display help information
  rename                    Rename source NAT rule
  rule                      Create or enter a rule context
```

Related commands

running-snat Context Commands

vpn

Enters VPN context mode.

Syntax

```
vpn ipsec
```

Example

```
NGFW{running}vpn ipsec
NGFW{running-ipsec}help
Valid commands are:
  delete log vpn CONTACT-NAME
  delete phase1 proposal (all|NAME)
  delete phase2 proposal (all|NAME)
  delete policy (all|NAME)
  delete pre-shared-keys (all|A.B.C.D|X:X::X:X|HOSTNAME) [vrf-id ID|any]
  delete retransmit-timeout
  delete retransmit-tries
  delete trust (all|CANAME)
  delete user
```

```
  delete vpn (all|NAME)
  help [full|COMMAND]
  ipsec enable|disable
  log vpn CONTACT-NAME [SEVERITY]
  manual
  phase1 VERSION proposal NAME
  phase2 VERSION proposal NAME
  policy NAME [PRIORITY]
  pre-shared-key local A.B.C.D|X:X::X:X|LFQDN remote A.B.C.D|X:X::X:X|RFQDN|any
  retransmit-timeout TIMEOUT
  retransmit-tries COUNT
  trust CANAME
  user
  vpn NAME

NGFW{running-ipsec}?
Valid entries at this position are:
  delete              Delete file or configuration item
  help                Display help information
  ipsec               Enable or disable IPsec
  log                 Add a Notification Contact to a log service
  manual              Enter manual Security Association context
  phase1              Enter Phase1 proposal context
  phase2              Enter Phase2 proposal context
  policy              Enter IPSec Policy context
  pre-shared-key      Configure pre-shared key (start with 0x for hexadecimal key)
  retransmit-timeout  Configure IKEv2 Dead Peer Detection retransmission timeout in
                      seconds
  retransmit-tries    Configure IKEv2 Dead Peer Detection maximum retransmission
                      tries
  trust               Configure certification authority trust
  user                Enter VPN user context
  vpn                 Enter VPN context
```

Related commands

running-ipsec Context Commands

zones

Enters security zone context mode.

Syntax

```
zones
```

Example

```
NGFW{running}zones
NGFW{running-zones}help
Valid commands are:
  delete zone all|ZONENAME
  help [full|COMMAND]
  rename zone ZONENAME NEWZONENAME
  zone ZONENAME

NGFW{running-zones}?
Valid entries at this position are:
  delete              Delete security zone(s)
  help                Display help information
  rename              Rename a specified zone
  zone                Enter security zone context
```

Related commands

running-zones Context Commands

Contexts and Related Commands

running-aaa Context Commands

NGFW{running-aaa}delete

Delete file or configuration item.

Syntax

```
delete ldap-group (LDAPNAME|all)
delete radius-group (RADIUSNAME|all)
delete role (ROLE|all)
delete user (USER|all)
delete user-group (USERGROUP|all)
```

Example

```
NGFW{running}aaa
NGFW{running-aaa}delete ldap-group group1
NGFW{running-aaa}delete radius-group group1
NGFW{running-aaa}delete role myrole1
NGFW{running-aaa}delete user myuser1
NGFW{running-aaa}delete user-group group1
```

NGFW{running-aaa}display

Display configuration.

Syntax

```
display ldap-group LDAPGROUP [xml]
display ldap-schema
(active-directory|novell-edirectory|fedora-ds|rfc2798|rfc2307nis|samba|custom) [xml]
display login-settings [xml]
display password-settings [xml]
display radius-group RADIUSGROUP [xml]
display remote-login-group [xml]
display role USER [xml]
display user USER [xml]
display usergroup USERGROUP [xml]
```

Example

```
NGFW{running-aaa}display ldap-group group1
NGFW{running-aaa}display ldap-schema active-directory
NGFW{running-aaa}display login-settings
NGFW{running-aaa}display password-settings
NGFW{running-aaa}display radius-group group1
NGFW{running-aaa}display remote-login-group
NGFW{running-aaa}display role superuserRole
NGFW{running-aaa}display user myuser1
NGFW{running-aaa}display usergroup group1
```

NGFW{running-aaa}ldap-group

Configure LDAP group. Maximum number of groups is two.

Syntax

```
ldap-group LDAPNAME
```

Example

```
NGFW{running-aaa}ldap-group mygroup
```

NGFW{running-aaa}ldap-schema

Configure LDAP schema.

Syntax

```
ldap-schema SCHEMA

SCHEMA
(active-directory|novell-edirectory|fedora-ds|rfc2798|rfc2307nis|samba|custom)
```

Example

```
NGFW{running-aaa}ldap-schema custom
NGFW{running-aaa-ldap-schema-custom}
```

NGFW{running-aaa}login

Configure login settings.

Syntax

```
login maximum-attempts (0-10)
login failure-action (lockout|lockout-disable|audit)
login lockout-period MINUTES
login lockout-period (0-1440)
```

Example

```
NGFW{running-aaa}login failure-action lockout
```

NGFW{running-aaa}password

Configure password settings.

Syntax

```
password quality (basic|maximum|none)
password expiry-time (10d|20d|30d|45d|60d|90d|6m|1y)
password expiry-action (force-change|notify-user|disable-account)
```

Example

```
NGFW{running-aaa}password quality maximum
NGFW{running-aaa}password expiry-time 30d
NGFW{running-aaa}password expiry-action force-change
```

NGFW{running-aaa}radius-group

Configure Radius group. Maximum number of radius groups is 2.

Syntax

```
radius-group RADIUSNAME
```

Example

```
NGFW{running-aaa}radius-group group1
```

NGFW{running-aaa}remote-login-group

Configure LDAP or RADIUS group to use for either network or administrative login.

Syntax

```
remote-login-group (network|administrator) (GROUP|none)
```

Example

```
NGFW{running-aaa}remote-login-group administrator group1
```

NGFW{running-aaa}role

Configure an access role.

Syntax

```
role ROLE [OLDROLE]
```

Example

```
NGFW{running-aaa}role myrole1
```

NGFW{running-aaa}user

Configure a name identified user.

Syntax

```
user NAME
```

Example

```
NGFW{running-aaa}user myuser1
```

NGFW{running-aaa}user-group

Configure a name identified usergroup.

Syntax

```
user-group GROUPNAME
```

Example

```
NGFW{running-aaa}user-group group1
```

running-aaa-ldap-group-X Context Commands

NGFW{running-aaa-ldap-group-mygroup1}base-dn

Configure base distinguished name (DN).

Syntax

base-dn DN

Example

```
NGFW{running-aaa}ldap-group mygroup1
NGFW{running-aaa-ldap-group-mygroup1}base-dn DC=example,DC=com
```

NGFW{running-aaa-ldap-group-mygroup1}bind-dn

Configure bind distinguished name (DN).

Syntax

```
bind-dn DN
```

Example

```
NGFW{running-aaa-ldap-group-mygroup1}bind-dn CN=admin,OU=People,DC=example,DC=com
```

NGFW{running-aaa-ldap-group-mygroup1}bind-password

Configure LDAP bind password.

Syntax

```
bind-password PASSWORD
```

Example

```
NGFW{running-aaa-ldap-group-mygroup1}bind-password mysecret
```

NGFW{running-aaa-ldap-group-mygroup1}delete

Delete file or configuration item.

Syntax

```
delete server (ADDRESS|all)
```

Example

```
NGFW{running-aaa-ldap-group-mygroup1}delete server 192.168.1.1
```

NGFW{running-aaa-ldap-group-mygroup1}port

Configure LDAP port.

Syntax

```
port <0-65535>
```

Example

```
NGFW{running-aaa-ldap-group-mygroup1}port 389
```

NGFW{running-aaa-ldap-group-mygroup1}retries

Configure server(s) retries.

Syntax

```
retries RETRY
```

Example

```
NGFW{running-aaa-ldap-group-mygroup1}retries 3
```

NGFW{running-aaa-ldap-group-mygroup1}schema

Configure Schema.

Syntax

```
schema(active-directory|fedora-ds|novell-edirectory|rfc2307nis|rfc2798|samba|custom)
```

Example

```
NGFW{running-aaa-ldap-group-mygroup1}schema active-directory
```

NGFW{running-aaa-ldap-group-mygroup1}server

Configure LDAP server address.

Syntax

```
server (A.B.C.D|X:X::X:X) priority (1-6)
```

Example

```
NGFW{running-aaa-ldap-group-mygroup1}server 192.168.1.1 priority 1
NGFW{running-aaa-ldap-group-mygroup1}server 192.168.1.2 priority 2
```

NGFW{running-aaa-ldap-group-mygroup1}timeout

Configure timeout.

Syntax

```
timeout SECONDS
```

Example

```
NGFW{running-aaa-ldap-group-mygroup1}timeout 10
```

NGFW{running-aaa-ldap-group-mygroup1}tls

Configure TLS.

Syntax

```
tls (enable|disable)
tls start-tls (enable|disable)
tls require-valid-server-cert (enable|disable)
```

Example

```
NGFW{running-aaa-ldap-group-mygroup1}tls enable
NGFW{running-aaa-ldap-group-mygroup1}tls require-valid-server-cert enable
NGFW{running-aaa-ldap-group-mygroup1}tls start-tls enable
```

NGFW{running-aaa-ldap-group-mygroup1}version

Configure LDAP version.

Syntax

```
version (2|3)
```

Example

```
NGFW{running-aaa-ldap-group-mygroup1}version 3
```

running-aaa-radius-group-X Context Commands

NGFW{running-aaa-radius-group-2}default-usergroup

Default usergroup.

Syntax

```
default-usergroup GROUP|none
```

Example

```
NGFW{running-aaa}radius-group 2
NGFW{running-aaa-radius-group-2}default-usergroup administrator
```

NGFW{running-aaa-radius-group-2}delete

Delete file or configuration item.

Syntax

```
delete server (A.B.C.D|X:X::X:X|all)
```

Example

```
NGFW{running-aaa-radius-group-2}delete server 192.168.1.1
```

NGFW{running-aaa-radius-group-2}retries

Configure server retries.

Syntax

```
retries (0-5)
```

Example

```
NGFW{running-aaa-radius-group-2}retries 3
```

NGFW{running-aaa-radius-group-2}server

Configure server.

Syntax

```
server (A.B.C.D|X:X::X:X) [PORT] password PASSWORD priority (1-6) timeout (0-300)
[nas-id NASID]
```

Example

```
NGFW{running-aaa-radius-group-2}server 192.168.1.1 1812 password mysecret priority 1
timeout 10 nas-id 1
NGFW{running-aaa-radius-group-2}server 192.168.1.7 1812 password mysecret priority 2
timeout 10 nas-id 1
```

running-actionsets Context Commands

Immediate Commit Feature. Changes take effect immediately.

NGFW{running-actionsets}actionset

Enter an action set context with defined name.

Syntax

```
actionset ACTIONSETNAME
```

Example

```
NGFW{running}actionsets
NGFW{running-actionsets}actionset myactionset1
```

NGFW{running-actionsets}delete

Delete file or configuration item.

Syntax

```
delete actionset ACTIONSETNAME
```

Example

```
NGFW{running-actionsets}delete actionset myactionset1
```

NGFW{running-actionsets}rename

Rename action set oldname newname.

Syntax

```
rename actionset ACTIONSETNAME NEWACTIONSETNAME
```

Example

```
NGFW{running-actionsets}rename actionset myactionset1 myactionset2
```

running-actionsets-X Context Commands

NGFW{running-actionsets-myactionset1}action

Set action type. Available values: permit, rate-limit, block, trust.

Immediate Commit Feature. Changes take effect immediately.

Syntax

```
action (permit|rate-limit|block|trust)
```

Example

```
NGFW{running-actionsets}actionset myactionset1
NGFW{running-actionsets-myactionset1}action rate-limit
```

NGFW{running-actionsets-myactionset1}allow-access

Allow quarantined host to access defined IP.

Syntax

```
allow-access DESTIP
```

Example

```
NGFW{running-actionsets-myactionset1}allow-access 192.168.1.1
```

NGFW{running-actionsets-myactionset1}bytes-to-capture

Set bytes to capture for packet trace.

Syntax

```
bytes-to-capture BYTES
```

Example

```
NGFW{running-actionsets-myactionset1}bytes-to-capture 6144
```

NGFW{running-actionsets-myactionset1}contact

Add a notify contact.

Syntax

```
contact XCONTACTNAME
```

Example

```
NGFW{running-actionsets-myactionset1}contact mycontact1
NGFW{running-actionsets-myactionset1}contact "Management Console"
```

NGFW{running-actionsets-myactionset1}delete

Delete file or configuration item.

Syntax

```
delete allow-access DESTIP
delete contact XCONTACTNAME
delete limit-quarantine SOURCEIP
delete no-quarantine SOURCEIP
```

Example

```
NGFW{running-actionsets-myactionset1}delete allow-access 192.168.1.1
NGFW{running-actionsets-myactionset1}delete contact mycontact1
NGFW{running-actionsets-myactionset1}delete limit-quarantine 192.168.1.1
NGFW{running-actionsets-myactionset1}delete no-quarantine 192.168.1.1
```

NGFW{running-actionsets-myactionset1}http-block

Set quarantine option to block HTTP traffic.

Syntax

```
http-block
```

Example

```
NGFW{running-actionsets-myactionset1}http-block
```

NGFW{running-actionsets-myactionset1}http-custom

Set or clear HTTP custom text display option.

Syntax

```
http-custom TEXT
```

Example

```
NGFW{running-actionsets-myactionset1}http-custom "my custom message"
```

NGFW{running-actionsets-myactionset1}http-redirect

Set redirect URL for HTTP redirect option.

Syntax

```
http-redirect URL
```

Example

```
NGFW{running-actionsets-myactionset1}http-redirect https://www.example.com
```

NGFW{running-actionsets-myactionset1}http-showdesc

Set or clear HTTP show description display option.

Syntax

```
http-showdesc (enable|disable)
```

Example

```
NGFW{running-actionsets-myactionset1}http-showdesc enable
```

NGFW{running-actionsets-myactionset1}http-showname

Set or clear HTTP show name display option.

Syntax

```
http-showname (enable|disable)
```

Example

```
NGFW{running-actionsets-myactionset1}http-showname enable
```

NGFW{running-actionsets-myactionset1}limit-quarantine

Add IP for limit quarantine.

Syntax

```
limit-quarantine SOURCEIP
```

Example

```
NGFW{running-actionsets-myactionset1}limit-quarantine 192.168.1.1
```

NGFW{running-actionsets-myactionset1}limit-rate

Set the rate value for rate-limit action.

Syntax

```
limit-rate RATE
```

Example

```
NGFW{running-actionsets-myactionset1}limit-rate 1500
```

NGFW{running-actionsets-myactionset1}no-quarantine

Add IP for no quarantine.

Syntax

```
no-quarantine SOURCEIP
```

Example

```
NGFW{running-actionsets-myactionset1}no-quarantine 192.168.1.1
```

NGFW{running-actionsets-myactionset1}nonhttp-block

Set quarantine option to block non-HTTP traffic.

Syntax

```
nonhttp-block (enable|disable)
```

Example

```
NGFW{running-actionsets-myactionset1}nonhttp-block enable
```

NGFW{running-actionsets-myactionset1}packet-trace

Enable/disable packet trace option.

Syntax

```
packet-trace (enable|disable)
```

Example

```
NGFW{running-actionsets-myactionset1}packet-trace enable
```

NGFW{running-actionsets-myactionset1}priority

Set packet trace priority.

Syntax

```
priority PRIORITY
```

Example

```
NGFW{running-actionsets-myactionset1}priority medium
```

NGFW{running-actionsets-myactionset1}quarantine

Set quarantine option. Available options: no, immediate, threshold.

Syntax

```
quarantine QUARANTINETYPE
```

Example

```
NGFW{running-actionsets-myactionset1}quarantine immediate
```

NGFW{running-actionsets-myactionset1}tcp-reset

Set tcp reset option for block action. Available options: none (disable), source, dest, or both.

Syntax

```
tcp-reset (none|source|dest|both)
```

Example

```
NGFW{running-actionsets-myactionset1}tcp-reset both
```

NGFW{running-actionsets-myactionset1}threshold

Set quarantine threshold value.

Syntax

```
threshold (2-10000) (1-60)
```

Example

```
NGFW{running-actionsets-myactionset1}threshold 200 5
```

NGFW{running-actionsets-myactionset1}verbosity

Set packet trace verbosity.

Syntax

```
verbosity (partial|full)
```

Example

```
NGFW{running-actionsets-myactionset1}verbosity full
```

running-addressgroups Context Commands

NGFW{running-addressgroups}addressgroup

Create or enter an address group context.

Syntax

```
addressgroup GROUPNAME
```

Example

```
NGFW{running}addressgroups
NGFW{running-addressgroups}addressgroup mygroup1
NGFW{running-addressgroups-mygroup1}
```

NGFW{running-addressgroups}delete

Delete address group parameters.

Syntax

```
delete addressgroup (all|GROUPNAME)
```

Example

```
NGFW{running-addressgroups}delete addressgroup mygroup1
NGFW{running-addressgroups}delete addressgroup all
```

running-addressgroups-X Context Commands

NGFW{running-addressgroups-mygroup1}delete

Delete address group parameters.

Syntax

```
delete group (all|GROUPNAME)
delete ipaddress (all|A.B.C.D/M|X:X::X:X/M)
delete range (all|A.B.C.D|X:X::X:X)
```

Example

```
NGFW{running-addressgroups}addressgroup myaddressgroups
NGFW{running-addressgroups-mygroup1}delete range 192.168.1.100 192.168.1.200
```

NGFW{running-addressgroups-mygroup1}description

Apply address group description.

Syntax

```
description TEXT
```

Example

```
NGFW{running-addressgroups-mygroup1}description "my address group 1"
```

NGFW{running-addressgroups-mygroup1}group

Add a group to this group.

Syntax

```
group GROUPNAME
```

Example

```
NGFW{running-addressgroups-mygroup1}group mygroup2
```

NGFW{running-addressgroups-mygroup1}ipaddress

Apply IPv4 or IPv6 address.

Syntax

```
ipaddress (A.B.C.D|A.B.C.D/M|X:X::X:X|X:X::X:X/M)
```

Example

```
NGFW{running-addressgroups-mygroup1}ipaddress 192.168.1.1
NGFW{running-addressgroups-mygroup1}ipaddress 192.168.1.0/24
```

NGFW{running-addressgroups-mygroup1}range

Apply IPv4 or IPv6 address range.

Syntax

```
range (A.B.C.D A.B.C.D)|(X:X::X:X X:X::X:X)
```

Example

```
NGFW{running-addressgroups-mygroup1}range 192.168.1.100 192.168.1.200
```

running-agglinkX Context Commands

NGFW{running}interface agglink0

NGFW{running-agglink0}arp/ndp

Enable or disable ARP and NDP on interface.

Syntax

```
arp/ndp (enable|disable)
```

Example

```
NGFW{running-agglink0}arp/ndp enable
```

NGFW{running-agglink0}autoconfv6

Enable or disable IPv6 auto-configuration on interface.

Syntax

```
autoconfv6 (enable|disable)
```

Example

```
NGFW{running-agglink0}autoconfv6 enable
```

NGFW{running-agglink0}bind

Bind agglink network interface over specific ethernet or bridge port.

Syntax

```
bind PORT mode (passive|static|active) [priority PRIORITY]
  Port priority: (0-65535) default 32768, lowest value has highest priority
```

Example

```
NGFW{running-agglink0}bind ethernet5 mode active priority 1
NGFW{running-agglink0}bind ethernet6 mode active priority 1
NGFW{running-agglink0}bind ethernet7 mode active priority 1
NGFW{running-agglink0}bind ethernet8 mode active priority 1
```

NGFW{running-agglink0}delete

Delete file or configuration item.

Syntax

```
delete bind (all|PORT)
delete ip igmp
delete ip igmp version
delete ip ospf area
delete ip ospf authentication mode md5 (1-255) KEY
delete ip ospf authentication mode text KEY
delete ip ospf cost (1-65535)
delete ip ospf dead-interval (1-65535)
delete ip ospf hello-interval (1-65535)
delete ip ospf priority (0-255)
delete ip ospf retransmit-interval (3-65535)
delete ip ospf transmit-delay (1-65535)
delete ip rip
delete ip rip authentication mode md5
delete ip rip authentication mode text
delete ip rip receive version (v1-only|v2-only|v1-or-v2)
delete ip rip send version (v1-only|v2-only|v1-or-v2)
delete ip rip split-horizon
delete ipaddress (all|A.B.C.D/M|X:X::X:X/M)
delete ipaddress dhcpv4
delete ipaddress dhcpv6
delete ipv6 mld
delete ipv6 mld version
delete ipv6 ospfv3 area
delete ipv6 ospfv3 cost
delete ipv6 ospfv3 dead-interval
delete ipv6 ospfv3 hello-interval
delete ipv6 ospfv3 priority
delete ipv6 ospfv3 retransmit-interval
delete ipv6 ospfv3 transmit-delay
delete ipv6 ripng
delete ipv6 ripng split-horizon
delete prefix (all|X:X::X:X/M)
delete shutdown
```

Example

```
NGFW{running-agglink0}delete bind ethernet7
NGFW{running-agglink0}delete ip igmp version
NGFW{running-agglink0}delete ip ospf area
NGFW{running-agglink0}delete ip ospf authentication mode md5 1 mysecret
NGFW{running-agglink0}delete ip ospf authentication mode text mysecret
NGFW{running-agglink0}delete ip ospf cost
NGFW{running-agglink0}delete ip ospf dead-interval 1
NGFW{running-agglink0}delete ip ospf hello-interval 1
NGFW{running-agglink0}delete ip ospf priority 1
NGFW{running-agglink0}delete ip ospf retransmit-interval
NGFW{running-agglink0}delete ip ospf transmit-delay 1
```

```
NGFW{running-agglink0}delete ip rip authentication mode md5
NGFW{running-agglink0}delete ip rip authentication mode text
NGFW{running-agglink0}delete ip rip receive version v2-only
NGFW{running-agglink0}delete ip rip send version v2-only
NGFW{running-agglink0}delete ip rip split-horizon
NGFW{running-agglink0}delete shutdown
NGFW{running-agglink0}delete ipaddress 192.168.1.1/24
NGFW{running-agglink0}delete ipaddress 100:0:0:0:0:0:0:1/64
```

NGFW{running-agglink0}description

Enter description for the interface.

Syntax

```
description TEXT
```

Example

```
NGFW{running-agglink0}description "Ethernet aggregated interface"
```

NGFW{running-agglink0}ip

Configure IP settings.

Syntax

```
ip igmp
ip igmp version (1|2|3)
ip ospf area A.B.C.D|(0-4294967295)
ip ospf authentication mode md5 (1-255) KEY
ip ospf authentication mode text KEY
ip ospf cost (1-65535)
ip ospf dead-interval (1-65535)
ip ospf hello-interval (1-65535) [A.B.C.D]
ip ospf priority (0-255)
ip ospf retransmit-interval (3-65535)
ip ospf transmit-delay (1-65535)
ip rip
ip rip authentication mode md5 (0-2147483647) KEY
ip rip authentication mode text
ip rip receive version VERSION
ip rip send version VERSION
ip rip split-horizon [poison-reverse]
```

Example

```
NGFW{running-agglink0}ip igmp version 3
NGFW{running-agglink0}ip ospf area 1
NGFW{running-agglink0}ip ospf authentication mode md5 1 mysecret
NGFW{running-agglink0}ip ospf authentication mode text mysecret
NGFW{running-agglink0}ip ospf cost 1
NGFW{running-agglink0}ip ospf dead-interval 1
NGFW{running-agglink0}ip ospf hello-interval 1
NGFW{running-agglink0}ip ospf priority 1
NGFW{running-agglink0}ip ospf retransmit-interval 3
NGFW{running-agglink0}ip ospf transmit-delay 1
NGFW{running-agglink0}ip rip authentication mode md5 1 mysecret
NGFW{running-agglink0}ip rip authentication mode text
  Enter key: up to 16 characters:******
NGFW{running-agglink0}ip rip receive version v2-only
NGFW{running-agglink0}ip rip send version v2-only
```

```
NGFW{running-agglink0}ip rip split-horizon poison-reverse
```

NGFW{running-agglink0}ipaddress

Configure IP address.

Syntax

```
ipaddress (A.B.C.D/M|X:X::X:X/M) [primary]
ipaddress dhcpv4
```

Example

```
NGFW{running-agglink0}ipaddress 192.168.1.1/24
NGFW{running-agglink0}ipaddress 100:0:0:0:0:0:0:1/64 primary
```

NGFW{running-agglink0}ipv6

Configure IPv6 settings.

Syntax

```
ipv6 mld
ipv6 mld version (1|2)
ipv6 ospfv3 area (A.B.C.D|(0-4294967295))
ipv6 ospfv3 cost (1-65535)
ipv6 ospfv3 dead-interval (1-65535)
ipv6 ospfv3 hello-interval (1-65535)
ipv6 ospfv3 priority (0-255)
ipv6 ospfv3 retransmit-interval (3-65535)
ipv6 ospfv3 transmit-delay (1-65535)
ipv6 ripng
ipv6 ripng split-horizon [poison-reverse]
```

Example

```
NGFW{running-agglink0}ipv6 mld version 2
NGFW{running-agglink0}ipv6 ospfv3 area 1
NGFW{running-agglink0}ipv6 ospfv3 cost 1
NGFW{running-agglink0}ipv6 ospfv3 dead-interval 1
NGFW{running-agglink0}ipv6 ospfv3 hello-interval 1
NGFW{running-agglink0}ipv6 ospfv3 priority 1
NGFW{running-agglink0}ipv6 ospfv3 retransmit-interval 3
NGFW{running-agglink0}ipv6 ospfv3 transmit-delay 1
NGFW{running-agglink0}ipv6 ripng split-horizon poison-reverse
```

NGFW{running-agglink0}load-balance

Configure the distribution mechanism.

Syntax

```
load-balance (round-robin|xor-ip|xor-ip-port|xor-mac|backup)
```

Example

```
NGFW{running-agglink0}load-balance xor-ip
```

NGFW{running-agglink0}mac-address

Configure Ethernet MAC address.

Syntax

```
mac-address (automatic|X:X:X:X:X:X)
```

Example

```
NGFW{running-agglink0}mac-address a1:b2:c3:d4:e5:f6
NGFW{running-agglink0}mac-address automatic
```

NGFW{running-agglink0}mtu

Configure interface MTU in bytes.

Syntax

```
mtu (default|VALUE)
VALUE (68-9216)
```

Example

```
NGFW{running-agglink0}mtu 1500
```

NGFW{running-agglink0}prefix

Configure IPv6 prefix.

Syntax

```
prefix X:X::X:X/M [valid-lifetime SECONDS] [preferred-lifetime SECONDS]
prefix X:X::X:X/M [valid-lifetime (1-4294967295)] [preferred-lifetime
(1-4294967295)]
```

Example

```
NGFW{running-agglink0}prefix 100:0:0:0:0:0:0:0/64 valid-lifetime 2592000
preferred-lifetime 604800
```

NGFW{running-agglink0}ra-autoconf-level

Modify IPv6 Router Advertisement autoconfiguration level.

Syntax

```
ra-autoconf-level (none|address|other|full)
```

Example

```
NGFW{running-agglink0}ra-autoconf-level full
```

NGFW{running-agglink0}ra-interval

Modify IPv6 Router Advertisement interval value in milliseconds.

Syntax

```
ra-interval (90-1800000)
```

Example

```
NGFW{running-agglink0}ra-interval 600
```

NGFW{running-agglink0}ra-interval-transmit

Modify IPv6 Router Advertisement interval transmit.

Syntax

```
ra-interval-transmit (enable|disable)
```

Example

```
NGFW{running-agglink0}ra-interval-transmit enable
```

NGFW{running-agglink0}ra-lifetime

Modify IPv6 Router Advertisement prefix lifetime in seconds.

Syntax

```
ra-lifetime (0-9000000)
```

Example

```
NGFW{running-agglink0}ra-lifetime 1800
```

NGFW{running-agglink0}ra-mtu

Modify IPv6 Router Advertisement MTU value in bytes.

Syntax

```
ra-mtu (none|MTU)
MTU (68-9216)
```

Example

```
NGFW{running-agglink0}ra-mtu 1500
```

NGFW{running-agglink0}ra-transmit-mode

Modify IPv6 Router Advertisement transmit mode.

Syntax

```
ra-transmit-mode (always|never|smart)
```

Example

```
NGFW{running-agglink0}ra-transmit-mode smart
```

NGFW{running-agglink0}shutdown

Shutdown logical interface state.

Syntax

```
shutdown
```

Example

```
NGFW{running-agglink0}shutdown
```

NGFW{running-agglink0}tcp4mss

Configure interface TCP MSS for IPv4.

Syntax

```
tcp4mss (disable|automatic|VALUE)
VALUE 4-65535
```

Example

```
NGFW{running-agglink0}tcp4mss automatic
```

NGFW{running-agglink0}tcp6mss

Configure interface TCP MSS for IPv6.

Syntax

```
tcp6mss (disable|automatic|VALUE)
VALUE 4-65535
```

Example

```
NGFW{running-agglink0}tcp6mss automatic
```

running-app-filter-mgmt Context Commands

Immediate Commit Feature. Changes take effect immediately.

Change management settings for an application filter.

NGFW{running}application-filter-mgmt

NGFW{running-application-filter-mgmt}filter

Syntax

```
filter FILTERNUMBER (enable|disable)
filter FILTERNUMBER afcstate (enable|disable)
filter FILTERNUMBER (enable|disable) afcstate (enable|disable)

Valid entries:
display     Display file or configuration item
filter      Change management settings for an application filter
help        Display help information
```

Example

```
NGFW{running-app-filter-mgmt}filter 642 afcstate enable
NGFW{running-app-filter-mgmt}filter 642 enable afcstate enable
WARNING: Are you sure you want to enable filter 642 system-wide (y/n)? [n]: y
NGFW{running-app-filter-mgmt}filter 642 disable
WARNING: Are you sure you want to disable filter 642 system-wide (y/n)? [n]: y
```

running-app-groups Context Commands

Immediate Commit Feature. Changes take effect immediately.

NGFW{running}application-groups

NGFW{running-app-groups}application-group

Create or enter application-group context.

Syntax

```
application-group NEWAPPNAME CRITERIASTRING
application-group APPNAME
```

Example

```
NGFW{running-app-groups}application-group FaceBook
```

NGFW{running-app-groups}delete

Delete application-group.

Syntax

```
delete application-group APPNAME
```

Example

```
NGFW{running-app-groups}delete application-group FaceBook
```

NGFW{running-app-groups}rename

Rename application-group.

Syntax

```
rename application-group APPNAME NEWAPPNAME
```

Example

```
NGFW{running-app-groups}rename application-group FaceBook facebook1
```

running-app-groups-X Context Commands

Immediate Commit Feature. Changes take effect immediately.

NGFW{running-app-groups}application-group FaceBook

NGFW{running-app-groups-FaceBook}criteria

Update application-group criteria.

Syntax

```
criteria CRITERIASTRING
```

Example

```
NGFW{running-app-groups-FaceBook}criteria "string"
```

NGFW{running-app-groups-FaceBook}description

Update application-group description.

Syntax

```
description DESCSTRING
```

Example

```
NGFW{running-app-groups-FaceBook}description "facebook application group"
```

running-autodv Context Commands

Immediate Commit Feature. Changes take effect immediately.

NGFW{running}autodv

NGFW{running-autodv}calendar

Enter Calender Style.

Syntax

```
calendar
```

Example

```
NGFW{running-autodv}calendar
```

NGFW{running-autodv}delete

Delete file or configuration item.

Syntax

```
delete proxy
delete proxy-password
delete proxy-username
```

Example

```
NGFW{running-autodv}delete proxy-password
NGFW{running-autodv}delete proxy-username
NGFW{running-autodv}delete proxy
```

NGFW{running-autodv}disable

Disable service.

Syntax

```
disable
```

Example

```
NGFW{running-autodv}disable
```

NGFW{running-autodv}enable

Enable service.

Syntax

```
enable
```

Example

```
NGFW{running-autodv}enable
```

NGFW{running-autodv}list

List Installed DVs.

Syntax

```
list
```

Example

```
NGFW{running-autodv}list
  version 3.2.0.8458
```

NGFW{running-autodv}periodic

Enter Periodic Style.

Syntax

```
periodic
```

Example

```
NGFW{running-autodv}periodic
```

NGFW{running-autodv}proxy

Configure proxy.

Syntax

```
proxy ADDR port PORT
proxy-password PASSWD
proxy-username USER
```

Example

```
NGFW{running-autodv}proxy 192.168.1.1 port 443
NGFW{running-autodv}proxy-password mypassword
NGFW{running-autodv}proxy-username myusername
```

NGFW{running-autodv}update

Update AutoDV.

Syntax

```
update
```

Example

```
NGFW{running-autodv}update
```

running-autodv-calendar Context Commands

Immediate Commit Feature. Changes take effect immediately.

NGFW{running-autodv}calendar

NGFW{running-autodv-calendar}day

Day of the week to update.

Syntax

```
day DAYNAME
```

Example

```
NGFW{running-autodv-calendar}day ?
Valid entries at this position are:
  Sunday      Sunday
  Monday      Monday
  Tuesday     Tuesday
  Wednesday   Wednesday
  Thursday    Thursday
  Friday      Friday
  Saturday    Saturday
```

NGFW{running-autodv-calendar}time

time HOURS:MINUTES

Syntax

```
time HOURS:MINUTES
```

Example

```
NGFW{running-autodv-calendar}time ?
Valid entry at this position is:
  HOURS   Value range is 0 - 23
NGFW{running-autodv-calendar}time 17:00
```

running-autodv-periodic Context Commands

Immediate Commit Feature. Changes take effect immediately.

NGFW{running-autodv}periodic

NGFW{running-autodv-periodic}day

Day of the week to update.

Syntax

```
day (Sunday|Monday|Tuesday|Wednesday|Thursday|Friday|Saturday)
```

Example

```
NGFW{running-autodv-periodic}day Sunday
```

NGFW{running-autodv-periodic}period

Set number of days between update checks.

Syntax

```
period PERIOD
PERIOD   Value range is 0 - 99, unit is days
```

Example

```
NGFW{running-autodv-periodic}period 1
```

NGFW{running-autodv-periodic}time

Time of day to check for updates.

time HOURS:MINUTES

Syntax

```
time HOURS:MINUTES

HOURS     Value range is 0 - 23
MINUTES   Value range is 0 - 59
```

Example

```
NGFW{running-autodv-periodic}time 21:00
```

running-bgp-X Context Commands

NGFW{running}router bgp 1

NGFW{running-bgp-1}aggregate-address

Configure BGP aggregate entries.

Syntax

```
aggregate-address A.B.C.D/M [as-set] [summary-only]
```

Example

```
NGFW{running-bgp-1}help aggregate-address
Configure BGP aggregate entries
Syntax: aggregate-address A.B.C.D/M [as-set] [summary-only]
  aggregate-address   Configure BGP aggregate entries
  A.B.C.D/M           Aggregate prefix
  as-set              Generate AS set path information
  summary-only        Filter more specific routes from updates
```

NGFW{running-bgp-1}always-compare-med

Always compare MEDs from neighbors in different AS.

Syntax

```
always-compare-med
```

NGFW{running-bgp-1}delete

Delete file or configuration item.

Syntax

```
delete aggregate-address A.B.C.D/M
delete always-compare-med
delete deterministic-med
delete distance
delete local-preference
delete neighbor A.B.C.D peer-group NAME
delete neighbor (A.B.C.D|NAME)
delete neighbor (A.B.C.D|NAME) description
delete neighbor (A.B.C.D|NAME) ebgp-multihop
delete neighbor (A.B.C.D|NAME) password
delete neighbor (A.B.C.D|NAME) soft-reconfiguration inbound
delete neighbor (A.B.C.D|NAME) route-reflector-client
delete neighbor (A.B.C.D|NAME) distribute-list ACCESS-LIST-NAME (in|out)
delete neighbor (A.B.C.D|NAME) prefix-list PREFIX-LIST-NAME (in|out)
delete neighbor (A.B.C.D|NAME) filter-list FILTER-LIST-NAME (in|out)
delete neighbor (A.B.C.D|NAME) route-map ROUTE-MAP-NAME (in|out)
delete neighbor (A.B.C.D|NAME) send-community
delete neighbor (A.B.C.D|NAME) shutdown
delete neighbor (A.B.C.D|NAME) passive
delete neighbor (A.B.C.D|NAME) next-hop-self
delete neighbor (A.B.C.D|NAME) maximum-prefix
delete neighbor (A.B.C.D|NAME) weight
delete neighbor (A.B.C.D|NAME) update-source A.B.C.D
delete neighbor (A.B.C.D|NAME) remove-private-as
delete neighbor NAME peer-group
delete network A.B.C.D/M
delete redistribute (connected|ospf|rip|static)
delete router-id
delete timers
```

Example

```
NGFW{running-bgp-1}delete ?
Valid entries at this position are:
  aggregate-address    Delete BGP aggregate entries
  always-compare-med   Delete always compare MEDs from neighbors in different AS
  deterministic-med    Delete pick the best-MED route from the neighboring AS
```

```
  distance             Delete administrative distances
  graceful-restart     Delete BGP graceful restart
  local-preference     Delete the default local preference configured
  neighbor             Delete BGP neighbor
  network              Delete a network to announce via BGP
  redistribute         Delete route redistribution from another routing protocol
  router-id            Delete the BGP router identifier
  timers               Delete BGP timers
```

NGFW{running-bgp-1}deterministic-med

Pick the best-MED route from the neighboring AS.

Syntax

```
deterministic-med
```

NGFW{running-bgp-1}disable

Disable BGP.

Syntax

```
disable
```

Example

```
NGFW{running-bgp-1}help disable
Disable Border Gateway Protocol (BGP)
Syntax: disable
  disable   Disable BGP
```

NGFW{running-bgp-1}distance

Define administrative distances.

Syntax

```
distance EXTERNAL INTERNAL LOCAL
distance (1-255) (1-255) (1-255)
```

Example

```
NGFW{running-bgp-1}help distance
Configure BGP administrative distances
Syntax: distance EXTERNAL INTERNAL LOCAL
  distance   Define administrative distances
  EXTERNAL   Distance for routes external to the AS (1-255)
  INTERNAL   Distance for routes internal to the AS (1-255)
  LOCAL      Distance for local routes (1-255)
```

NGFW{running-bgp-1}enable

Enable BGP.

Syntax

```
enable
```

Example

```
NGFW{running-bgp-1}help enable
Enable Border Gateway Protocol (BGP)
```

```
Syntax: enable
  enable   Enable BGP
```

NGFW{running-bgp-1}graceful-restart

Set the BGP graceful restart.

Syntax

```
graceful-restart
```

Example

```
NGFW{running-bgp-1}help graceful-restart
Configure the BGP graceful restart
Syntax: graceful-restart
        graceful-restart restart-time RESTART-TIME
        graceful-restart stalepath-time STALEPATH-TIME
graceful-restart   Set the BGP graceful restart
restart-time       Set the restart-time for BGP graceful restart
RESTART-TIME       BGP graceful restart time in the unit of seconds (1-3600)
stalepath-time     Set the stalepath time for BGP graceful restart
STALEPATH-TIME     BGP stalepath time in the unit of seconds (1-3600)
```

NGFW{running-bgp-1}local-preference

Set local preference (higher numbers take preference).

Syntax

```
local-preference LOCAL-PREFERENCE
LOCAL-PREFERENCE   Default local preference (0-4294967295)
```

Example

```
NGFW{running-bgp-1}local-preference 10
```

NGFW{running-bgp-1}neighbor

Configure BGP neighbor or peer-group.

Syntax

```
neighbor A.B.C.D peer-group NAME
neighbor (A.B.C.D|NAME) distribute-list ACCESS-LIST-NAME (in|out)
neighbor (A.B.C.D|NAME) prefix-list PREFIX-LIST-NAME (in|out)
neighbor (A.B.C.D|NAME) filter-list FILTER-LIST-NAME (in|out)
neighbor (A.B.C.D|NAME) route-map NAME (in|out)
neighbor (A.B.C.D|NAME) send-community
neighbor (A.B.C.D|NAME) ebgp-multihop (1-255)
neighbor (A.B.C.D|NAME) description DESCRIPTION
neighbor (A.B.C.D|NAME) remote-as ASNUMBER
neighbor (A.B.C.D|NAME) password
neighbor (A.B.C.D|NAME) soft-reconfiguration inbound
neighbor (A.B.C.D|NAME) route-reflector-client
neighbor (A.B.C.D|NAME) shutdown
neighbor (A.B.C.D|NAME) passive
neighbor (A.B.C.D|NAME) next-hop-self
neighbor (A.B.C.D|NAME) maximum-prefix (1-4294967295)
neighbor (A.B.C.D|NAME) weight (0-65535)
neighbor (A.B.C.D|NAME) update-source A.B.C.D
neighbor (A.B.C.D|NAME) remove-private-as
```

```
neighbor NAME peer-group
```

NGFW{running-bgp-1}network

Specify a network to announce through the BGP.

Syntax

```
network A.B.C.D/M
```

Example

```
NGFW{running-bgp-1}network 192.168.0.3/24
```

NGFW{running-bgp-1}redistribute

Redistribute routes from another routing protocol.

Syntax

```
redistribute (connected|ospf|rip|static) [metric VALUE] [route-map NAME]

Valid entries:
connected      Connected
ospf           Open Shortest Path First (OSPF)
rip            Routing Information Protocol (RIP)
static         Static routes
metric         Metric for redistributed routes
VALUE          Default metric (1-4294967295)
route-map      Route map reference
NAME           Pointer to route-map entries
```

Example

```
NGFW{running-bgp-1}redistribute connected
```

NGFW{running-bgp-1}router-id

Set the BGP router identifier.

Syntax

```
router-id A.B.C.D
```

Example

```
NGFW{running-bgp-1}help router-id
Syntax: router-id A.B.C.D
  router-id   Set the BGP router identifier
  A.B.C.D     BGP router-id in IP address format
```

NGFW{running-bgp-1}timers

Adjust BGP timers. The keepalive interval should be no more than one-third of holdtime.

Syntax

```
timers KEEPALIVE HOLDTIME

KEEPALIVE   Keepalive interval (0-65535)
HOLDTIME    Holdtime (0-65535)
```

Example

```
NGFW{running-bgp-1}timers 60 180
```

running-blockedStreams Context Commands

NGFW{running}blockedStreams

NGFW{running-blockedStreams}flushallstreams

Flush All Reports.

Syntax

```
flushallstreams
```

Example

```
NGFW{running-blockedStreams}flushallstreams
```

NGFW{running-blockedStreams}flushstreams

Flush reports.

Syntax

```
flushstreams
```

Example

```
NGFW{running-blockedStreams}flushstreams
```

NGFW{running-blockedStreams}list

List reports.

Syntax

```
list
```

running-bridgeX Context Commands

NGFW{running}interface bridge0

NGFW{running-bridge0}arp/ndp

Enable or disable ARP and NDP on interface.

Syntax

```
arp/ndp (enable|disable)
```

Example

```
NGFW{running-bridge0}arp/ndp enable
```

NGFW{running-bridge0}autoconfv6

Enable or disable IPv6 autoconfiguration on interface.

Syntax

```
autoconfv6 (enable|disable)
```

Example

```
NGFW{running-bridge0}autoconfv6 enable
```

NGFW{running-bridge0}bind

Bind bridged network interface over ethernet/VLAN/agglink.

Syntax

```
bind PORT
```

Example

```
NGFW{running-bridge0}bind ethernet5
NGFW{running-bridge0}bind ethernet6
NGFW{running-bridge0}bind ethernet7
NGFW{running-bridge0}bind ethernet8
```

NGFW{running-bridge0}delete

Delete file or configuration item.

Syntax

```
delete bind (all|PORT)
delete ip igmp
delete ip igmp version
delete ipaddress (all|A.B.C.D/M|X:X::X:X/M)
delete ipaddress dhcpv4
delete ipaddress dhcpv6
delete ipv6 mld
delete ipv6 mld version
delete prefix (all|X:X::X:X/M)
delete shutdown
```

Example

```
NGFW{running-bridge0}delete bind ethernet8
NGFW{running-bridge0}delete bind all
NGFW{running-bridge0}delete ip igmp
NGFW{running-bridge0}delete ipaddress 192.168.1.1/24
NGFW{running-bridge0}delete ipaddress 100:0:0:0:0:0:0:1/64
NGFW{running-bridge0}delete ipv6 mld
NGFW{running-bridge0}delete prefix all
NGFW{running-bridge0}delete shutdown
```

NGFW{running-bridge0}description

Enter description for the interface.

Syntax

```
description TEXT
```

Example

```
NGFW{running-bridge0}description "Ethernet bridged interface"
```

NGFW{running-bridge0}ip

Configure IP settings.

Syntax

```
ip igmp
ip igmp version (1|2|3)
ip ospf area A.B.C.D|(0-4294967295)
ip ospf authentication mode md5 KEY_ID KEY
ip ospf authentication mode text KEY
ip ospf cost COST
ip ospf dead-interval VALUE
```

```
ip ospf hello-interval VALUE [A.B.C.D]
ip ospf priority VALUE
ip ospf retransmit-interval VALUE
ip ospf transmit-delay VALUE
ip rip
ip rip authentication mode md5 (0-2147483647) KEY
ip rip authentication mode text
ip rip receive version VERSION
ip rip send version VERSION
ip rip split-horizon [poison-reverse]
ipaddress (A.B.C.D/M|X:X::X:X/M) [primary]
ipv6 mld
```

Example

```
NGFW{running-bridge0}ip igmp version 3
NGFW{running-bridge0}ip igmp
```

NGFW{running-bridge0}ipaddress

Configure IP address.

Syntax

```
ipaddress (A.B.C.D/M|X:X::X:X/M) [primary]
ipaddress dhcpv4
```

Example

```
NGFW{running-bridge0}ipaddress 192.168.1.1/24
NGFW{running-bridge0}ipaddress 100:0:0:0:0:0:0:1/64
```

NGFW{running-bridge0}ipv6

Configure IPv6 settings.

Syntax

```
ipv6 mld
ipv6 mld version (1|2)
ipv6 ospfv3 area A.B.C.D|(0-4294967295)
ipv6 ospfv3 cost COST
ipv6 ospfv3 dead-interval VALUE
ipv6 ospfv3 hello-interval VALUE
ipv6 ospfv3 priority VALUE
ipv6 ospfv3 retransmit-interval VALUE
ipv6 ospfv3 transmit-delay VALUE
ipv6 ripng
ipv6 ripng split-horizon [poison-reverse]
```

Example

```
NGFW{running-bridge0}ipv6 mld version 2
NGFW{running-bridge0}ipv6 ripng split-horizon poison-reverse
```

NGFW{running-bridge0}mtu

Configure interface MTU.

Syntax

```
mtu (default|VALUE)
VALUE (68-9216)
```

Example

```
NGFW{running-bridge0}mtu 1280
```

NGFW{running-bridge0}prefix

Configure IPv6 prefix.

Syntax

```
prefix X:X::X:X/M [valid-lifetime SECONDS] [preferred-lifetime SECONDS]

SECONDS (1-4294967295)
```

Example

```
NGFW{running-bridge0}prefix 100:0:0:0:0:0:0:0/64 valid-lifetime 2592000
preferred-lifetime 604800
```

NGFW{running-bridge0}ra-autoconf-level

Modify IPv6 Router Advertisement autoconfiguration level.

Syntax

```
ra-autoconf-level AUTOCONF

AUTOCONF            Router Advert Autoconfiguration level (DHCP)
Possible values for AUTOCONF are:
none                No parameter is autoconfigured
address             Address is autoconfigured
other               Some other parameters are autoconfigured
full                Most parameters are autoconfigured
```

Example

```
NGFW{running-bridge0}help ra-autoconf-level full
```

NGFW{running-bridge0}ra-interval

Modify IPv6 Router Advertisement interval value in milliseconds.

Syntax

```
ra-interval (90-1800000)
```

Example

```
NGFW{running-bridge0}ra-interval 600
```

NGFW{running-bridge0}ra-interval-transmit

Modify IPv6 Router Advertisement interval transmit.

Syntax

```
ra-interval-transmit (enable|disable)
```

Example

```
NGFW{running-bridge0}ra-interval-transmit enable
```

NGFW{running-bridge0}ra-lifetime

Modify IPv6 Router Advertisement prefix lifetime in seconds.

Syntax

```
ra-lifetime (0-9000000)
```

Example

```
NGFW{running-bridge0}ra-lifetime 1800
```

NGFW{running-bridge0}ra-mtu

Modify IPv6 Router Advertisement MTU value.

Syntax

```
ra-mtu (none|MTU)
MTU value advertised(68-9216)(0 if none)
```

Example

```
NGFW{running-bridge0}ra-mtu none
NGFW{running-bridge0}ra-mtu 1500
```

NGFW{running-bridge0}ra-transmit-mode

Modify IPv6 Router Advertisement transmit mode.

Syntax

```
ra-transmit-mode MODE

MODE   Router Advertisement Transmit mode
Possible values for MODE are:
always       Router Advert message is always sent
never        Router Advert message is never sent
smart        Router Advert message is sent if a prefix is defined
```

Example

```
NGFW{running-bridge0}ra-transmit-mode smart
```

NGFW{running-bridge0}shutdown

Shutdown logical interface state.

Syntax

```
shutdown
```

Example

```
NGFW{running-bridge0}shutdown
```

NGFW{running-bridge0}tcp4mss

Configure interface TCP MSS for IPv4.

Syntax

```
tcp4mss (disable|automatic|4-65535)

disable     Disable service
automatic   Automatically select TCP MSS based on interface MTU
(4-65535)   TCP MSS value for IPv4
```

Example

```
NGFW{running-bridge0}tcp4mss automatic
```

NGFW{running-bridge0}tcp6mss

Configure interface TCP MSS for IPv6.

Syntax

```
tcp6mss (disable|automatic|4-65535)
```

```
disable     Disable service
automatic   Automatically select TCP MSS based on interface MTU
(4-65535)   TCP MSS value for IPv6
```

Example

```
NGFW{running-bridge0}tcp6mss automatic
```

running-captive-portal Context Commands

NGFW{running}captive-portal

NGFW{running-captive-portal}delete

Delete captive portal rule(s).

Syntax

```
delete rule (all|RULEID)
```

Example

```
NGFW{running-captive-portal}delete rule 20010
NGFW{running-captive-portal}delete rule all
```

NGFW{running-captive-portal}rename

Rename a captive-portal rule.

Syntax

```
rename rule RULEID NEWRULEID
```

Example

```
NGFW{running-captive-portal}rename rule watershed 20010
```

NGFW{running-captive-portal}reset

Set a Captive Portal parameter to its DEFAULT value.

Syntax

```
reset (max-session-time|inactive-timeout|port|certificate)
reset login-page (foreground-color|background-color)
reset login-page (header-HTML|footer-HTML|failed-HTML)
reset status-page (foreground-color|background-color)
reset status-page main-HTML
```

Example

```
NGFW{running-captive-portal}reset certificate
NGFW{running-captive-portal}reset login-page foreground-color
NGFW{running-captive-portal}reset status-page main-HTML
```

NGFW{running-captive-portal}rule

Create or enter a rule context.

Syntax

```
rule (auto|RULEID) [POSITION_VALUE]
```

Example

```
NGFW{running-captive-portal}rule auto
NGFW{running-captive-portal}rule 20010 1
NGFW{running-captive-portal}rule watershed
```

NGFW{running-captive-portal}set

Set a Captive Portal parameter.

Syntax

```
set max-session-time MINUTES
set inactive-timeout MINUTES
set port PORT
set certificate CERTNAME
set (login-page|status-page) (foreground-color|background-color) (HEX|COLOR)
set login-page (header-HTML|footer-HTML|failed-HTML)
set status-page (foreground-color|background-color) (HEX|COLOR)
set status-page main-HTML
```

Example

```
NGFW{running-captive-portal}set inactive-timeout 60
NGFW{running-captive-portal}set port 8443
NGFW{running-captive-portal}set status-page background-color #CD88B1
NGFW{running-captive-portal}set status-page foreground-color #FFEFD5
NGFW{running-captive-portal}set status-page foreground-color DodgerBlue
```

running-captive-portal-rule-X Context Commands

NGFW{running-captive-portal}rule 20000

NGFW{running-captive-portal-rule-20000}delete

Delete file or configuration item.

Syntax

```
delete src-address include group (all|ADDRESSGROUP)
delete src-address include ipaddress (all|A.B.C.D/M|X:X::X:X/M)
delete src-address include range (all|A.B.C.D|X:X::X:X)
delete src-address exclude group (all|ADDRESSGROUP)
delete src-address exclude ipaddress (all|A.B.C.D/M|X:X::X:X/M)
delete src-address exclude range (all|A.B.C.D|X:X::X:X)
delete dst-address include group (all|ADDRESSGROUP)
delete dst-address include ipaddress (all|A.B.C.D/M|X:X::X:X/M)
delete dst-address include range (all|A.B.C.D|X:X::X:X)
delete dst-address exclude group (all|ADDRESSGROUP)
delete dst-address exclude ipaddress (all|A.B.C.D/M|X:X::X:X/M)
delete dst-address exclude range (all|A.B.C.D|X:X::X:X)
delete src-zone (include all|ZONENAME)
delete src-zone (exclude all|ZONENAME)
```

Example

```
NGFW{running-captive-portal-rule-20000}delete dst-address include group mygroup1
NGFW{running-captive-portal-rule-20000}delete src-address exclude ipaddress all
NGFW{running-captive-portal-rule-20000}delete dst-address include ipaddress
192.168.1.1/32
```

NGFW{running-captive-portal-rule-20000}description

Apply rule description.

Syntax

```
description TEXT
```

Example

```
NGFW{running-captive-portal-rule-20000}description "captive portal rule"
```

NGFW{running-captive-portal-rule-20000}dst-address

Apply destination address.

Syntax

```
dst-address (include|exclude) group ADDRESSGROUP
dst-address (include|exclude) ipaddress (A.B.C.D|X:X::X:X)
dst-address (include|exclude) ipaddress (A.B.C.D/M|X:X::X:X/M)
dst-address (include|exclude) range ((A.B.C.D A.B.C.D)|(X:X::X:X X:X::X:X))
```

Example

```
NGFW{running-captive-portal-rule-20000}dst-address include group mygroup1
NGFW{running-captive-portal-rule-20000}dst-address include ipaddress 192.168.1.0/24
NGFW{running-captive-portal-rule-20000}dst-address exclude ipaddress 192.168.1.1
NGFW{running-captive-portal-rule-20000}dst-address include range 192.168.1.100
192.168.1.200
```

NGFW{running-captive-portal-rule-20000}move

Move rule position.

Syntax

```
move (after RULEID)|(before RULEID)|(to position VALUE)
```

Example

```
NGFW{running-captive-portal-rule-20000}move to position 1
NGFW{running-captive-portal-rule-20000}move before 20050
NGFW{running-captive-portal-rule-20000}move after 20040
```

NGFW{running-captive-portal-rule-20000}src-address

Apply source address.

Syntax

```
src-address (include|exclude) group ADDRESSGROUP
src-address (include|exclude) ipaddress (A.B.C.D|X:X::X:X)
src-address (include|exclude) ipaddress (A.B.C.D/M|X:X::X:X/M)
src-address (include|exclude) range ((A.B.C.D A.B.C.D)|(X:X::X:X X:X::X:X))
```

Example

```
NGFW{running-captive-portal-rule-20000}src-address include group mygroup1
NGFW{running-captive-portal-rule-20000}dst-address include ipaddress 192.168.1.0/24
NGFW{running-captive-portal-rule-20000}dst-address exclude ipaddress 192.168.1.1
NGFW{running-captive-portal-rule-20000}dst-address include range 192.168.1.100
192.168.1.200
```

NGFW{running-captive-portal-rule-20000}src-zone

Apply source security zone.

Syntax

```
src-zone (include|exclude) ZONENAME
```

Example

```
NGFW{running-captive-portal-rule-20000}src-zone include myzone1
NGFW{running-captive-portal-rule-20000}src-zone exclude myzone1
```

running-certificates Context Commands

NGFW{running}certificates

NGFW{running-certificates}ca-certificate

Add CA certificate.

Syntax

```
ca-certificate CANAME
```

Example

```
NGFW{running-certificates}ca-certificate myCAname
Please enter the PEM encoded CA certificate contents (including BEGIN CERTIFICATE and
END CERTIFICATE lines):
-----BEGIN CERTIFICATE-----
SoIDQTCCAqoCCQDiEcSvKsrhKTANBgkqhkiG9w0BAQQFADBFMQswCQYDVQQGEwJB
VTETMBEGA1UECBMKU29tZS1TdGF0ZTEhMB8GA1UEChMYSW50ZXJuZXQgV2lkZ2l0
cyBQdHkgTHeRkMB4XDTA5MDQxNjE3MDUxNloDTA5MDUxNjE3MDUxNlowbDEQMA4G
A1UEBhMHVW5rbm93bjEQMA4GA1UECBMHVW5rbm93bjEQMA4GA1UEBxMHVW5rbm93
bjEQMA4GA1UEChMHVW5rbm93bjEQMA4GA1UEoxMHVW5wer93bjEQMA4GA1UEAxMH
VW5rbm93bjCCAbcwggEsBgcqhkjOOAQBMIIBHwKBgQD9f1OBHXUSKVLfSpwu7OTn
9hG3UjzvRADDHj+AplEmaUVdQCJR+1k9jVj6v8X1ujD2y5tVbNeBO4AdNG/yZmC3
a5lQpaSfn+gEexAiwk+7qdf+t8Yb+DtX58aophUPBPuD9tPFHsMCNVQTWhaRMvZ1
864rYdcq7/IiAxmd0UgBxwIVAJdgUI8VIwvMspK5gqLrhAvwWBz1AoGBAPfhoIXW
mz3ey7yrXDa4V7l5lK+7+jrqgvlXTAs9B4JnUVlXjrrUWU/mcQcQgYC0SRZxI+hM
KBYTt88JMozIpuE8FnqLVHyNKOCjrh4rs6Z1kW6jfwv6ITVi8ftiegEkO8yk8b6o
UZCJqIPf4VrlnwaSi2ZegHtVJWQBTDv+z0kqA4GEAAKBgDNS53gXgLN9qXzf5AIs
npdKIhCaP6LOMaueQM2X9p51TWee8n95Ti9pUEoZSAgXKbV235WfqaQaIXhkXM7d
D/huz80xy3Pf5EzAEYhZLanL2GF6UL7g9z0ZtHI7E1yk2ylQrB8GI/fboIp213ug
NQ9TR7THyOy9dwftwoKSXEmSMA0GCSqGSIb3DQEBBAUAA4GBAIzxQr3OK9Jzq+wh
ZfKLLd0S7PbNZH7BfO7voEGtuC5fSPqbziwmOt9FYAg+U0rvIrHQI2DxSPHoxOA9
PISrOJgU6A2+VTbkZTJB32/Zng/hTDUQUkyyjllskdmafS1b9SSs0Z7SPuLu6VDB
zR6PBzoFwaWk3nX2lYsk/gFpf07z
-----END CERTIFICATE-----
```

NGFW{running-certificates}cert-request

Creates a certificate request for this device.

Syntax

```
cert-request CERTREQUEST [key-size SIZE]

CERTREQUEST    Certificate Request identifier
key-size       Specify private key size
SIZE           Specify private key size bits
Possible values for SIZE are:
1024           1024-bit key size
1536           1536-bit key size
```

```
2048            2048-bit key size (default)
4096            4096-bit key size
```

Example

```
NGFW{running-certificates}cert-request myrequest
(Enter 'exit' to abort the command)
Enter Common Name (string, required): www.example.com
Enter Country (two letter code or 'none')[none]: US
Enter State (string or 'none')[none]:
Enter Locality (string or 'none')[none]:
Enter Organization (string or 'none')[none]:
Enter Unit (string or 'none')[none]:
Enter E-mail (string or 'none')[none]:
Enter FQDN (a string or 'none')[none]: www.example.com
Enter User FQDN (string or 'none')[none]:
-----BEGIN CERTIFICATE REQUEST-----
MIICpjCCAY4CAQAwJzELMAkGA1UEBhMCVVMxGDAWBgNVBAMTD3d3dy5leGFtcGxl
LmNvbTCCASIwDQYJKoZIhvcNAQEBBQADggEPADCCAQoCggEBAKWIxUWcq3vk3bBt
ivmAaNXtDLT+DMASIfnIIs4b/e8nS8k2HvrlqCqgDcm98iet2vOZ7G3bzLOWPL+a
K6hJSUaqW+cz9LVMyoIM7lsWLgt+46X/EKvSGpTLNuyvupJPa76iNjgzJLxcYgEO
C3vQGIZUlG6aiJ9ABiGAPC4GpUICnJFeo9JrkDGAcKh3hFN0VZyuPgDeLssj0luo
5HL9WO/oC0E+rdYGzgU7/+B04X2mQ4LiKCV92deGvnN2Fc0DP1EHFy5hS5nVlzG1
Y6yvIYVKL2IWfdNH5U6MDd1zJLAmhRUaphLUx87yluOLl5uVPXwm/EXlE6ql2MP+
fCg10+UCAwEAAaA6MDgGCSqGSIb3DQEJDjErMCkwCwYDVR0PBAQDAgXgMBoGA1Ud
EQQTMBGCD3d3dy5leGFtcGxlLmNvbTANBgkqhkiG9w0BAQQFAAOCAQEAGXPnvwZ3
cLLSjMOtNmizrKST+YdF1EzOOkXMBh+FZigXny5tCfQccmU5ir18KE/aKbMyQeii
sSeHhI4utZvOrjLL8lcbJlEU2xnC9BGXhmbGUmWynHFziTYom7Lpv8gq+p6+B1Ox
KDxJ+cMv1Ips+g3C8zZnQsN+dLgnWCb3X3NaJos5LHu4PK48+Zl3sic94Ixw0ZQF
HHhlJe7rfg8HMEYHXMiGowSpn9vnRMVh1K0o2Cdv9aIzjm+TH+WiTV9yYX5Dqys7
c8vOS1+G6R6o5s6tHDGPNYyVfCD1W+vxdCXVGR5zLsoB5eTL7bDR1NFKu/77FvKu
dLTq8hPpOt7gvQ==
-----END CERTIFICATE REQUEST-----
```

NGFW{running-certificates}certificate

Add device certificate.

Syntax

```
certificate CERTNAME
```

Example

```
NGFW{running-certificates}certificate mycertname
Please enter the PEM encoded certificate contents (including BEGIN CERTIFICATE and
END CERTIFICATE lines):
-----BEGIN CERTIFICATE-----
SoIDQTCCAqoCCQDiEcSvKsrhKTANBgkqhkiG9w0BAQQFADBFMQswCQYDVQQGEwJB
VTETMBEGA1UECBMKU29tZS1TdGF0ZTEhMB8GA1UEChMYSW50ZXJuZXQgV2lkZ2l0
cyBQdHkgTHeRkMB4XDTA5MDQxNjE3MDUxNloDTA5MDUxNjE3MDUxNlowbDEQMA4G
A1UEBhMHVW5rbm93bjEQMA4GA1UECBMHVW5rbm93bjEQMA4GA1UEBxMHVW5rbm93
bjEQMA4GA1UEChMHVW5rbm93bjEQMA4GA1UEoxMHVW5wer93bjEQMA4GA1UEAxMH
VW5rbm93bjCCAbcwggEsBgcqhkjOOAQBMIIBHwKBgQD9f1OBHXUSKVLfSpwu7OTn
9hG3UjzvRADDHj+AplEmaUVdQCJR+1k9jVj6v8X1ujD2y5tVbNeBO4AdNG/yZmC3
a5lQpaSfn+gEexAiwk+7qdf+t8Yb+DtX58aophUPBPuD9tPFHsMCNVQTWhaRMvZ1
864rYdcq7/IiAxmd0UgBxwIVAJdgUI8VIwvMspK5gqLrhAvwWBz1AoGBAPfhoIXW
mz3ey7yrXDa4V7l5lK+7+jrqgvlXTAs9B4JnUVlXjrrUWU/mcQcQgYC0SRZxI+hM
KBYTt88JMozIpuE8FnqLVHyNKOCjrh4rs6Z1kW6jfwv6ITVi8ftiegEkO8yk8b6o
UZCJqIPf4VrlnwaSi2ZegHtVJWQBTDv+z0kqA4GEAAKBgDNS53gXgLN9qXzf5AIs
npdKIhCaP6LOMaueQM2X9p51TWee8n95Ti9pUEoZSAgXKbV235WfqaQaIXhkXM7d
D/huz80xy3Pf5EzAEYhZLanL2GF6UL7g9z0ZtHI7E1yk2ylQrB8GI/fboIp213ug
```

```
NQ9TR7THyOy9dwftwoKSXEmSMA0GCSqGSIb3DQEBBAUAA4GBAIzxQr3OK9Jzq+wh
ZfKLLd0S7PbNZH7BfO7voEGtuC5fSPqbziwmOt9FYAg+U0rvIrHQI2DxSPHoxOA9
PISrOJgU6A2+VTbkZTJB32/Zng/hTDUQUkyyjllskdmafS1b9SSs0Z7SPuLu6VDB
zR6PBzoFwaWk3nX2lYsk/gFpf07z
-----END CERTIFICATE-----
```

NGFW{running-certificates}crl

Certificate revocation list.

Syntax

```
crl
```

Example

```
NGFW{running-certificates}crl
```

NGFW{running-certificates}delete

Delete file or configuration item.

Syntax

```
delete ca-certificate (all|CANAME)
delete cert-request (all|CERTREQUEST)
delete certificate (all|CERTNAME)
```

Example

```
NGFW{running-certificates}delete ca-certificate myCAname
NGFW{running-certificates}delete cert-request myrequest
NGFW{running-certificates}delete certificate mycertname
```

NGFW{running-certificates}display

Display file or configuration item.

Syntax

```
display ca-certificate CANAME [pem|text]
display cert-request CERTNAME
display certificate CERTNAME [pem|text]
display private-key CERTNAME
```

Example

```
NGFW{running-certificates}display
    # CERTIFICATE AUTHORITIES
        ca-certificate myCAname
-----BEGIN CERTIFICATE-----
SoIDQTCCAqoCCQDiEcSvKsrhKTANBgkqhkiG9w0BAQQFADBFMQswCQYDVQQGEwJB
                              ...
PISrOJgU6A2+VTbkZTJB32/Zng/hTDUQUkyyjllskdmafS1b9SSs0Z7SPuLu6VDB
zR6PBzoFwaWk3nX2lYsk/gFpf07z
-----END CERTIFICATE-----

    # CERTIFICATES
        certificate mycertname
-----BEGIN CERTIFICATE-----
SoIDQTCCAqoCCQDiEcSvKsrhKTANBgkqhkiG9w0BAQQFADBFMQswCQYDVQQGEwJB
                              ...
PISrOJgU6A2+VTbkZTJB32/Zng/hTDUQUkyyjllskdmafS1b9SSs0Z7SPuLu6VDB
```

```
zR6PBzoFwaWk3nX2lYsk/gFpf07z
-----END CERTIFICATE-----

    # CERTIFICATE REQUESTS
        cert-request myrequest key-size 2048
-----BEGIN CERTIFICATE REQUEST-----
MIICpjCCAY4CAQAwJzELMAkGA1UEBhMCVVMxGDAWBgNVBAMTD3d3dy5leGFtcGxl
                                ...
c8vOS1+G6R6o5s6tHDGPNYyVfCD1W+vxdCXVGR5zLsoB5eTL7bDR1NFKu/77FvKu
dLTq8hPpOt7gvQ==
-----END CERTIFICATE REQUEST-----

        # Subject Identity #
         CN= www.example.com
         C = US
         ST= none
         L = none
         O = none
         OU= none
         Email= none
         FQDN = www.example.com
         User = none

    # CRL
```

NGFW{running-certificates}private-key

Add device certificate private-key.

Syntax

```
private-key CERTNAME
```

Example

```
NGFW{running-certificates}private-key mycertname
Please enter the PEM encoded private key contents (including BEGIN PRIVATE KEY and
END PRIVATE KEY lines):
-----BEGIN DSA PRIVATE KEY-----
S0IBvAIBAAKBgQDjfcGLU+2NKUidI0mQ7EfiEWCc2/QLDYwfyl6t3YMMVRePWYUz
Pjom3A98G8VEhE8i+Ry3VMjmrmeRTljORWh7drvA+R48QIUC0sKbHY0TjshpNKjC
EpzX3s25mn2jeH9OLajjfT4AUKk629ajnA/tyE/Dg4a3J9PMrR/BOaJXjwIVAPq+
xXo8i7Jrjuo9pdu2A+12183HAoGBAMWQMBgsyvPRfXCDh+kaokahCJRZb7olAeN4
uSPrTmEdxn9jO+bfPCOx6Paljsjflw6uevWEBja9j0AmafxYPrKY8AhngKRFohoH
0Vwp9QKT+yVsCWghrBWQYj3myvrOGg0ydw6buDNIRYY71lYoVzQKw6NddseP3Gp9
4Pch6BKyAoGAGxqWTZsPe2lp/lz3LmmbpJoLRbE9OWBa5rVCuRM21qSRDDzQ0R4X
/cWW1kIC5n6NpVEMu+b70q3NyAK8AuFN+Ezfw+LgpvCI+Ae27bjj7AJxMD8161UG
e45Qiv20THFFqw/zP7DHG6tFdT06ss6xjw+ausphZGRhU8xBBR+NF3sCFQCiAvaI
xWsrP2Z1777kgMC45lKhqg==
-----END DSA PRIVATE KEY-----
```

running-certificates-crl Context Commands

NGFW{running-certificates}crl

NGFW{running-certificates-crl}add

Add a CRL URI or file for a specified CA.

Syntax

```
add CANAME (local-import|(uri CRLURI))
```

Example

```
NGFW{running-certificates-crl}help add
Valid commands are:
  # Enter context
  addressgroups

  # Other commands
  add CANAME local-import|(uri CRLURI)
```

NGFW{running-certificates-crl}cache

Enable or disable CRL cache fetched via HTTP.

Syntax

```
cache (enable|disable)
```

Example

```
NGFW{running-certificates-crl}cache enable
```

NGFW{running-certificates-crl}delete

Delete a CRL URI or file for a specified Certificate Authority.

Syntax

```
delete crl (all|CANAME)

Valid entries:
all      Delete all CRL URIs and local files
CANAME   Delete CRL URI and local files for this Certificate Authority.
```

Example

```
NGFW{running-certificates-crl}delete crl all
```

NGFW{running-certificates-crl}mode

Set certificate revocation mode.

Syntax

```
mode (required|optional)

Valid entries:
required   Fail authentication by certificate if CRL cannot be verified
optional   Allow authentication by certificate if CRL cannot be verified
```

Example

```
NGFW{running-certificates-crl}mode required
```

running-cluster Context Commands

NGFW{running}cluster

NGFW{running-cluster}check

Perform consistency check.

Syntax

```
check CHECK_TYPE (enable|disable)
```

Example

```
NGFW{running-cluster}check config enable
```

NGFW{running-cluster}cluster-name

Apply cluster name.

Syntax

```
cluster-name NAME
```

Example

```
NGFW{running-cluster}cluster-name ?
Valid entry at this position is:
  NAME   Cluster name (1-30 characters)
```

NGFW{running-cluster}delete

Delete file or configuration item.

Syntax

```
delete standby
```

Example

```
NGFW{running-cluster}delete ?
Valid entry at this position is:
  standby   Remove the device from standby
```

NGFW{running-cluster}disable

Disable clustering.

Syntax

```
disable
```

Example

```
NGFW{running-cluster}disable
```

NGFW{running-cluster}enable

Enable clustering.

Syntax

```
enable
```

Example

```
NGFW{running-cluster}enable
```

NGFW{running-cluster}member-id

Cluster Member ID.

Syntax

```
member-id ID
```

Example

```
NGFW{running-cluster}member-id ?
Valid entry at this position is:
  ID   Member ID
```

NGFW{running-cluster}member-name

Cluster member name.

Syntax

```
member-name NAME
```

Example

```
NGFW{running-cluster}member-name ?
Valid entry at this position is:
  NAME   Member name (1-30 characters)
```

NGFW{running-cluster}standby

Sets the device on standby.

Syntax

```
standby
```

Example

```
NGFW{running-cluster}standby
```

NGFW{running-cluster}tct

Enter cluster traffic context.

Syntax

```
tct
```

Example

```
NGFW{running-cluster}tct
NGFW{running-cluster-tct}
```

running-cluster-tct Context Commands

NGFW{running-cluster}tct
NGFW{running-cluster-tct}delete

Delete file or configuration item.

Syntax

```
delete ipaddress
delete multicast
```

Example

```
NGFW{running-cluster-tct}delete ?
Valid entries at this position are:
  ipaddress   IPv4 address
  multicast   Apply multicast IPv4 address
```

NGFW{running-cluster-tct}encryption

Apply encryption hash.

Syntax

```
encryption (enable|disable)
encryption hash (none|MD5|SHA1|SHA256|SHA384|SHA512)
encryption cipher (none|AES256)
encryption passphrase PASSPHRASE
hash         Apply encryption hash
Possible values for HASH are:
    MD5          MD5 hash algorithm
    SHA1         SHA1 hash algorithm
    SHA256       SHA256 hash algorithm
    SHA384       SHA384 hash algorithm
    SHA512       SHA512 hash algorithm
    none         No hash algorithm
cipher       Apply encryption cipher
Possible values for CIPHER are:
    none         No cipher algorithm
    AES256       AES256 cipher algorithm
passphrase   Apply encryption passphrase
PASSPHRASE   Apply encryption passphrase
enable       Enable encryption
disable      Disable encryption
```

Example

```
NGFW{running-cluster-tct}encryption enable
NGFW{running-cluster-tct}encryption disable
NGFW{running-cluster-tct}encryption hash SHA512
NGFW{running-cluster-tct}encryption cipher AES256
NGFW{running-cluster-tct}encryption passphrase mypassphrase
```

NGFW{running-cluster-tct}ipaddress

IPv4 address.

Syntax

```
ipaddress A.B.C.D/M
```

Example

```
NGFW{running-cluster-tct}help ipaddress
Apply IPv4 address
Syntax: ipaddress A.B.C.D/M
  ipaddress   IPv4 address
  A.B.C.D/M   IPv4 address with netmask
```

NGFW{running-cluster-tct}mgmt-port-failover

Failover to management port if HA ports unavailable.

Syntax

```
mgmt-port-failover (enable|disable)
```

Example

```
NGFW{running-cluster-tct}mgmt-port-failover enable
```

NGFW{running-cluster-tct}mtu

Apply MTU.

Syntax

```
mtu (68-9216)
```

Example

```
NGFW{running-cluster-tct}mtu 1500
```

NGFW{running-cluster-tct}multicast

Apply multicast IPv4 address.

Syntax

```
multicast A.B.C.D
```

Example

```
NGFW{running-cluster-tct}multicast 192.168.0.32
```

NGFW{running-cluster-tct}physical-media

Apply physical-media settings. Auto-negotiation is the default.

Syntax

```
physical-media (auto-neg)|(SPEED-MODE)

auto-neg         Enable auto-negotiation (default is on)
SPEED-MODE       Set the port speed
Possible values for SPEED-MODE are:
10half           Supported port speed and mode
10full           Supported port speed and mode
100half          Supported port speed and mode
100full          Supported port speed and mode
1000full         Supported port speed and mode
```

Example

```
NGFW{running-cluster-tct}physical-media 10full
```

NGFW{running-cluster-tct}port

Apply multicast UDP port number.

Syntax

```
port N
N      Apply multicast UDP port number(1-65534)
```

Example

```
NGFW{running-cluster-tct}port 9
```

NGFW{running-cluster-tct}retry

Apply retry interval.

Syntax

```
retry N
N       Apply retry interval value(1-10)
```

Example

```
NGFW{running-cluster-tct}retry 3
```

NGFW{running-cluster-tct}timeout

Apply timeout.

Syntax

```
timeout N
N      Apply timeout value(100-10000)
```

Example

```
NGFW{running-cluster-tct}timeout 160
```

NGFW{running-cluster-tct}ttl

Apply TTL.

Syntax

```
ttl N
N     Apply TTL value(1-255)
```

Example

```
NGFW{running-cluster-tct}ttl 2
```

running-dhcp-relay Context Commands

NGFW{running}dhcp relay

NGFW{running-dhcp-relay}client

Configure client interface.

Syntax

```
client interface (all|IFNAME)
```

Example

```
NGFW{running-dhcp-relay}help client
Configure client interface
Syntax: client interface all|IFNAME
  all         Configure listening to all interfaces?
  IFNAME      Configure interface
```

NGFW{running-dhcp-relay}delete

Delete configuration item.

Syntax

```
delete client interface (all|IFNAME)
delete server (all|(interface IFNAME)|(address A.B.C.D))
```

Example

```
NGFW{running-dhcp-relay}delete client interface all
```

NGFW{running-dhcp-relay}disable

Disable service.

Syntax

```
disable
```

Example

```
NGFW{running-dhcp-relay}help disable
Disable DHCP relay
Syntax: disable
  disable   Disable service
```

NGFW{running-dhcp-relay}enable

Enable service.

Syntax

```
enable
```

Example

```
NGFW{running-dhcp-relay}help enable
Enable DHCP relay
Syntax: enable
  enable   Enable service
```

NGFW{running-dhcp-relay}server

Configure server interface.

Syntax

```
server (interface IFNAME)|(address A.B.C.D)
```

Example

```
NGFW{running-dhcp-relay}help server address
Configure server address
Syntax: server (address A.B.C.D)
   A.B.C.D   Configure IPv4 address
```

```
NGFW{running-dhcp-relay}help server interface
Configure server interface
Syntax: server (interface IFNAME)
   A.B.C.D   Configure IPv4 address
```

running-dhcp-server Context Commands

NGFW{running}dhcp server

NGFW{running-dhcp-server}delete

Delete configuration item.

Syntax

```
delete scope (all|NAME)
```

Example

```
NGFW{running-dhcp-server}help delete
Delete scope
Syntax: delete scope all|NAME
all     Delete all scopes
NAME    Delete scope
```

NGFW{running-dhcp-server}disable

Disable server.

Syntax

```
disable
```

Example

```
NGFW{running-dhcp-server}disable
```

NGFW{running-dhcp-server}display

Display configuration item.

Syntax

```
display scope NAME
```

Example

```
NGFW{running-dhcp-server}help display
Valid commands are:

  # Manage context
  display [xml]

  # Other commands
  display scope NAME [xml]
```

NGFW{running-dhcp-server}enable

Enable server.

Syntax

```
enable
```

Example

```
NGFW{running-dhcp-server}enable
```

NGFW{running-dhcp-server}scope

Configure scope.

Syntax

```
scope NAME
```

Example

```
NGFW{running-dhcp-server}scope myscope
```

running-dhcp-server-X Context Commands

NGFW{running-dhcp-server}scope myscope
NGFW{running-dhcp-server-myscope}address-range

Configure IP address range.

Syntax

```
address-range A.B.C.D A.B.C.D
```

Example

```
NGFW{running-dhcp-server-myscope}help address-range
Configure IP address range
Syntax: address-range A.B.C.D A.B.C.D
  A.B.C.D  First address
  A.B.C.D  Last address
```

NGFW{running-dhcp-server-myscope}default-gateway

Configure default gateway.

Syntax

```
default-gateway (myself|A.B.C.D)
```

Example

```
NGFW{running-dhcp-server-myscope}help default-gateway
Configure default gateway
Syntax: default-gateway myself|A.B.C.D
        myself    Use subnets IP address as default gateway
        A.B.C.D   IPv4 address
```

NGFW{running-dhcp-server-myscope}delete

Delete configuration item.

Syntax

```
delete address-range (all|(A.B.C.D A.B.C.D))
delete default-gateway NAME
delete dns-server (all|A.B.C.D)
delete domain-name NAME
delete exclude (all|A.B.C.D)
delete host (all|NAME)
delete lease
delete option (all|NAME|NUMBER)
delete subnet A.B.C.D/M
```

Example

```
NGFW{running-dhcp-server-myscope}delete ?
Valid entries at this position are:
  address-range     Delete IP address range
  default-gateway   Delete default gateway
  dns-server        Delete DNS server
  domain-name       Delete domain name
  exclude           Delete excluded IP address
  host              Delete host
  lease             Delete lease
  option            Delete option
  subnet            Delete subnet
```

NGFW{running-dhcp-server-myscope}dns-server

Configure DNS server.

Syntax

```
dns-server A.B.C.D (primary|secondary|tertiary)
```

Example

```
NGFW{running-dhcp-server-myscope}help dns-server
Configure DNS server
Syntax: dns-server A.B.C.D primary|secondary|tertiary
     A.B.C.D      IPv4 address
     primary      Configure primary server
     secondary    Configure secondary server
     tertiary     Configure tertiary server
```

NGFW{running-dhcp-server-myscope}domain-name

Configure Domain Name.

Syntax

```
domain-name NAME
```

Example

```
NGFW{running-dhcp-server-myscope}domain-name americas
```

NGFW{running-dhcp-server-myscope}exclude

Configure excluded IP address.

Syntax

```
exclude A.B.C.D
```

Example

```
NGFW{running-dhcp-server-myscope}help exclude
Configure excluded IP address
Syntax: exclude A.B.C.D
     A.B.C.D      IPv4 address
```

NGFW{running-dhcp-server-myscope}host

Configure host name.

Syntax

```
host NAME X:X:X:X:X:X A.B.C.D
```

Example

```
NGFW{running-dhcp-server-myscope}help host
Configure static IP address for client with mac address.
Syntax: host NAME X:X:X:X:X:X A.B.C.D
       NAME         Configure name
       X:X:X:X:X:X  Ethernet MAC address (e.g 00:02:b3:39:ba:d2)
       Syntax: byte(:byte){5} byte MAC address byte
       A.B.C.D       IPv4 address
```

NGFW{running-dhcp-server-myscope}lease

Configure DHCPv4 lease in seconds.

Syntax

```
lease (0-1073741824)
```

Example

```
NGFW{running-dhcp-server-myscope}help lease
```

```
Configure DHCPv4 lease
Syntax: lease <0-1073741824>
<0-1073741824>   Lease value in seconds (0-1073741824)
```

NGFW{running-dhcp-server-myscope}option

Configure options.

Syntax

```
option (NAME|NUMBER) text Value 1
option (NAME|NUMBER) boolean Value 1 [Value 2] [Value 3]
option (NAME|NUMBER) integer8 Value 1 [Value 2] [Value 3]
option (NAME|NUMBER) hex8 Value 1 [Value 2] [Value 3]
option (NAME|NUMBER) integer32 Value 1 [Value 2] [Value 3]
option (NAME|NUMBER) hex32 Value 1 [Value 2] [Value 3]
option (NAME|NUMBER) ipaddress (Value 1) [Value 2] [Value 3]
Refer to https://tools.ietf.org/html/rfc2132#section-3 or
https://en.wikipedia.org/wiki/Dynamic_Host_Configuration_Protocol#DHCP_options for
known option names and numbers.
```

Example

```
NGFW{running-dhcp-server-myscope}help option
option        Configure options
Syntax: option (NAME) Values
  Values as specified in documents referenced above
Syntax: option (NUMBER) text Value 1
  Value 1 can include up to 256 characters of any type including spaces and tabs
Syntax: option (NUMBER) boolean Value 1 [Value 2] [Value 3]
  Value 1,2,3 must be string true or false
Syntax: option (NUMBER) integer8 Value 1 [Value 2] [Value 3]
  Value 1,2,3 must be in integer between 0 and 255
Syntax: option (NUMBER) hex8 Value 1 [Value 2] [Value 3]
  Value 1,2,3 must be in hex integer between 0 and ff and entered as (0x0-0xff)
Syntax: option (NUMBER) integer32 Value 1 [Value 2] [Value 3]
  Value 1,2,3 must be in integer between 0 and 16777215
Syntax: option (NUMBER) hex32 Value 1 [Value 2] [Value 3]
  Value 1,2,3 must be in hex integer between 0 and ffffff and entered as
(0x0-0xffffff)
Syntax: option (NUMBER) ipaddress (Value 1) [Value 2] [Value 3]
  Value 1,2,3 can be a domain name of up to 255 characters or an IP address
```

NGFW{running-dhcp-server-myscope}subnet

Configure subnet.

Syntax

```
subnet A.B.C.D/M
```

Example

```
NGFW{running-dhcp-server-myscope}subnet ?
Valid entry at this position is:
  A.B.C.D/M   IPv4 address and mask length
```

running-dnat Context Commands

NGFW{running}dst-nat

NGFW{running-dnat}delete

Delete destination NAT rule(s).

Syntax

```
delete rule (all|DSTNATRULEID)
```

Example

```
NGFW{running-dnat}delete rule 123
```

NGFW{running-dnat}rename

Rename destination NAT rule.

Syntax

```
rename dnat DSTNATRULEID NEWDSTNATRULEID
```

Example

```
NGFW{running-dnat}rename rule 123 dnat1
```

NGFW{running-dnat}rule

Create or enter a rule context.

Syntax

```
rule (auto|DSTNATRULEID) [POSITION_VALUE]
```

Example

```
NGFW{running-dnat}rule auto
NGFW{running-dnat}rule 123
```

running-dnat-rule-X Context Commands

NGFW{running-dnat}rule 1
NGFW{running-dnat-rule-dnat1}delete

Delete file or configuration item.

Syntax

```
delete port
delete dst-zone (include|exclude) ZONENAME
delete src-address (include|exclude) group ADDRESSGROUP
delete dst-address (include|exclude) group ADDRESSGROUP
delete src-address (include|exclude) ipaddress A.B.C.D
delete dst-address (include|exclude) ipaddress A.B.C.D
delete src-address (include|exclude) ipaddress A.B.C.D/M
delete dst-address (include|exclude) ipaddress A.B.C.D/M
delete src-address (include|exclude) range A.B.C.D A.B.C.D
delete dst-address (include|exclude) range A.B.C.D A.B.C.D
delete translate-to ipaddress (A.B.C.D|A.B.C.D/M)
delete translate-to range A.B.C.D A.B.C.D
```

Example

```
NGFW{running-dnat-rule-dnat1}delete translate-to range 192.168.1.100 192.168.1.200
NGFW{running-dnat-rule-dnat1}delete src-zone include all
NGFW{running-dnat-rule-dnat1}delete dst-address include ipaddress 192.168.1.0/24
NGFW{running-dnat-rule-dnat1}delete src-address exclude ipaddress 192.168.1.1
```

NGFW{running-dnat-rule-dnat1}description

Apply rule description.

Syntax

```
description TEXT
```

Example

```
NGFW{running-dnat-rule-dnat1}description "destination nat rule"
```

NGFW{running-dnat-rule-dnat1}dst-address

Apply destination address.

Syntax

```
dst-address (include|exclude) ipaddress (A.B.C.D|A.B.C.D/M)
dst-address (include|exclude) range A.B.C.D A.B.C.D
dst-address (include|exclude) group ADDRESSGROUP
```

Example

```
NGFW{running-dnat-rule-dnat1}dst-address include ipaddress 192.168.1.0/24
NGFW{running-dnat-rule-dnat1}dst-address exclude ipaddress 192.168.1.1
NGFW{running-dnat-rule-dnat1}dst-address include range 192.168.1.100 192.168.1.200
```

NGFW{running-dnat-rule-dnat1}move

Move rule position.

Syntax

```
move after DSTNATRULEID
move before DSTNATRULEID
move to position VALUE
```

Example

```
NGFW{running-dnat-rule-dnat1}move after dnat1
NGFW{running-dnat-rule-dnat1}move before dnat1
NGFW{running-dnat-rule-dnat1}move to position 1
```

NGFW{running-dnat-rule-dnat1}src-address

Apply source address.

Syntax

```
src-address (include|exclude) ipaddress (A.B.C.D|A.B.C.D/M)
src-address (include|exclude) range A.B.C.D A.B.C.D
src-address (include|exclude) group ADDRESSGROUP
```

Example

```
NGFW{running-dnat-rule-dnat1}src-address include ipaddress 192.168.1.0/24
NGFW{running-dnat-rule-dnat1}src-address exclude ipaddress 192.168.1.1
NGFW{running-dnat-rule-dnat1}src-address include range 192.168.1.100 192.168.1.200
```

NGFW{running-dnat-rule-dnat1}src-zone

Apply source security zone.

Syntax

```
src-zone (include|exclude) ZONENAME
```

Example

```
NGFW{running-dnat-rule-dnat1}src-zone include myzone1
NGFW{running-dnat-rule-dnat1}src-zone exclude myzone1
```

NGFW{running-dnat-rule-dnat1}tcp

Create tcp protocol translation.

Syntax

```
tcp dst-port PORT [to PORT] translate-to TRANS-PORT [to TRANS-PORT]
```

Example

```
NGFW{running-dnat-rule-dnat1}tcp dst-port 80 to 81 translate-to 8080 to 8081
```

NGFW{running-dnat-rule-dnat1}translate-to

Apply translation.

Syntax

```
translate-to ipaddress (A.B.C.D|A.B.C.D/M)
translate-to range A.B.C.D A.B.C.D
```

Example

```
NGFW{running-dnat-rule-dnat1}translate-to ipaddress 192.168.1.1
NGFW{running-dnat-rule-dnat1}translate-to ipaddress 192.168.1.0/24
NGFW{running-dnat-rule-dnat1}translate-to range 192.168.1.100 192.168.1.200
```

NGFW{running-dnat-rule-dnat1}udp

Create udp protocol translation.

Syntax

```
udp dst-port PORT [to PORT] translate-to TRANS-PORT [to TRANS-PORT]
```

Example

```
NGFW{running-dnat-rule-dnat1}udp dst-port 53 translate-to 3853
```

running-dns Context Commands

NGFW{running}dns

NGFW{running-dns}delete

Delete file or configuration item. A secondary domain-search can only be deleted if no tertiary exists. A primary domain-search can only be deleted if no secondary exists.

Syntax

```
delete domain-name
delete domain-search (primary|secondary|tertiary|all)
delete name-server (all|A.B.C.D|X:X::X:X)
delete proxy cache cleaning interval
delete proxy cache forwarder (all|A.B.C.D|X:X::X:X)
delete proxy cache maximum negative ttl
delete proxy cache maximum ttl
delete proxy cache size
```

Example

```
NGFW{running-dns}delete proxy cache ?
Valid entries at this position are:
  cleaning    Delete cleaning
  forwarder   Delete forwarder
  maximum     Delete maximum
  size        Delete size

NGFW{running-dns}delete domain-search tertiary
NGFW{running-dns}delete domain-search secondary
NGFW{running-dns}delete domain-search primary
```

NGFW{running-dns}domain-name

Configure domain name.

Syntax

```
domain-name NAME
```

Example

```
NGFW{running-dns}help domain-name
Configure router domain name
Syntax: domain-name NAME
  domain-name   Configure domain name
  NAME          Domain name (e.g. hp.com)<1-256>
```

NGFW{running-dns}domain-search

Configure domain search. A secondary domain-search can only be entered after a primary is entered and a tertiary can only be entered after a secondary is entered.

Syntax

```
domain-search (primary|secondary|tertiary) NAME
```

Example

```
NGFW{running-dns}domain-search primary example.com
NGFW{running-dns}domain-search secondary example.org
NGFW{running-dns}domain-search tertiary example.edu
```

NGFW{running-dns}name-server

Configure DNS server.

Syntax

```
name-server (A.B.C.D|X:X::X:X)
```

Example

```
NGFW{running-dns}help name-server
Configure DNS server
Syntax: name-server A.B.C.D|X:X::X:X
A.B.C.D       IPv4 address
X:X::X:X      IPv6 address
```

NGFW{running-dns}proxy

Configure proxy.

Syntax

```
proxy (enable|disable)
proxy cache cleaning interval cache cleaning interval in minutes
proxy cache forwarder A.B.C.D|X:X::X:X
proxy cache maximum negative ttl cache maximum negative ttl in minutes
proxy cache maximum ttl cache maximum ttl in minutes
proxy cache size cache size in megabytes
```

Example

```
NGFW{running-dns}proxy enable
```

running-ethernetX Context Commands

NGFW{running}interface ethernet1

NGFW{running-ethernet1}arp/ndp

Enable or disable ARP and NDP on interface.

Syntax

```
arp/ndp (enable|disable)
```

Example

```
NGFW{running-ethernet1}arp/ndp enable
```

NGFW{running-ethernet1}autoconfv6

Enable or disable IPv6 autoconfiguration on interface.

Syntax

```
autoconfv6 (enable|disable)
```

Example

```
NGFW{running-ethernet1}autoconfv6 disable
```

NGFW{running-ethernet1}delete

Delete file or configuration item.

Syntax

```
delete ip igmp
delete ip igmp version
delete ip ospf area
delete ip ospf authentication mode md5 (1-255) KEY
delete ip ospf authentication mode text KEY
delete ip ospf cost (1-65535)
delete ip ospf dead-interval (1-65535)
delete ip ospf hello-interval (1-65535)
delete ip ospf priority (0-255)
delete ip ospf retransmit-interval (3-65535)
delete ip ospf transmit-delay (1-65535)
delete ip pim-sm
delete ip rip
delete ip rip authentication mode md5
delete ip rip authentication mode text
delete ip rip receive version (v1-only|v2-only|v1-or-v2)
delete ip rip send version (v1-only|v2-only|v1-or-v2)
delete ip rip split-horizon
```

```
delete ipaddress (all|A.B.C.D/M|X:X::X:X/M)
delete ipaddress dhcpv4
delete ipaddress dhcpv6
delete ipv6 mld
delete ipv6 mld version
delete ipv6 ospfv3 area
delete ipv6 ospfv3 cost
delete ipv6 ospfv3 dead-interval
delete ipv6 ospfv3 hello-interval
delete ipv6 ospfv3 priority
delete ipv6 ospfv3 retransmit-interval
delete ipv6 ospfv3 transmit-delay
delete ipv6 pim-sm
delete ipv6 ripng
delete ipv6 ripng split-horizon
delete prefix (all|X:X::X:X/M)
delete shutdown (shutdown logical interface state)
```

Example

```
NGFW{running-ethernet1}delete ip igmp version
NGFW{running-ethernet1}delete ip ospf area
NGFW{running-ethernet1}delete ip ospf authentication mode md5 1 mysecret
NGFW{running-ethernet1}delete ip ospf authentication mode text mysecret
NGFW{running-ethernet1}delete ip ospf cost 1
NGFW{running-ethernet1}delete ip ospf dead-interval 1
NGFW{running-ethernet1}delete ip ospf hello-interval 1
NGFW{running-ethernet1}delete ip ospf priority 1
NGFW{running-ethernet1}delete ip ospf retransmit-interval
NGFW{running-ethernet1}delete ip ospf transmit-delay 1
NGFW{running-ethernet1}delete ip pim-sm
NGFW{running-ethernet1}delete ip rip authentication mode md5
NGFW{running-ethernet1}delete ip rip authentication mode text
NGFW{running-ethernet1}delete ip rip receive version v2-only
NGFW{running-ethernet1}delete ip rip send version v2-only
NGFW{running-ethernet1}delete ip rip split-horizon
NGFW{running-ethernet1}delete prefix all
NGFW{running-ethernet1}delete shutdown
NGFW{running-ethernet1}delete ipaddress dhcpv6
WARNING: This command will remove the dhcpv6 context. Do you want to continue (y/n)?
[n]: y
NGFW{running-ethernet1}delete ipaddress dhcpv4
WARNING: This command will remove the dhcpv4 context. Do you want to continue (y/n)?
[n]: y
NGFW{running-ethernet1}delete ipaddress 192.168.1.1/24
NGFW{running-ethernet1}delete ipaddress 100:0:0:0:0:0:0:1/64
```

NGFW{running-ethernet1}description

Enter description for the interface.

Syntax

```
description TEXT
```

Example

```
NGFW{running-ethernet1}description "Ethernet port 1"
```

NGFW{running-ethernet1}ip

Configure IP settings.

Syntax

```
ip igmp
ip igmp version (1|2|3)
ip ospf area (A.B.C.D|(0-4294967295))
ip ospf authentication mode md5 (1-255) KEY
ip ospf authentication mode text KEY
ip ospf cost (1-65535)
ip ospf dead-interval (1-65535)
ip ospf hello-interval (1-65535) [A.B.C.D]
ip ospf priority (0-255)
ip ospf retransmit-interval (3-65535)
ip ospf transmit-delay (1-65535)
ip pim-sm
ip rip
ip rip authentication mode md5 (0-2147483647) KEY
ip rip authentication mode text
ip rip receive version VERSION (v1-only|v2-only|v1-or-v2)
ip rip send version VERSION
ip rip split-horizon [poison-reverse]
```

Example

```
NGFW{running-ethernet1}ip igmp version 3
NGFW{running-ethernet1}ip ospf area 1
NGFW{running-ethernet1}ip ospf authentication mode md5 1 mysecret
NGFW{running-ethernet1}ip ospf authentication mode text mysecret
NGFW{running-ethernet1}ip ospf cost 1
NGFW{running-ethernet1}ip ospf dead-interval 1
NGFW{running-ethernet1}ip ospf hello-interval 1
NGFW{running-ethernet1}ip ospf priority 1
NGFW{running-ethernet1}ip ospf retransmit-interval 3
NGFW{running-ethernet1}ip ospf transmit-delay 1
NGFW{running-ethernet1}ip rip authentication mode md5 1 mysecret
NGFW{running-ethernet1}ip rip authentication mode text
Enter key: up to 16 characters:******
NGFW{running-ethernet1}ip rip receive version v2-only
NGFW{running-ethernet1}ip rip send version v2-only
NGFW{running-ethernet1}ip rip split-horizon poison-reverse
NGFW{running-ethernet1}ip ?
```

NGFW{running-ethernet1}ipaddress

Configure IP address.

Syntax

```
ipaddress (A.B.C.D/M|X:X::X:X/M) [primary]
ipaddress dhcpv4
```

Example

```
NGFW{running-ethernet1}ipaddress 100:0:0:0:0:0:0:1/64 primary
NGFW{running-ethernet1}ipaddress 192.168.1.1/24
NGFW{running-ethernet1}ipaddress dhcpv4
NGFW{running-ethernet1-dhcpv4}?
Valid entries at this position are:
  client                    Configure client parameters
  defaultroute-request      Ask for IPv4 default route or not
```

```
  delete                    Delete file or configuration item
  dhcp                      Configure DHCPv4 client
  dhcp                      Enable or disable DHCPv4 client service
  display                   Display DHCPv4 client context
  dns-request               Ask for DNS server IPv4 address or not
  help                      Display help information
  ntp-request               Ask for NTP server IPv4 address or not
  option                    Configure DHCPv4 client option name

NGFW{running-ethernet1-dhcpv4}help
Valid commands are:
  client identifier none|(hexa HEXA-ID)|(ascii ASCII-ID)
  client name none|NAME
  defaultroute-request enable|disable
  delete option (NAME CODE)|all
  dhcp enable|disable
  dhcp server auto|A.B.C.D
  display [xml]
  dns-request enable|disable
  help [full|COMMAND]
  ntp-request enable|disable
  option NAME CODE (boolean BOOLEAN)|(int8 INTEGER)|(uint8 INTEGER)|(int16
INTEGER)|(uint16 INTEGER)|(int32 INTEGER)|(uint32 INTEGER)|(ip-address
(A.B.C.D|DOMAIN))|(text TEXT)|(string (STRING|TEXT))|(array-of-boolean BOOLEAN,
BOOLEAN)|(array-of-int8 INTEGER, INTEGER)|(array-of-uint8 INTEGER,
INTEGER)|(array-of-int16 INTEGER, INTEGER)|(array-of-uint16 INTEGER,
INTEGER)|(array-of-int32 INTEGER, INTEGER)|(array-of-uint32 INTEGER,
INTEGER)|(array-of-ip-address (A.B.C.D, A.B.C.D|DOMAIN, DOMAIN))
```

NGFW{running-ethernet1}ipv6

Configure IPv6 settings.

Syntax

```
ipv6 mld
ipv6 mld version (1|2)
ipv6 ospfv3 area (A.B.C.D|(0-4294967295))
ipv6 ospfv3 cost (1-65535)
ipv6 ospfv3 dead-interval (1-65535)
ipv6 ospfv3 hello-interval (1-65535)
ipv6 ospfv3 priority (0-255)
ipv6 ospfv3 retransmit-interval (3-65535)
ipv6 ospfv3 transmit-delay (1-65535)
ipv6 pim-sm
ipv6 ripng
ipv6 ripng split-horizon [poison-reverse]
```

Example

```
NGFW{running-ethernet1}ipv6 mld version 2
NGFW{running-ethernet1}ipv6 ospfv3 area 1
NGFW{running-ethernet1}ipv6 ospfv3 cost 1
NGFW{running-ethernet1}ipv6 ospfv3 dead-interval 1
NGFW{running-ethernet1}ipv6 ospfv3 hello-interval 1
NGFW{running-ethernet1}ipv6 ospfv3 priority 1
NGFW{running-ethernet1}ipv6 ospfv3 retransmit-interval 3
NGFW{running-ethernet1}ipv6 ospfv3 transmit-delay 1
NGFW{running-ethernet1}ipv6 ripng split-horizon poison-reverse
NGFW{running-ethernet1}help ipv6 ripng split-horizon
Enable split-horizon / poison-reverse on this interface
Syntax: ipv6 ripng split-horizon [poison-reverse]
```

```
ipv6              Configure IPv6 settings
ripng             Configure RIPng over the interface
split-horizon     Enable split-horizon
poison-reverse    Enable poison-reverse
```

NGFW{running-ethernet1}mtu

Configure interface MTU.

Syntax

```
mtu (default|(68-9216))
```

Example

```
NGFW{running-ethernet1}mtu 1500
```

NGFW{running-ethernet1}physical-media

Apply physical-media settings. Auto-negotiation is the default or specify a supported port speed and mode.

Syntax

```
physical-media (auto-neg|10half|10full|100half|100full|1000full)
```

Example

```
NGFW{running-ethernet1}physical-media 1000full
NGFW{running-ethernet1}physical-media auto-neg
```

NGFW{running-ethernet1}prefix

Configure IPv6 prefix.

Syntax

```
prefix X:X::X:X/M [valid-lifetime SECONDS] [preferred-lifetime SECONDS]

X:X::X:X/M           IPv6 prefix
valid-lifetime       Configure valid lifetime
(1-4294967295)       Valid lifetime in seconds (default is 2592000)
preferred-lifetime   Configure preferred lifetime
(1-4294967295)       Preferred lifetime in seconds
                     (default is 604800 - cannot exceed valid lifetime)
```

Example

```
NGFW{running-ethernet1}prefix 100:0:0:0:0:0:0:0/64 valid-lifetime 2592000
preferred-lifetime 604800
```

NGFW{running-ethernet1}ra-autoconf-level

Modify IPv6 Router Advertisement autoconfiguration level (DHCP).

Syntax

```
ra-autoconf-level AUTOCONF

Possible values for AUTOCONF are:
none                 No parameter is autoconfigured
address              Address is autoconfigured
other                Some other parameters are autoconfigured
full                 Most parameters are autoconfigured
```

Example

```
NGFW{running-ethernet1}ra-autoconf-level full
```

NGFW{running-ethernet1}ra-interval

Modify IPv6 Router Advertisement interval value.

Syntax

```
ra-interval MILLISECONDS
ra-interval (90-1800000)
```

Example

```
NGFW{running-ethernet1}ra-interval 600
```

NGFW{running-ethernet1}ra-interval-transmit

Modify IPv6 Router Advertisement interval transmit.

Syntax

```
ra-interval-transmit (enable|disable)
```

Example

```
NGFW{running-ethernet1}ra-interval-transmit enable
```

NGFW{running-ethernet1}ra-lifetime

Modify IPv6 Router Advertisement prefix lifetime in seconds.

Syntax

```
ra-lifetime SECONDS
ra-lifetime (0-9000000)
```

Example

```
NGFW{running-ethernet1}ra-lifetime 1800
```

NGFW{running-ethernet1}ra-mtu

Modify IPv6 Router Advertisement MTU value.

Syntax

```
ra-mtu (none|(68-9216))
MTU value advertised (0 if none)
```

Example

```
NGFW{running-ethernet1}ra-mtu 1500
```

NGFW{running-ethernet1}ra-transmit-mode

Modify IPv6 Router Advertisement transmit mode.

Syntax

```
ra-transmit-mode MODE

Possible values for MODE are:
always              Router Advert message is always sent
never               Router Advert message is never sent
```

```
smart              Router Advert message is sent if a prefix is defined
```

Example

```
NGFW{running-ethernet1}ra-transmit-mode smart
```

NGFW{running-ethernet1}restart

Restart Ethernet port.

Syntax

```
restart
```

Example

```
NGFW{running-ethernet1}restart
```

NGFW{running-ethernet1}shutdown

Shutdown logical interface state.

Syntax

```
shutdown
```

Example

```
NGFW{running-ethernet1}shutdown
```

NGFW{running-ethernet1}tcp4mss

Configure interface TCP MSS for IPv4.

Syntax

```
tcp4mss (disable|automatic|(4-65535))
Valid entries:
disable     Disable service
automatic   Automatically select TCP MSS based on interface MTU
VALUE       TCP MSS value for IPv4
```

Example

```
NGFW{running-ethernet1}tcp4mss automatic
```

NGFW{running-ethernet1}tcp6mss

Configure interface TCP MSS for IPv6.

Syntax

```
tcp6mss (disable|automatic|(4-65535))
Valid entries:
disable     Disable service
automatic   Automatically select TCP MSS based on interface MTU
TCP MSS value for IPv6
```

Example

```
NGFW{running-ethernet1}tcp6mss automatic
```

running-firewall Context Commands

NGFW{running}firewall

NGFW{running-firewall}default-block-rule

Apply action set for default block rule.

Syntax

```
default-block-rule DEFACTIONSET
```

Example

```
NGFW{running-firewall}default-block-rule "Block + Notify + Trace"
```

NGFW{running-firewall}delete

Delete firewall rule.

Syntax

```
delete rule (all|XRULEID)
```

Example

```
NGFW{running-firewall}delete rule myrule1
NGFW{running-firewall}delete rule myrule1
```

NGFW{running-firewall}rename

Rename a firewall rule.

Syntax

```
rename rule XRULEID NEWRULEID
```

Example

```
NGFW{running-firewall}rename rule myrule1 myrule2
```

NGFW{running-firewall}rule

Create or enter a rule context.

Syntax

```
rule (auto|RULEID) [POSITION_VALUE]
```

Example

```
NGFW{running-firewall}rule auto
NGFW{running-firewall}rule myrule1
```

running-firewall-rule-X Context Commands

NGFW{running-firewall}rule myrule1

NGFW{running-firewall-rule-myrule1}action

Apply action set.

Syntax

```
action ACTIONSETNAME
```

Example

```
NGFW{running-firewall-rule-myrule1}action "Permit + Notify + Trace"
```

NGFW{running-firewall-rule-myrule1}application-group

Apply application group.

Syntax

```
application-group APPGROUPNAME
application-group ANONYMOUS CRITERIASTRING
```

Example

```
NGFW{running-firewall-rule-myrule1}application-group facebook
NGFW{running-firewall-rule-myrule1}application-group ANONYMOUS
```

NGFW{running-firewall-rule-myrule1}delete

Delete file or configuration item.

Syntax

```
delete application-group
delete comment
delete profile
delete schedule (include all|SCHEDULENAME)
delete schedule (exclude all|SCHEDULENAME)
delete services include (service all|SERVICENAME)
delete services include (protocol all|PROTONUM)
delete services include port all
delete services include tcp (all|PORT) [to PORT]
delete services include udp (all|PORT) [to PORT]
delete services include (icmp all|(CODENAME)|(TYPE [CODE]))
delete services include (icmpv6 all|(CODENAME6)|(TYPE6 [CODE6]))
delete services exclude (service all|SERVICENAME)
delete services exclude (protocol all|PROTONUM)
delete services exclude port all
delete services exclude tcp (all|PORT) [to PORT]
delete services exclude udp (all|PORT) [to PORT]
delete services exclude (icmp all|(CODENAME)|(TYPE [CODE]))
delete services exclude (icmpv6 all|(CODENAME6)|(TYPE6 [CODE6]))
delete src-address include group (all|SADDRESSGROUP)
delete src-address include (ipaddress all|A.B.C.D/M|X:X::X:X/M)
delete src-address include range (all|A.B.C.D|X:X::X:X)
delete src-address include ((any4)|(any6))
delete src-address exclude group (all|SADDRESSGROUP)
delete src-address exclude (ipaddress all|A.B.C.D/M|X:X::X:X/M)
delete src-address exclude range (all|A.B.C.D|X:X::X:X)
delete src-address exclude ((any4)|(any6))
delete dst-address include group (all|DADDRESSGROUP)
delete dst-address include (ipaddress all|A.B.C.D/M|X:X::X:X/M)
delete dst-address include range (all|A.B.C.D|X:X::X:X)
delete dst-address include ((any4)|(any6))
delete dst-address exclude group (all|DADDRESSGROUP)
delete dst-address exclude (ipaddress all|A.B.C.D/M|X:X::X:X/M)
delete dst-address exclude range (all|A.B.C.D|X:X::X:X)
delete dst-address exclude ((any4)|(any6))
delete src-zone (include all|ZONENAME)
delete src-zone (exclude all|ZONENAME)
delete dst-zone (include all|ZONENAME)
```

```
delete dst-zone (exclude all|ZONENAME)
delete user (include all|USERNAME)
delete user (exclude all|USERNAME)
delete user-group (include all|IN_GRP_NAME|IN_DN_GRP_NAME)
delete user-group (exclude all|EX_GRP_NAME|EX_DN_GRP_NAME)
```

Example

```
NGFW{running-firewall-rule-myrule1}delete application-group
NGFW{running-firewall-rule-myrule1}delete schedule exclude myhours1
NGFW{running-firewall-rule-myrule1}delete schedule include all
NGFW{running-firewall-rule-myrule1}delete services include port all
NGFW{running-firewall-rule-myrule1}delete services include service http
NGFW{running-firewall-rule-myrule1}delete services exclude icmp any
NGFW{running-firewall-rule-myrule1}delete dst-zone include myzone1
NGFW{running-firewall-rule-myrule1}delete src-zone include myzone1
NGFW{running-firewall-rule-myrule1}delete src-address include ipaddress
192.168.1.0/24
NGFW{running-firewall-rule-myrule1}delete dst-address include ipaddress
192.168.1.0/24
NGFW{running-firewall-rule-myrule1}delete services include port tcp 443
NGFW{running-firewall-rule-myrule1}delete user include all
NGFW{running-firewall-rule-myrule1}delete user exclude myuser1
NGFW{running-firewall-rule-myrule1}delete user-group include mygroup
```

NGFW{running-firewall-rule-myrule1}description

Apply rule description.

Syntax

```
description TEXT
```

Example

```
NGFW{running-firewall-rule-myrule1}description "My Firewall Policy"
```

NGFW{running-firewall-rule-myrule1}disable

Disable rule.

Syntax

```
disable
```

Example

```
NGFW{running-firewall-rule-myrule1}disable
```

NGFW{running-firewall-rule-myrule1}dst-address

Apply destination addresses.

Syntax

```
dst-address (include|exclude) (any4|any6)
dst-address (include|exclude) group ADDRESSGROUP
dst-address (include|exclude) ipaddress (A.B.C.D|X:X::X:X)
dst-address (include|exclude) ipaddress (A.B.C.D/M|X:X::X:X/M)
dst-address (include|exclude) range ((A.B.C.D A.B.C.D)|(X:X::X:X X:X::X:X))
```

Example

```
NGFW{running-firewall-rule-myrule1}dst-address exclude ipaddress 192.168.1.1
NGFW{running-firewall-rule-myrule1}dst-address include ipaddress 192.168.1.0/24
```

```
NGFW{running-firewall-rule-myrule1}dst-address include range 192.168.1.100
192.168.1.200
NGFW{running-firewall-rule-myrule1}dst-address include group mygroup1
```

NGFW{running-firewall-rule-myrule1}dst-zone

Apply destination security zone.

Syntax

```
dst-zone (include|exclude) ZONENAME
```

Example

```
NGFW{running-firewall-rule-myrule1}dst-zone include myzone1
NGFW{running-firewall-rule-myrule1}dst-zone exclude myzone1
```

NGFW{running-firewall-rule-myrule1}enable

Enable rule.

Syntax

```
enable
```

Example

```
NGFW{running-firewall-rule-myrule1}enable
```

NGFW{running-firewall-rule-myrule1}move

Move firewall rule position in the rule table.

Syntax

```
move after XRULEID
move before XRULEID
move to position VALUE
```

Example

```
NGFW{running-firewall-rule-myrule1}move after myrule2
NGFW{running-firewall-rule-myrule1}move before myrule2
NGFW{running-firewall-rule-myrule1}move to position 1
```

NGFW{running-firewall-rule-myrule1}profile

Apply profile.

Syntax

```
profile (reputation REPPROFILE [ips IPSPROFILE])|(ips IPSPROFILE [reputation
REPPROFILE])
```

Example

```
NGFW{running-firewall-rule-myrule1}profile ips "Default IPS Profile" reputation
"Default Reputation Profile"
NGFW{running-firewall-rule-myrule1}profile ips "Default IPS Profile"
NGFW{running-firewall-rule-myrule1}profile reputation "Default Reputation Profile"
```

NGFW{running-firewall-rule-myrule1}schedule

Apply schedule.

Syntax

```
schedule (include|exclude) SCHEDULENAME
```

Example

```
NGFW{running-firewall-rule-myrule1}schedule include myhours1
NGFW{running-firewall-rule-myrule1}schedule exclude myhours1
```

NGFW{running-firewall-rule-myrule1}services

Apply IP Services.

Syntax

```
services (include|exclude) (service SERVICENAME)
services (include|exclude) (protocol PROTONUM)
services (include|exclude) (port tcp PORT [to PORT])
services (include|exclude) (port udp PORT [to PORT])
services (include|exclude) (icmp ICMP-CODENAMES|(TYPE [CODE]))
services (include|exclude) (icmpv6 ICMP6-CODENAMES|(TYPE [CODE]))
```

Example

```
NGFW{running-firewall-rule-myrule1}services include protocol 6
NGFW{running-firewall-rule-myrule1}services include port tcp 443
NGFW{running-firewall-rule-myrule1}services include service http
NGFW{running-firewall-rule-myrule1}services exclude icmpv6 any
```

NGFW{running-firewall-rule-myrule1}src-address

Apply source addresses.

Syntax

```
src-address include (any4|any6)
src-address include group ADDRESSGROUP
src-address include ipaddress (A.B.C.D|X:X::X:X)
src-address include ipaddress (A.B.C.D/M|X:X::X:X/M)
src-address include range ((A.B.C.D A.B.C.D)|(X:X::X:X X:X::X:X))
src-address exclude (any4|any6)
src-address exclude group ADDRESSGROUP
src-address exclude ipaddress (A.B.C.D|X:X::X:X)
src-address exclude ipaddress (A.B.C.D/M|X:X::X:X/M)
src-address exclude range ((A.B.C.D A.B.C.D)|(X:X::X:X X:X::X:X))
```

Example

```
NGFW{running-firewall-rule-myrule1}src-address exclude ipaddress 192.168.1.1
NGFW{running-firewall-rule-myrule1}src-address include ipaddress 192.168.1.0/24
NGFW{running-firewall-rule-myrule1}src-address include range 192.168.1.100
192.168.1.200
NGFW{running-firewall-rule-myrule1}src-address include group mygroup1
```

NGFW{running-firewall-rule-myrule1}src-zone

Apply source security zone.

Syntax

```
src-zone (include|exclude) ZONENAME
```

Example

```
NGFW{running-firewall-rule-myrule1}src-zone include myzone1
NGFW{running-firewall-rule-myrule1}src-zone exclude myzone1
```

NGFW{running-firewall-rule-myrule1}user

Apply user name.

Syntax

```
user (include|exclude) USER_NAME
```

Example

```
NGFW{running-firewall-rule-myrule1}user include myuser1
```

NGFW{running-firewall-rule-myrule1}user-group

Apply user group name or LDAP-group DN.

Syntax

```
user-group (include|exclude) (USER_GRP_NAME|LDAP_GROUP_DN)
```

Example

```
NGFW{running-firewall-rule-myrule1}user-group include group1
```

running-gen Context Commands

NGFW{running}gen

NGFW{running-gen}arp

Configure static ARP entry.

Syntax

```
arp A.B.C.D INTERFACE MAC
```

```
A.B.C.D     IPv4 address
INTERFACE   Interface name
MAC         Ethernet MAC address (e.g 00:02:b3:39:ba:d2)
```

Example

```
NGFW{running-gen}arp 192.168.1.1 ethernet5 a1:b2:c3:d4:e5:f6
```

NGFW{running-gen}auto-restart

Enable or disable automatic restart on detection of a critical problem.

Syntax

```
auto-restart (enable|disable)
```

Example

```
NGFW{running-gen}auto-restart enable
```

NGFW{running-gen}delete

Delete file or configuration item.

Syntax

```
delete arp (all|(ENTRY INTERFACE))
delete host (NAME|all)
delete ndp (all|(ENTRY INTERFACE))
```

Example

```
NGFW{running-gen}delete arp 192.168.1.1 ethernet5
```

```
NGFW{running-gen}delete host myhost
NGFW{running-gen}delete ndp 100::1 ethernet5
NGFW{running-gen}delete arp all
NGFW{running-gen}help delete arp
Delete configured static ARP entry
Syntax: delete arp all|(ENTRY INTERFACE)
  delete      Delete file or configuration item
  arp         Delete configured static ARP entry
  all         All settings
  ENTRY       IPv4 address of ARP entry
  INTERFACE   Interface of NDP entry
```

NGFW{running-gen}ephemeral-port-range

Set the range of the ephemeral port (default is 32768-61000).

Syntax

```
ephemeral-port-range (default|(LOWRANGE HIGHRANGE))
default                Default port range value 32768-61000 is applied
LOWRANGE               Value of the first port
HIGHRANGE              Value of the last port
```

Example

```
NGFW{running-gen}ephemeral-port-range default
NGFW{running-gen}ephemeral-port-range 32768 61000
```

NGFW{running-gen}forwarding

Enable or disable IPv4/IPv6 forwarding.

Syntax

```
forwarding (ipv4|ipv6) (enable|disable)
```

Example

```
NGFW{running-gen}forwarding ipv4 enable
NGFW{running-gen}forwarding ipv6 enable
```

NGFW{running-gen}host

Configure static address to host name association.

Syntax

```
host NAME (A.B.C.D|X:X::X:X)
```

Example

```
NGFW{running-gen}host myhost 192.168.1.1
NGFW{running-gen}host myhost 100:0:0:0:0:0:0:1
```

NGFW{running-gen}https

Enable or disable WEB server configuration.

Syntax

```
https (enable|disable)
```

Example

```
NGFW{running-gen}https enable
```

NGFW{running-gen}inband-management

Inband Management.

Syntax

```
inband-management (enable|disable)
```

Example

```
NGFW{running-gen}inband-management enable
```

NGFW{running-gen}management-service

Management of a service to use the management port or the network port.

Syntax

```
management-service all (management|network)
management-service dns (management|network)
management-service email (management|network)
management-service ldap (management|network)
management-service ntp (management|network)
management-service radius (management|network)
management-service remote-syslog (management|network)
management-service snmp (management|network)
```

Example

```
NGFW{running-gen}management-service all management
NGFW{running-gen}management-service all network
NGFW{running-gen}management-service ldap network
NGFW{running-gen}management-service email network
NGFW{running-gen}management-service snmp management
```

Example

```
NGFW{running-gen}help management-service
Set a management service to either use management port or network port
all                Set all management services to use management port or network port
dns                Set the DNS service to use the management port or the network port
email              Set the email service to use management port or network port
ldap               Set the LDAP service to use the management port or the network port
ntp                Set the NTP service to use the management port or the network port
radius             Set the RADIUS service to use management port or the network port
remote-syslog      Set remote syslog service to use management port or network port
snmp               Set the SNMP service to use the management port or the network port
management         Set service to use management port
network            Set service to use network port
```

NGFW{running-gen}ndp

Configure static NDP entry.

Syntax

```
ndp X:X::X:X INTERFACE MAC
X:X::X:X    IPv6 address
INTERFACE   Interface name
MAC         Ethernet MAC address (e.g 00:02:b3:39:ba:d2)
```

Example

```
NGFW{running-gen}ndp 100:0:0:0:0:0:0:1 ethernet5 a1:b2:c3:d4:e5:f6
```

NGFW{running-gen}ssh

Enable or disable ssh service.

Syntax

```
ssh (enable|disable)
```

Example

```
NGFW{running-gen}ssh enable
```

NGFW{running-gen}timezone

Display or configure time zone.

Syntax

```
timezone GMT
timezone REGION CITY

REGION
(Africa|America|Antarctica|Arctic|Asia|Atlantic|Australia|Europe|Indian|Pacific)
```

Example

```
NGFW{running-gen}timezone America Chicago
NGFW{running-gen}timezone GMT
```

running-global-inspection Context Commands

NGFW{running}global-inspection

NGFW{running-global-inspection}default-inspection

Apply default inspection profile.

Syntax

```
default-inspection ips-profile (IPSPROFILE|none)
default-inspection reputation-profile (REPPROFILE|none)
```

Example

```
NGFW{running-global-inspection}default-inspection reputation-profile ?
Valid entries at this position are:
REPPROFILE    Existing reputation profile
none          Disable security profile
```

NGFW{running-global-inspection}unknown-app

Apply inspection profile during application detection phase.

Syntax

```
unknown-app (ips-profile IPSPROFILE|none)|(reputation-profile REPPROFILE|none)
```

Example

```
NGFW{running-global-inspection}unknown-app ?
Valid entries at this position are:
  ips-profile          Apply IPS profile
  reputation-profile   Apply reputation profile
```

NGFW{running}interface gre0

NGFW{running-gre0}autoconfv6

Enable or disable IPv6 autoconfiguration on interface.

Syntax

```
autoconfv6 (enable|disable)
```

Example

```
NGFW{running-gre0}autoconfv6 enable
```

NGFW{running-gre0}bind

Configure the GRE tunnel encapsulation.

Syntax

```
bind (local global ip) (remote global ip)
bind A.B.C.D A.B.C.D
bind X:X::X:X X:X::X:X
```

Example

```
NGFW{running-gre0}bind 192.168.1.1 192.168.2.1
NGFW{running-gre0}bind 2001:2:0:0:0:0:0:1 2001:db8:0:0:0:0:0:1
```

NGFW{running-gre0}checksum

Enable or disable GRE Checksum.

Syntax

```
checksum (enable|disable)
```

Example

```
NGFW{running-gre0}checksum enable
```

NGFW{running-gre0}delete

Delete file or configuration item.

Syntax

```
delete bind
delete ip igmp
delete ip igmp version
delete ip ospf area
delete ip ospf authentication mode md5 KEY_ID KEY
delete ip ospf authentication mode text KEY
delete ip ospf cost COST
delete ip ospf dead-interval VALUE
delete ip ospf hello-interval VALUE
delete ip ospf priority VALUE
delete ip ospf retransmit-interval VALUE
delete ip ospf transmit-delay VALUE
delete ip rip
delete ip rip authentication mode md5
delete ip rip authentication mode text
delete ip rip receive version VERSION
```

```
delete ip rip send version VERSION
delete ip rip split-horizon
delete ipaddress A.B.C.D
delete ipaddress X:X::X:X
delete ipaddress all
delete ipv6 mld
delete ipv6 mld version
delete ipv6 ospfv3 area
delete ipv6 ospfv3 cost
delete ipv6 ospfv3 dead-interval
delete ipv6 ospfv3 hello-interval
delete ipv6 ospfv3 priority
delete ipv6 ospfv3 retransmit-interval
delete ipv6 ospfv3 transmit-delay
delete ipv6 ripng
delete ipv6 ripng split-horizon
delete prefix all|X:X::X:X/M
delete shutdown
```

Example

```
NGFW{running-gre0}delete bind
NGFW{running-gre0}delete ip igmp version
NGFW{running-gre0}delete ip igmp
NGFW{running-gre0}delete ip ospf authentication mode md5 1 secret
NGFW{running-gre0}delete ip ospf authentication mode text secret
NGFW{running-gre0}delete ip ospf cost 1
NGFW{running-gre0}delete ip ospf dead-interval 1
NGFW{running-gre0}delete ip ospf hello-interval 1
NGFW{running-gre0}delete ip ospf priority 1
NGFW{running-gre0}delete ip ospf retransmit-interval 3
NGFW{running-gre0}delete ip ospf transmit-delay 1
NGFW{running-gre0}delete ip rip authentication mode md5
NGFW{running-gre0}delete ip rip authentication mode text
NGFW{running-gre0}delete ip rip receive version v2-only
NGFW{running-gre0}delete ip rip send version v2-only
NGFW{running-gre0}delete ip rip split-horizon poison-reverse
NGFW{running-gre0}delete ip rip split-horizon
NGFW{running-gre0}delete ipaddress 10.10.10.1 10.11.11.1
NGFW{running-gre0}delete ipaddress 100:10:10:0:0:0:0:1 100:11:11:0:0:0:0:1
NGFW{running-gre0}delete ipv6 mld version
NGFW{running-gre0}delete ipv6 ospfv3 area
NGFW{running-gre0}delete ipv6 ospfv3 cost
NGFW{running-gre0}delete ipv6 ospfv3 dead-interval
NGFW{running-gre0}delete ipv6 ospfv3 hello-interval
NGFW{running-gre0}delete ipv6 ospfv3 priority
NGFW{running-gre0}delete ipv6 ospfv3 retransmit-interval
NGFW{running-gre0}delete ipv6 ospfv3 transmit-delay
NGFW{running-gre0}delete ipv6 ripng split-horizon poison-reverse
NGFW{running-gre0}delete ipv6 ripng split-horizon
```

NGFW{running-gre0}description

Enter description for the interface.

Syntax

```
description TEXT
```

Example

```
NGFW{running-gre0}description "GRE tunnel 0"
```

NGFW{running-gre0}ip

Configure IP settings.

Syntax

```
ip igmp
ip igmp version (1|2|3)
ip ospf area (A.B.C.D|(0-4294967295))
ip ospf authentication mode md5 (1-255) KEY
ip ospf authentication mode text KEY
ip ospf cost (1-65535)
ip ospf dead-interval (1-65535)
ip ospf hello-interval (1-65535) [A.B.C.D]
ip ospf priority (0-255)
ip ospf retransmit-interval (3-65535)
ip ospf transmit-delay (1-65535)
ip rip
ip rip authentication mode md5 (0-2147483647) KEY
ip rip authentication mode text
ip rip receive version (v1-only|v2-only|v1-or-v2)
ip rip send version (v1-only|v2-only|v1-or-v2)
ip rip split-horizon [poison-reverse]
```

Example

```
NGFW{running-gre0}ip igmp version 3
NGFW{running-gre0}ip ospf area 1
NGFW{running-gre0}ip ospf authentication mode md5 1 mysecret
NGFW{running-gre0}ip ospf authentication mode text mysecret
NGFW{running-gre0}ip ospf cost 1
NGFW{running-gre0}ip ospf dead-interval 1
NGFW{running-gre0}ip ospf hello-interval 1
NGFW{running-gre0}ip ospf priority 1
NGFW{running-gre0}ip ospf retransmit-interval 3
NGFW{running-gre0}ip ospf transmit-delay 1
NGFW{running-gre0}ip rip authentication mode md5 1 mysecret
NGFW{running-gre0}ip rip authentication mode text
Enter key: up to 16 characters:******
NGFW{running-gre0}ip rip receive version v2-only
NGFW{running-gre0}ip rip send version v2-only
NGFW{running-gre0}ip rip split-horizon poison-reverse
```

NGFW{running-gre0}ipaddress

Configure endpoints IP address.

Syntax

```
ipaddress (local gre endpoint ipaddress) (remote gre endpoint ipaddress)
ipaddress A.B.C.D A.B.C.D
ipaddress X:X::X:X X:X::X:X
```

Example

```
NGFW{running-gre0}ipaddress 10.10.10.1 10.11.11.1
NGFW{running-gre0}ipaddress 100:10:10:0:0:0:0:1 100:11:11:0:0:0:0:1
```

NGFW{running-gre0}ipv6

Configure IPv6 settings.

Syntax

```
ipv6 mld
ipv6 mld version (1|2)
ipv6 ospfv3 area (A.B.C.D|(0-4294967295))
ipv6 ospfv3 cost COST
ipv6 ospfv3 dead-interval VALUE
ipv6 ospfv3 hello-interval VALUE
ipv6 ospfv3 priority VALUE
ipv6 ospfv3 retransmit-interval VALUE
ipv6 ospfv3 transmit-delay VALUE
ipv6 ripng
ipv6 ripng split-horizon [poison-reverse]
```

Example

```
NGFW{running-gre0}ipv6 mld version 2
NGFW{running-gre0}ipv6 ospfv3 area 1
NGFW{running-gre0}ipv6 ospfv3 cost 1
NGFW{running-gre0}ipv6 ospfv3 dead-interval 1
NGFW{running-gre0}ipv6 ospfv3 hello-interval 1
NGFW{running-gre0}ipv6 ospfv3 priority 1
NGFW{running-gre0}ipv6 ospfv3 retransmit-interval 3
NGFW{running-gre0}ipv6 ospfv3 transmit-delay 1
NGFW{running-gre0}ipv6 ripng split-horizon poison-reverse
```

NGFW{running-gre0}key

Configure GRE key.

Syntax

```
key (enable|disable)
key (0-4294967295)

Enable GRE key - use a default key
Disable GRE key
Set GRE key value
```

Example

```
NGFW{running-gre0}key enable
```

NGFW{running-gre0}mtu

Configure interface MTU.

Syntax

```
mtu (default|(68-9216))
```

Example

```
NGFW{running-gre0}mtu 1500
```

NGFW{running-gre0}shutdown

Shutdown logical interface state.

Syntax

```
shutdown
```

Example

```
NGFW{running-gre0}shutdown
```

NGFW{running-gre0}tcp4mss

Configure interface TCP MSS for IPv4.

Syntax

```
tcp4mss (disable|automatic|4-65535)

disable     Disable service
automatic   Automatically select TCP MSS based on interface MTU
VALUE       TCP MSS value for IPv4
```

Example

```
NGFW{running-gre0}tcp4mss automatic
```

NGFW{running-gre0}tcp6mss

Configure interface TCP MSS for IPv6.

Syntax

```
tcp6mss (disable|automatic|4-65535)

disable     Disable service
automatic   Automatically select TCP MSS based on interface MTU
VALUE       TCP MSS value for IPv6
```

Example

```
NGFW{running-gre0}tcp6mss automatic
```

running-high-availability Context Commands

NGFW{running}high-availability

NGFW{running-high-availability}delete

Delete file or configuration item.

Syntax

```
delete failover-group base-mac
delete failover-group name

base-mac   Base MAC address
name       Failover group name
```

Example

```
NGFW{running-high-availability}delete failover-group name
```

NGFW{running-high-availability}disable

Disable high-availability.

Syntax

```
disable
```

Example

```
NGFW{running-high-availability}disable
```

NGFW{running-high-availability}enable

Enable high-availability.

Syntax

```
enable
```

Example

```
NGFW{running-high-availability}enable
```

NGFW{running-high-availability}failover-group

Allows you to define name and MAC address for a Failover Group.

Syntax

```
failover-group base-mac X:X:X:X:X:X
failover-group name NAME
```

Example

```
NGFW{running-high-availability}failover-group name mygroupname
```

NGFW{running-high-availability}state-sync

Allows you to define state synchronization.

Syntax

```
state-sync global [enable|disable]
state-sync firewall [enable|disable]
state-sync firewall [log-level
(alert|critical|debug|emergency|error|info|notice|warning|none)]
state-sync ips [enable|disable]
state-sync ips [log-level
(alert|critical|debug|emergency|error|info|notice|warning|none)]
state-sync routing [enable|disable]
state-sync routing [log-level
(alert|critical|debug|emergency|error|info|notice|warning|none)]
```

Example

```
NGFW{running-high-availability}state-sync firewall enable
```

running-ips Context Commands

Immediate Commit Feature. Changes take effect immediately.

NGFW{running}ips

NGFW{running-ips}afc-mode

Configures AFC mode.

Syntax

```
afc-mode AFCMODE
```

Example

```
NGFW{running-ips}afc-mode ?
Valid entries at this position are:
```

```
  automatic   Automatic AFC mode
  manual      Manual AFC mode
```

NGFW{running-ips}afc-severity

Configures AFC severity level.

Syntax

```
afc-severity SEVERITY
```

Example

```
NGFW{running-ips}afc-severity ?
Valid entries for SEVERITY:
  critical   Critical severity
  error      Error severity
  info       Info severity
  warning    Warning severity
```

NGFW{running-ips}connection-table

Configures connection table timeout.

Syntax

```
connection-table TIMEOUTTYPE SECONDS
TIMEOUTTYPE        Connection table timeout type
Possible values for TIMEOUTTYPE are:
    non-tcp-timeout    Connection table non-tcp timeout
    timeout            Connection table timeout
    trust-timeout      Connection table trust timeout
SECONDS            Connection table timeout seconds
```

Example

```
NGFW{running-ips}connection-table trust-timeout 60
```

NGFW{running-ips}delete

Allows you to delete a profile.

Syntax

```
delete profile XPROFILENAME
```

Example

```
NGFW{running-ips}delete profile myprofile
```

NGFW{running-ips}deployment-choices

Gets deployment choices.

Syntax

```
deployment-choices
```

Example

```
NGFW{running-ips}deployment-choices ?
Name            Description:
-------------------------------------------------------------
Default         "Recommended for general deployment."
```

```
Aggressive      "Offers a more aggressive security posture that may require tuning
                based upon specific application protocol usage."
Core            "Recommended for deployment in the network core."
Edge            "Recommended for deployment in a Server Farm/DMZ."
Perimeter       "Recommended for deployment at an Internet entry point."
```

NGFW{running-ips}display-categoryrules

Display category rules for all profiles.

Syntax

```
display-categoryrules
```

Example

```
NGFW{running-ips}display-categoryrules ?
category "Streaming Media" enabled actionset "Recommended"
category "Identity Theft" enabled actionset "Recommended"
category "Virus" enabled actionset "Recommended"
category "Spyware" enabled actionset "Recommended"
category "IM" enabled actionset "Recommended"
category "Network Equipment" enabled actionset "Recommended"
category "Traffic Normalization" enabled actionset "Recommended"
category "P2P" enabled actionset "Recommended"
category "Vulnerabilities" enabled actionset "Recommended"
category "Exploits" enabled actionset "Recommended"
category "Reconnaissance" enabled actionset "Recommended"
category "Security Policy" enabled actionset "Recommended"
```

NGFW{running-ips}gzip-decompression

Sets GZIP decompression mode.

Syntax

```
gzip-decompression (enable|disable)
```

Example

```
NGFW{running-ips}gzip-decompression enable
```

NGFW{running-ips}profile

Allows you to create or enter an IPS profile.

Syntax

```
profile PROFILENAME
```

Example

NGFW{running-ips}profile *myprofile*

NGFW{running-ips}quarantine-duration

Sets quarantine duration.

Syntax

```
quarantine-duration DURATION
DURATION    value between 1 to 1440 minutes
```

Example

```
NGFW{running-ips}quarantine-duration 60
```

NGFW{running-ips}rename

Renames a profile.

Syntax

```
rename profile PROFILENAME NEWPROFILENAME
```

Example

```
NGFW{running-ips}rename profile myprofile yourprofile
```

running-ips-X Context Commands

Immediate Commit Feature. Changes take effect immediately.

NGFW{running-ips}profile 1
NGFW{running-ips-1}categoryrule

Enters categoryrule context.

Syntax

```
categoryrule
```

Example

```
NGFW{running-ips-1}categoryrule
NGFW{running-ips-1-categoryrule}
NGFW{running-ips-1-categoryrule} ?
Valid entries at this position are:
  category                  Custom category keyword
  display                   Display category rules for profile
  help                      Display help information
NGFW{running-ips-1-categoryrule}display
    categoryrule
      category "Network Equipment" enabled actionset "Recommended"
      category "IM" enabled actionset "Recommended"
      category "Spyware" enabled actionset "Recommended"
      category "Virus" enabled actionset "Recommended"
      category "Identity Theft" enabled actionset "Recommended"
      category "Streaming Media" enabled actionset "Recommended"
      category "Security Policy" enabled actionset "Recommended"
      category "Reconnaissance" enabled actionset "Recommended"
      category "Exploits" enabled actionset "Recommended"
      category "Vulnerabilities" enabled actionset "Recommended"
      category "P2P" enabled actionset "Recommended"
      category "Traffic Normalization" enabled actionset "Recommended"
      exit
```

NGFW{running-ips-1}delete

Delete file or configuration item.

Syntax

```
delete filter FILTERNUMBER

FILTERNUMBER   Existing filter number
```

Example

```
NGFW{running-ips-1}delete filter 9
```

NGFW{running-ips-1}deployment

Change deployment.

Syntax

```
deployment (Aggressive|Core|Default|Edge|Perimeter)
```

Example

```
NGFW{running-ips-1}deployment Default
```

NGFW{running-ips-1}description

Edit description for a profile.

Syntax

```
description DESCRIPTION
```

Example

```
NGFW{running-ips-1}description "my description"
```

NGFW{running-ips-1}filter

Creates or enters a filter context.

Syntax

```
filter FILTERNUMBER
```

Example

```
NGFW{running-ips-1}filter 200
```

running-ipsec Context Commands

NGFW{running}vpn ipsec

NGFW{running-ipsec}delete

Delete file or configuration item.

Syntax

```
delete log vpn CONTACT-NAME
delete phase1 proposal (all|NAME)
delete phase2 proposal (all|NAME)
delete policy (all|NAME)
delete pre-shared-keys (all|A.B.C.D|X:X::X:X|HOSTNAME) [vrf-id ID|any]
delete retransmit-timeout
delete retransmit-tries
delete trust (all|CANAME)
delete user
delete vpn (all|NAME)

Valid entries:
log                 Delete a Notification Contact from a log service
phase1              Delete Phase1 proposal
phase2              Delete Phase2 Proposal
policy              Delete IPsec Policy
```

```
pre-shared-keys      Delete pre-shared-keys
retransmit-timeout   Delete Dead Peer Detection retransmit-timeout
retransmit-tries     Delete Dead Peer Detection retransmit-tries
trust                Delete certification authority trust
user                 delete user context
vpn                  Delete IPsec Virtual Private Networks
```

Example

```
NGFW{running-ipsec}delete phase1 proposal all
```

NGFW{running-ipsec}ipsec

Enables or disables IPsec.

Syntax

```
ipsec (enable|disable)
```

Example

```
NGFW{running-ipsec}ipsec enable
```

NGFW{running-ipsec}log

Add log to a log session.

Syntax

```
log vpn CONTACT-NAME [SEVERITY]
```

```
Valid entries:
vpn                Configure log for VPN (IPSec) services
CONTACT-NAME       Notification Contact name
```

Example

```
NGFW{running-ipsec}log vpn fred warning
```

NGFW{running-ipsec}manual

Enters manual Security Association context.

Syntax

```
manual
```

Example

```
NGFW{running-ipsec}manual
NGFW{running-manual-sa}
```

NGFW{running-ipsec}phase1

Enters phase1 proposal context.

Syntax

```
phase1 VERSION proposal NAME
```

```
Valid entries:
VERSION     1 (IKE Version 1)
            2 (IKE Version 2)
proposal    Phase1 proposal
NAME        Phase1 proposal name : alphanumeric, underscore, dash excluding 'all'
```

Example

```
NGFW{running-ipsec}phase1 1 proposal propname
NGFW{running-phase1-proposal-propname}help
NGFW{running-phase1-proposal-propname}?
```

NGFW{running-ipsec}phase2

Enters phase2 proposal context.

Syntax

```
phase2 VERSION proposal NAME

Valid entries:
VERSION     1 (IKE Version 1)
            2 (IKE Version 2)
proposal    Phase1 proposal
NAME        Phase1 proposal name : alphanumeric, underscore, dash excluding 'all'
```

Example

```
NGFW{running-ipsec}phase2 1 proposal propname
NGFW{running-phase2-proposal-propname}
```

NGFW{running-ipsec}policy

Enters IPSec Policy sub-context.

Syntax

```
policy NAME [PRIORITY]

Valid entries:
NAME       IPsec Policy Name : alphanumeric, underscore, and dash excluding 'all'
PRIORITY   Priority for NEW policy (1-5989)
```

Example

```
NGFW{running-ipsec}policy mypolicy 1
NGFW{running-ipsec-policy-mypolicy}
```

NGFW{running-ipsec}pre-shared-key

Configures pre-shared key (start with 0x for hexadecimal key).

Syntax

```
pre-shared-key local (A.B.C.D|X:X::X:X|LFQDN) remote (A.B.C.D|X:X::X:X|RFQDN|any)

Valid entries:
local            Configure local host
A.B.C.D          Local Peer IPv4 address
X:X::X:X         Local Peer IPv6 address
LFQDN            Hostname or user fqdn
remote           Configure remote host
A.B.C.D          Remote Peer IPv4 address
X:X::X:X         Remote Peer IPv6 address
RFQDN            Hostname or user fqdn
any              any remote IP Address
```

Example

```
NGFW{running-ipsec}pre-shared-key local 100:0:0:0:0:0:0:1 remote
2001:db8:0:0:0:0:0:1
```

```
Enter pre-shared key:**************
```

NGFW{running-ipsec}retransmit-timeout

Configures IKEv2 Dead Peer Detection retransmission timeout in seconds.

Syntax

```
retransmit-timeout TIMEOUT
TIMEOUT    Configure IKEv2 Dead Peer Detection retransmission timeout in seconds
```

Example

```
NGFW{running-ipsec}retransmit-timeout 60
```

NGFW{running-ipsec}retransmit-tries

Configures IKEv2 Dead Peer Detection maximum retransmission tries.

Syntax

```
retransmit-tries COUNT
COUNT   Configure IKEv2 Dead Peer Detection maximum retransmission tries
```

Example

```
NGFW{running-ipsec}retransmit-tries 4
```

NGFW{running-ipsec}trust

Configures certification authority trust.

Syntax

```
trust CANAME
CANAME   Certification authority name
```

Example

```
NGFW{running-ipsec}trust mycertname
```

NGFW{running-ipsec}user

Enter vpn user context.

Syntax

```
user
```

Example

```
NGFW{running-ipsec}user
NGFW{running-ipsec-user}help
```

NGFW{running-ipsec}vpn

Enter VPN context.

Syntax

```
vpn NAME
```

Example

```
NGFW{running-ipsec}vpn myvpn
NGFW{running-ipsec-vpn-myvpn}help
```

```
NGFW{running-ipsec-vpn-myvpn}?
```

running-ipsec-policy-X Context Commands and their Usage

NGFW{running}vpn ipsec

NGFW{running-ipsec}policy myipsecpolicy

NGFW{running-ipsec-policy-myipsecpolicy}mode

Configure encapsulation mode.

Syntax

```
mode MODE
```

Example

```
NGFW{running-ipsec-policy-myipsecpolicy}mode tunnel
```

NGFW{running-ipsec-policy-myipsecpolicy}policy

Enable or Disable IPsec Policy.

Syntax

```
policy enable|disable
```

Example

```
NGFW{running-ipsec-policy-myipsecpolicy}policy enable
```

NGFW{running-ipsec-policy-myipsecpolicy}rule

Configure IPsec traffic selector.

Syntax

```
rule SOURCE_ADDR REMOTE_ADDR PROTOCOL
```

Example

```
NGFW{running-ipsec-policy-myipsecpolicy}rule 172.16.1.1 172.16.2.2 any
```

NGFW{running-ipsec-policy-myipsecpolicy}vpn-name

Configure the VPN to use for this policy.

Syntax

```
vpn-name VPNNAME
```

Example

```
NGFW{running-ipsec-policy-myipsecpolicy}vpn-name mytunnel
```

NGFW{running}vpn ipsec

NGFW{running-ipsec}vpn myvpn

NGFW{running-ipsec-vpn-myvpn}certificate

Configure certificate name.

Syntax

```
certificate CERTNAME
```

Example

NGFW{running-ipsec-vpn-myvpn}delete

Delete file or configuration item.

Syntax

```
  delete certificate
  delete exchange-mode
  delete identity
  delete ip-pool
  delete peers
  delete proposal
  delete user-group
```

Example

NGFW{running-ipsec-vpn-myvpn}dpddelay

Configure Dead Peer Detection delay in seconds.

Syntax

```
dpddelay (SECONDS|disable)
dpddelay ((1-99999999999999999)|disable)
```

Example

```
NGFW{running-ipsec-vpn-myvpn}dpddelay 10
NGFW{running-ipsec-vpn-myvpn}dpddelay disable
```

NGFW{running-ipsec-vpn-myvpn}dpdtimeout

Configure IKEv1 Dead Peer Detection timeout interval in seconds.

Syntax

```
dpdtimeout SECONDS
dpdtimeout (1-99999999999999999)
```

Example

```
NGFW{running-ipsec-vpn-myvpn}dpdtimeout 90
```

NGFW{running-ipsec-vpn-myvpn}exchange-mode

Configure Phase1 Exchange Mode.

Syntax

```
exchange-mode (main|aggressive)
```

Example

```
NGFW{running-ipsec-vpn-myvpn}exchange-mode aggressive
```

NGFW{running-ipsec-vpn-myvpn}identity

Configure local and remote IKE Identities.

Syntax

```
identity local ((ip-address A.B.C.D|X:X::X:X|anyLADDR)|(fqdn
HOSTNAME|anyLHOSTNAME)|(user-fqdn EMAILADDRESS|anyLEMAIL)|(asn1dn
asn1dn|anyLASNDNAME)) [remote (ip-address A.B.C.D|X:X::X:X|anyRADDR)|(fqdn
HOSTNAME|anyRHOSTNAME)|(user-fqdn EMAILADDRESS|anyREMAIL)|(asn1dn
asn1dn|anyRASNDNAME)]
```

Example

```
NGFW{running-ipsec-vpn-myvpn}identity local nearside.example.com remote
farside.example.com
```

NGFW{running-ipsec-vpn-myvpn}ip-compression

Enable or disable IP Compression.

Syntax

```
ip-compression (enable|disable)
```

Example

```
NGFW{running-ipsec-vpn-myvpn}ip-compression enable
```

NGFW{running-ipsec-vpn-myvpn}ip-pool

Configure IP Pool for remote VPN clients.

Syntax

```
ip-pool (A.B.C.D/M|X:X::X:X/M)
```

Example

```
NGFW{running-ipsec-vpn-myvpn}ip-pool 192.168.1.0/24
```

NGFW{running-ipsec-vpn-myvpn}key

Configure Key exchange type.

Syntax

```
key (ike|manual)
```

Example

```
NGFW{running-ipsec-vpn-myvpn}key ike
```

NGFW{running-ipsec-vpn-myvpn}nat-traversal

Enable or disable NAT Traversal mode.

Syntax

```
nat-traversal (enable|disable)
```

Example

```
NGFW{running-ipsec-vpn-myvpn}nat-traversal enable
```

NGFW{running-ipsec-vpn-myvpn}peer

Configure local and remote VPN Peers.

Syntax

```
peer local (A.B.C.D|X:X::X:X) remote (A.B.C.D|X:X::X:X)
```

Example

```
NGFW{running-ipsec-vpn-myvpn}peer local 192.168.1.1 remote 192.168.2.2
```

NGFW{running-ipsec-vpn-myvpn}proposal

Configure Phase1 and Phase2 IKE proposals.

Syntax

```
proposal PHASE1 PHASE2
```

Example

```
NGFW{running-ipsec-vpn-myvpn}proposal myphase1 myphase2
```

NGFW{running-ipsec-vpn-myvpn}rekey

Enable or disable rekey.

Syntax

```
rekey (enable|disable)
```

Example

```
NGFW{running-ipsec-vpn-myvpn}rekey enable
```

NGFW{running-ipsec-vpn-myvpn}type

Configure VPN type.

Syntax

```
type (site-to-site|client-to-site)
```

Example

```
NGFW{running-ipsec-vpn-myvpn}type site-to-site
```

NGFW{running-ipsec-vpn-myvpn}user-group

Configure VPN user group.

Syntax

```
user-group GROUP
```

Example

```
NGFW{running-ipsec-vpn-myvpn}user-group myvpngroup
```

NGFW{running}l2tp-server0

NGFW{running-l2tp-server0}auth

Authenticated configuration.

Syntax

```
auth (enable|disable)
auth shared-secret (A.B.C.D|any) secret-key
```

Example

```
NGFW{running-l2tp-server0}auth enable
```

NGFW{running-l2tp-server0}bind

Configures bind service of L2TP server.

Syntax

```
bind (none|any|(A.B.C.D [port]))
```

```
Valid entries:
none      Remove bind configuration
any       Configure any bind
A.B.C.D   IPv4 address to bind
port      Port range (1024-65535)
```

Example

```
NGFW{running-l2tp-server0}bind 198.152.100.0
```

NGFW{running-l2tp-server0}delete

Deletes file or configuration item.

Syntax

```
delete auth shared-secret (A.B.C.D|all)
```

```
Valid entries:
auth            Delete authenticated configuration
shared-secret   Shared secret for an IPv4 address
A.B.C.D         IPv4 address
all             All settings
```

Example

```
NGFW{running-l2tp-server0}delete auth shared-secret all
```

NGFW{running-l2tp-server0}hiding

Enables or disables hiding configuration.

Syntax

```
hiding (enable|disable)
```

Example

```
NGFW{running-l2tp-server0}hiding enable
```

NGFW{running-l2tp-server0}sequencing

Enables or disables sequence configuration.

Syntax

```
sequencing (enable|disable)
```

Example

```
NGFW{running-l2tp-server0}sequencing enable
```

running-l2tpX Context Commands

NGFW{running}interface l2tp0

NGFW{running-l2tp0}auth

Authenticated configuration.

Syntax

```
auth l2tp (enable|disable)
auth l2tp shared-secret SECRET
auth ppp reply ALGORITHM
auth ppp user-id NAME PASSWORD

Valid entries:
l2tp   Configure L2TP authenticated options
ppp    Configure PPP authenticated options
Valid entries for ALGORITHM:
  pap         Pap authentication
  chap        Chap authentication
  chap-md5    Chap md5 authentication
  ms-chapv2   Ms chapv2 authentication
  ms-chap     Ms chap authentication
```

Example

```
NGFW{running-l2tp0}auth l2tp enable
NGFW{running-l2tp0}auth l2tp shared-secret secret
NGFW{running-l2tp0}auth ppp reply chap-md5
NGFW{running-l2tp0}auth ppp user-id myuser mypassword
```

NGFW{running-l2tp0}autoconfv6

Enable or disable IPv6 autoconfiguration on interface.

Syntax

```
autoconfv6 (enable|disable)
```

Example

```
NGFW{running-l2tp0}autoconfv6 enable
NGFW{running-l2tp0}autoconfv6 disable
```

NGFW{running-l2tp0}bind

Configure binding addresses of the L2TP tunnel.

Syntax

```
bind (none|(A.B.C.D A.B.C.D))
```

Example

```
NGFW{running-l2tp0}bind 192.168.2.1 192.168.200.1
NGFW{running-l2tp0}bind none
```

NGFW{running-l2tp0}delete

Delete file or configuration item.

Syntax

```
delete auth l2tp shared-secret
delete auth ppp reply (all|AUTH-ALGO)
delete auth ppp user-id
delete ip igmp
delete ip igmp version
delete ipv6 mld
delete ipv6 mld version
delete log-option ppp all
delete log-option ppp DEL-PPP-LOG-OPTION {1,10}
delete prefix all|X:X::X:X/M
delete shutdown
```

Example

```
NGFW{running-l2tp0}delete auth l2tp shared-secret
NGFW{running-l2tp0}delete auth ppp reply chap-md5
NGFW{running-l2tp0}delete auth ppp user-id
NGFW{running-l2tp0}
NGFW{running-l2tp0}delete ip igmp version
NGFW{running-l2tp0}delete ip igmp
NGFW{running-l2tp0}delete ipv6 mld
NGFW{running-l2tp0}delete log-option ppp all
NGFW{running-l2tp0}delete prefix 100::/64
NGFW{running-l2tp0}delete shutdown
```

NGFW{running-l2tp0}description

Enter description for the interface.

Syntax

```
description TEXT
```

Example

```
NGFW{running-l2tp0}description "l2tp interface 0"
```

NGFW{running-l2tp0}dns-request

Configure IP DNS server address request.

Syntax

```
dns-request (enable|disable)
```

Example

```
NGFW{running-l2tp0}dns-request enable
NGFW{running-l2tp0}dns-request disable
```

NGFW{running-l2tp0}ip

Configure IP settings.

Syntax

```
ip igmp
ip igmp version (1|2|3)
```

Example

```
NGFW{running-l2tp0}ip igmp
NGFW{running-l2tp0}ip igmp version 3
```

NGFW{running-l2tp0}ipcp

Enable or disable IPCP for IPv4.

Syntax

```
ipcp (enable|disable)
```

Example

```
NGFW{running-l2tp0}ipcp enable
NGFW{running-l2tp0}ipcp disable
```

NGFW{running-l2tp0}ipv6

Configure IPv6 settings.

Syntax

```
ipv6 mld
ipv6 mld version (1|2)
```

Example

```
NGFW{running-l2tp0}ipv6 mld
```

NGFW{running-l2tp0}ipv6cp

Enable or disable IPCP for IPv6.

Syntax

```
ipv6cp (enable|disable)
```

Example

```
NGFW{running-l2tp0}ipv6cp enable
NGFW{running-l2tp0}ipv6cp disable
```

NGFW{running-l2tp0}keep-alive

LCP keep alive period in seconds.

Syntax

```
keep-alive ppp disable
keep-alive ppp (default|(0-600)) [retry (0-600)]
```

Example

```
NGFW{running-l2tp0}keep-alive ppp default retry 1
NGFW{running-l2tp0}keep-alive ppp disable
```

NGFW{running-l2tp0}log-option

Add service log option.

Syntax

```
log-option ppp all
log-option ppp (PPP-LOG-OPTION)

PPP-LOG-OPTION valid entries:
auth     Link authentication events
ipcp     IPCP events and negotiation
ipv6cp   IPV6CP events and negotiation
l2tp     L2TP high level events
l2tp2    L2TP more detailed events
l2tp3    L2TP packet dumps
pptp     PPTP high level events
pptp2    PPTP more detailed events
pptp3    PPTP packet dumps
lcp      LCP events and negotiation
phys     Physical layer events
radius   Radius authentication events
echo     Keep-alive events
bund     Bundle events
iface    IP interface and route management events
link     Link events
frame    Dump all incoming and outgoing frames
fsm      All state machine events (except echo and reset)
```

Example

```
NGFW{running-l2tp0}log-option ppp all
```

NGFW{running-l2tp0}mru

Configure interface MRU.

Syntax

```
mru (default|(64-65535))
```

Example

```
NGFW{running-l2tp0}mru 1500
NGFW{running-l2tp0}mru default
```

NGFW{running-l2tp0}mtu

Configure interface MTU.

Syntax

```
mtu (default|(68-9216))
```

Example

```
NGFW{running-l2tp0}mtu 1500
```

NGFW{running-l2tp0}prefix

Configure IPv6 prefix in seconds.

Syntax

```
prefix X:X::X:X/M [valid-lifetime (1-4294967295)] [preferred-lifetime
(1-4294967295)]
```

Example

```
NGFW{running-l2tp0}prefix 100:0:0:0:0:0:0:0/64 valid-lifetime 2592000
preferred-lifetime 604800
```

NGFW{running-l2tp0}ra-autoconf-level

Modify IPv6 Router Advertisement autoconfiguration level.

Syntax

```
ra-autoconf-level AUTOCONF
Possible values for AUTOCONF are:
none          No parameter is autoconfigured
address       Address is autoconfigured
other         Some other parameters are autoconfigured
full          Most parameters are autoconfigured
```

Example

```
NGFW{running-l2tp0}ra-autoconf-level full
```

NGFW{running-l2tp0}ra-interval

Modify IPv6 Router Advertisement interval value in milliseconds.

Syntax

```
ra-interval (90-1800000)
```

Example

```
NGFW{running-l2tp0}ra-interval 600
```

NGFW{running-l2tp0}ra-interval-transmit

Modify IPv6 Router Advertisement interval transmit.

Syntax

```
ra-interval-transmit (enable|disable)
```

Example

```
NGFW{running-l2tp0}ra-interval-transmit enable
```

NGFW{running-l2tp0}ra-lifetime

Modify IPv6 Router Advertisement prefix lifetime in seconds.

Syntax

```
ra-lifetime (0-9000000)
(0 if none)
```

Example

```
NGFW{running-l2tp0}ra-lifetime 1800
```

NGFW{running-l2tp0}ra-mtu

Modify IPv6 Router Advertisement MTU value.

Syntax

```
ra-mtu (none|(68-9216))
none     Not configured
(0 if none)
```

Example

```
NGFW{running-l2tp0}ra-mtu 1500
```

NGFW{running-l2tp0}ra-transmit-mode

Modify IPv6 Router Advertisement transmit mode.

Syntax

```
ra-transmit-mode MODE

Possible values for MODE are:
always    Router Advert message is always sent
never     Router Advert message is never sent
smart     Router Advert message is sent if a prefix is defined
```

Example

```
NGFW{running-l2tp0}ra-transmit-mode smart
```

NGFW{running-l2tp0}sequencing

Enable the use of sequence numbers on data messages.

Syntax

```
sequencing (enable|disable)

Valid entries:
disable   Disable sequencing parameters
enable    Enable sequencing parameters
```

Example

```
NGFW{running-l2tp0}sequencing enable
```

NGFW{running-l2tp0}shutdown

Shutdown logical interface state.

Syntax

```
shutdown
```

Example

```
NGFW{running-l2tp0}shutdown
```

NGFW{running-l2tp0}tcp4mss

Configure interface TCP MSS for IPv4.

Syntax

```
tcp4mss (disable|automatic|VALUE)
```

```
Valid entries:
disable     Disable service
automatic   Automatically select TCP MSS based on interface MTU
VALUE       TCP MSS value for IPv4 (4-65535)
```

Example

```
NGFW{running-l2tp0}tcp4mss automatic
```

NGFW{running-l2tp0}tcp6mss

Configure interface TCP MSS for IPv6.

Syntax

```
tcp6mss (disable|automatic|VALUE)
```

```
Valid entries:
disable     Disable service
automatic   Automatically select TCP MSS based on interface MTU
VALUE       TCP MSS value for IPv6 (4-65535)
```

Example

```
NGFW{running-l2tp0}tcp6mss automatic
```

running-log Context Commands

NGFW{running}log

NGFW{running-log}delete

Delete file or configuration item.

Syntax

```
delete log audit CONTACT-NAME
delete log ipsec CONTACT-NAME
delete log quarantine CONTACT-NAME
delete log system CONTACT-NAME
delete log-option fib (events|kernel|memory|packet) [recv|send]
delete log-option ppp (all|DEL-PPP-LOG-OPTION){1,10}
delete log-option xmsd (all|LOG_OPTION)
```

Example

```
NGFW{running-log}delete log-option ?
Valid entries at this position are:
  fib    Delete fib log-option
  ppp    Delete PPP log options
  xmsd   Delete xmsd log-options

NGFW{running-log}delete log-option fib ?
Valid entries at this position are:
  events   Delete log-option fib events
  kernel   Delete log-option fib kernel
  memory   Delete log-option fib memory
  packet   Delete log-option fib packet (include recv and send)

NGFW{running-log}delete log-option fib events ?
Valid entries at this position are:
  <Enter>   Execute command
  recv      Delete log-option fib packet-recv
  send      Delete log-option fib packet-send
```

```
NGFW{running-log}delete log-option fib events recv
NGFW{running-log}delete log audit mycontactname ALL
NGFW{running-log}delete log vpn mycontactname error
NGFW{running-log}delete log quarantine mycontactname none
NGFW{running-log}delete log system mycontactname info
```

NGFW{running-log}log

Add log to a log session.

Syntax

```
log audit CONTACT-NAME [ALL|none]
log quarantine CONTACT-NAME [ALL|none]
log system CONTACT-NAME [SEVERITY]
log vpn CONTACT-NAME [SEVERITY]

Valid entries:
audit       Configure log for audit services
quarantine  Configure log for quarantine services
system      Configure log for all services
vpn         Configure log for VPN (IPSec) services
SEVERITY    alert|critical|debug|emergency|error|info|notice|warning|none
```

Example

```
NGFW{running-log}log audit mycontactname ALL
NGFW{running-log}log vpn mycontactname error
NGFW{running-log}log quarantine mycontactname none
NGFW{running-log}log system mycontactname info
```

NGFW{running-log}log-option

Add service log option.

Syntax

```
log-option fib (events|kernel|memory|packet) [recv|send]
log-option ppp (all|PPP-LOG-OPTION)
log-option xmsd (all|LOG_OPTION)

Valid entries:
fib    Configure FIB log options
Possible values for fib
  events    Enable logging fib events
  kernel    Enable logging fib kernel
  memory    Enable logging fib memory
  packet    Enable logging fib packet (include recv and send)
ppp    Configure PPP log options
xmsd   Configure xmsd log options

Possible values for ppp PPP-LOG-OPTION:
all      Enable all optional log items
auth     Link authentication events
ipcp     IPCP events and negotiation
ipv6cp   IPV6CP events and negotiation
l2tp     L2TP high level events
l2tp2    L2TP more detailed events
l2tp3    L2TP packet dumps
pptp     PPTP high level events
pptp2    PPTP more detailed events
```

```
pptp3    PPTP packet dumps
lcp      LCP events and negotiation
phys     Physical layer events
radius   Radius authentication events
echo     Keep-alive events
bund     Bundle events
iface    IP interface and route management events
link     Link events
frame    Dump all incoming and outgoing frames
fsm      All state machine events (except echo and reset)

Possible values for xmsd LOG_OPTION:
ethgrp         Enable logging ethgrp
addressgroups  Enable logging addressgroups
security-zones Enable logging security zones
bnet           Enable logging bnet
bridge         Enable logging bridgeport
captive-portal Enable logging captive portal
vlan           Enable logging vlan
segments       Enable logging segments
mgmt           Enable logging mgmt
interface      Enable logging interface
xms_configure  Enable logging xms configure
xms_process    Enable logging xms process
xms_stream     Enable logging xms stream
aaa            Enable logging aaa
accesspoint    Enable logging accesspoint
bfd            Enable logging bfd
cron           Enable logging cron
dhcp4client    Enable logging dhcp4 client
dhcp4sever     Enable logging dhcp4 server
dhcp6client    Enable logging dhcp6 client
dhcp6server    Enable logging dhcp6 server
dhcprelay      Enable logging dhcprelay
dns            Enable logging dns
dyndns         Enable logging dyndns
eapauth        Enable logging eapauth
ethernet       Enable logging ethernet
filter         Enable logging filter
firewall       Enable logging firewall
fmipv6         Enable logging fmipv6
fw_nat         Enable logging firewall policy nat
gre            Enable logging gre
ipsec          Enable logging ipsec
l2tpserver     Enable logging l2tpserver
linkmonitor    Enable logging linkmonitor
log            Enable logging log
loopback       Enable logging loopback
lsn            Enable logging nat lsn
dstm           Enable logging dstm
mig6to4        Enable logging migration 6to4
migisatap      Enable logging migration isatap
migXin4        Enable logging migration Xin4
migXin6        Enable logging migration Xin6
mobility       Enable logging mobility
multicastreg   Enable logging multicastreg
nat            Enable logging nat
ntp            Enable logging ntp
openvpn        Enable logging openvpn
```

```
osi             Enable logging osi
pdh             Enable logging pdh
pim4sm          Enable logging pim4sm
pim6sm          Enable logging pim6sm
ports           Enable logging ports
ppp             Enable logging ppp
pppoeserver     Enable logging pppoeserver
pppserver       Enable logging pppserver
routing         Enable logging routing
schedules       Enable logging schedules
serialport      Enable logging serialport
services        Enable logging services
snmp            Enable logging snmp
snoop           Enable logging snoop
svti            Enable logging svti
system          Enable logging system
qos             Enable logging qos
xmsupdate       Enable logging xmsupdate
vrf             Enable logging vrf
vrrp            Enable logging vrrp
wifi            Enable logging wifi
xipc            Enable logging xipc requests
```

Example

```
NGFW{running-log}log-option fib packet send
NGFW{running-log}log-option xmsd firewall
NGFW{running-log}log-option ppp auth
```

NGFW{running-log}sub-system

Sets sub-system log level.

Syntax

```
sub-system (COROSYNC|GATED|HTTPD|INIT|LOGIN|PACEMAKER|TOS|XMS|CRMADMIN)
[alert|critical|debug|emergency|error|info|notice|warning|none]

Possible values for SEVERITY are:
emergency    Panic condition messages (TOS critical)
alert        Immediate problem condition messages
critical     Critical condition messages
error        Error messages
warning      Warning messages
notice       Special condition messages
info         Informational messages
debug        Debug messages
debug0       TOS Debug0 messages
debug1       TOS Debug1 messages
debug2       TOS Debug2 messages
debug3       TOS Debug3 messages
none         Turn off messages
```

Example

```
NGFW{running-log}sub-system LOGIN alert
```

NGFW{running}interface loopback0

NGFW{running-loopback0}delete

Delete file or configuration item.

Syntax

```
delete ip ospf area
delete ip ospf authentication mode md5 (1-255) KEY
delete ip ospf authentication mode text KEY
delete ip ospf cost (1-65535)
delete ip ospf dead-interval (1-65535)
delete ip ospf hello-interval (1-65535)
delete ip ospf priority (0-255)
delete ip ospf retransmit-interval (3-65535)
delete ip ospf transmit-delay (1-65535)
delete ip rip
delete ip rip authentication mode md5
delete ip rip authentication mode text
delete ip rip receive version (v1-only|v2-only|v1-or-v2)
delete ip rip send version (v1-only|v2-only|v1-or-v2)
delete ip rip split-horizon
delete ipaddress (all|A.B.C.D/M|X:X::X:X/M)
delete ipaddress dhcpv4
delete ipaddress dhcpv6
delete ipv6 ospfv3 area
delete ipv6 ospfv3 cost
delete ipv6 ospfv3 dead-interval
delete ipv6 ospfv3 hello-interval
delete ipv6 ospfv3 priority
delete ipv6 ospfv3 retransmit-interval
delete ipv6 ospfv3 transmit-delay
delete ipv6 ripng
delete ipv6 ripng split-horizon
```

Example

```
NGFW{running-loopback0}delete ip rip split-horizon poison-reverse
NGFW{running-loopback0}delete ip rip split-horizon
NGFW{running-loopback0}delete ipaddress 192.168.1.1/24
NGFW{running-loopback0}delete ipaddress 100:0:0:0:0:0:0:1/64
NGFW{running-loopback0}delete ipv6 rip split-horizon poison-reverse
NGFW{running-loopback0}delete ipv6 rip split-horizon
NGFW{running-loopback0}delete ip ospf authentication mode md5 1 secret
NGFW{running-loopback0}delete ip ospf authentication mode text secret
NGFW{running-loopback0}delete ip ospf cost 1
NGFW{running-loopback0}delete ip ospf dead-interval 1
NGFW{running-loopback0}delete ip ospf hello-interval 1
NGFW{running-loopback0}delete ip ospf priority 1
NGFW{running-loopback0}delete ip ospf retransmit-interval 3
NGFW{running-loopback0}delete ip ospf transmit-delay 1
NGFW{running-loopback0}delete ip rip authentication mode md5
NGFW{running-loopback0}delete ip rip authentication mode text
NGFW{running-loopback0}delete ip rip receive version v2-only
NGFW{running-loopback0}delete ip rip send version v2-only
NGFW{running-loopback0}delete ipaddress 192.168.1.1/24
NGFW{running-loopback0}delete ipaddress 100:0:0:0:0:0:0:1/64
NGFW{running-loopback0}delete ipv6 ospfv3 area
NGFW{running-loopback0}delete ipv6 ospfv3 cost
```

```
NGFW{running-loopback0}delete ipv6 ospfv3 dead-interval
NGFW{running-loopback0}delete ipv6 ospfv3 hello-interval
NGFW{running-loopback0}delete ipv6 ospfv3 priority
NGFW{running-loopback0}delete ipv6 ospfv3 retransmit-interval
NGFW{running-loopback0}delete ipv6 ospfv3 transmit-delay
NGFW{running-loopback0}delete ipv6 ripng split-horizon poison-reverse
NGFW{running-loopback0}delete ipv6 ripng split-horizon
```

NGFW{running-loopback0}description

Enter description for the interface.

Syntax

```
description TEXT
```

Example

```
NGFW{running-loopback0}description "loopback interface 0"
```

NGFW{running-loopback0}ip

Configure IP settings.

Syntax

```
ip ospf area (A.B.C.D|(0-4294967295))
ip ospf authentication mode md5 (1-255) KEY
ip ospf authentication mode text KEY
ip ospf cost (1-65535)
ip ospf dead-interval (1-65535)
ip ospf hello-interval (1-65535) [A.B.C.D]
ip ospf priority (0-255)
ip ospf retransmit-interval (3-65535)
ip ospf transmit-delay (1-65535)
ip rip
ip rip authentication mode md5 (0-2147483647) KEY
ip rip authentication mode text
ip rip receive version (v1-only|v2-only|v1-or-v2)
ip rip send version (v1-only|v2-only|v1-or-v2)
ip rip split-horizon [poison-reverse]
```

Example

```
NGFW{running-loopback0}ip ospf area 1
NGFW{running-loopback0}ip ospf authentication mode md5 1 mysecret
NGFW{running-loopback0}ip ospf authentication mode text mysecret
NGFW{running-loopback0}ip ospf cost 1
NGFW{running-loopback0}ip ospf dead-interval 1
NGFW{running-loopback0}ip ospf hello-interval 1
NGFW{running-loopback0}ip ospf priority 1
NGFW{running-loopback0}ip ospf retransmit-interval 3
NGFW{running-loopback0}ip ospf transmit-delay 1
NGFW{running-loopback0}ip rip authentication mode md5 1 mysecret
NGFW{running-loopback0}ip rip authentication mode text
Enter key: up to 16 characters:******
NGFW{running-loopback0}ip rip receive version v2-only
NGFW{running-loopback0}ip rip send version v2-only
NGFW{running-loopback0}ip rip split-horizon poison-reverse
```

NGFW{running-loopback0}ipaddress

Configure IP address.

Syntax

```
ipaddress (A.B.C.D/M|X:X::X:X/M) [primary]
ipaddress dhcpv4
```

Example

```
NGFW{running-loopback0}ipaddress 192.168.1.1/24
NGFW{running-loopback0}ipaddress 100:0:0:0:0:0:0:1/64 primary
```

NGFW{running-loopback0}ipv6

Configure IPv6 settings.

Syntax

```
ipv6 ospfv3 area (A.B.C.D|(0-4294967295))
ipv6 ospfv3 cost COST
ipv6 ospfv3 dead-interval VALUE
ipv6 ospfv3 hello-interval VALUE
ipv6 ospfv3 priority VALUE
ipv6 ospfv3 retransmit-interval VALUE
ipv6 ospfv3 transmit-delay VALUE
ipv6 ripng
ipv6 ripng split-horizon [poison-reverse]
```

Example

```
NGFW{running-loopback0}ipv6 ospfv3 area 1
NGFW{running-loopback0}ipv6 ospfv3 cost 1
NGFW{running-loopback0}ipv6 ospfv3 dead-interval 1
NGFW{running-loopback0}ipv6 ospfv3 hello-interval 1
NGFW{running-loopback0}ipv6 ospfv3 priority 1
NGFW{running-loopback0}ipv6 ospfv3 retransmit-interval 3
NGFW{running-loopback0}ipv6 ospfv3 transmit-delay 1
NGFW{running-loopback0}ipv6 ripng split-horizon poison-reverse
```

NGFW{running-loopback0}mtu

Configure interface MTU.

Syntax

```
mtu (default|(68-9216))
```

Example

```
NGFW{running-loopback0}mtu 1500
```

running-manual-sa Context Commands

NGFW{running}vpn ipsec
NGFW{running-ipsec}manual
NGFW{running-manual-sa}delete

Delete file or configuration item.

Syntax

```
delete sa esp all
```

```
delete sa esp ((A.B.C.D|X:X::X:X) SPI)

Valid entries:
sa                  Configure Security Association
esp                 Delete ESP Security Associations
all                 Delete all ESP Security Associations
(A.B.C.D|X:X::X:X)  Security Association remote address
SPI                 Security Parameter Index
```

Example

```
NGFW{running-manual-sa}delete sa esp 192.168.2.2 1
```

NGFW{running-manual-sa}sa

Configure Security Association.

Syntax

```
sa esp (A.B.C.D A.B.C.D) SPI MODE ((CRYPTALGO CRYPTKEY)|null) AUTHALGO AUTHKEY
sa esp (X:X::X:X X:X::X:X) SPI MODE ((CRYPTALGO CRYPTKEY)|null) AUTHALGO AUTHKEY
sa esp (A.B.C.D A.B.C.D) (1-4294967295) (tunnel|transport) ((3des-cbc
CRYPTKEY)|(aes-cbc CRYPTKEY)|null) (hmac-md5 AUTHKEY|hmac-sha1 AUTHKEY)
sa esp (X:X::X:X X:X::X:X) (1-4294967295) (tunnel|transport) ((3des-cbc
CRYPTKEY)|(aes-cbc CRYPTKEY)|null) (hmac-md5 AUTHKEY|hmac-sha1 AUTHKEY)

Valid entries:
esp         ESP security association
A.B.C.D     Security Association source IPv4 address
A.B.C.D     Security Association destination IPv4 address
X:X::X:X    Security Association source IPv6 address
X:X::X:X    Security Association destination IPv6 address
SPI         Security Parameter Index from 1 to 2^32-1 (e.g. 0x1 or 1 to 0xffffffff or
4294967295)
MODE        IPsec processing mode
Possible values for MODE are:
    tunnel      Tunnel mode
    transport   Transport mode
CRYPTALGO   IPsec encryption algorithm
Possible values for CRYPTALGO are:
    3des-cbc    Triple DES
    aes-cbc     AES
CRYPTKEY    Encryption key
format: ASCII string ("abcdefgh1234#=+...")
hexadecimal value (0x123456789abcdef0)
192 bits (24 bytes) for 3des-cbc
128/192/256 bits (16/24/32 bytes) for aes-cbc

null        ESP_NULL encryption (RFC2410)
AUTHALGO    IPsec authentication algorithm
Possible values for AUTHALGO are:
    hmac-md5    HMAC-MD5
    hmac-sha1   HMAC-SHA1
AUTHKEY     Authentication/integrity key
format: ASCII string ("abcdefgh1234#=+...")
hexadecimal value (0x123456789abcdef0)
length: 128 bits (16 bytes) for hmac-md5
160 bits (20 bytes) for hmac-sha1
```

Example

```
NGFW{running-manual-sa}sa esp 192.168.1.1 192.168.2.2 1 tunnel aes-cbc
0x4d7acaf0c08349ebbcbd86a2093eadf69786537755fc3ea23835c2d71450fdf5  hmac-sha1
0x6a4a71232e102e404979f8edef925a51b1ac098d
```

NGFW{running}interface mgmt

NGFW{running-mgmt}delete

Delete file or configuration item.

Syntax

```
delete host (location|contact)
delete ip-filter ACTION SERVICE4 [ip ADDRESS4]
delete ip-filter ACTION SERVICE6 [ip ADDRESS6]
delete ip-filter ACTION ip (ADDRESS4|ADDRESS6)
delete ipaddress all|A.B.C.D/M|X:X::X:X/M
delete route A.B.C.D/M [A.B.C.D]
delete route X:X::X:X/M [X:X::X:X]
delete route all
```

Example

```
NGFW{running-mgmt}delete host contact
NGFW{running-mgmt}delete host location
NGFW{running-mgmt}delete ip-filter deny https ip 2001:2::1/128
NGFW{running-mgmt}delete ip-filter deny ip 192.168.1.1/32
NGFW{running-mgmt}delete route 192.168.0.0/24 192.168.0.2
NGFW{running-mgmt}delete route 2001:2::/48 100::2
NGFW{running-mgmt}delete route all
```

NGFW{running-mgmt}description

Enter description for the management interface.

Syntax

```
description TEXT
```

Example

```
NGFW{running-mgmt}description "management interface"
```

NGFW{running-mgmt}host

Configure the firewall host settings.

Syntax

```
host (name|location|contact) VALUE
```

Example

```
NGFW{running-mgmt}host contact "mycontact"
NGFW{running-mgmt}host location "mylocation"
NGFW{running-mgmt}host name "myfirewallname"
```

NGFW{running-mgmt}ip-filter

Create management IP filter rules.

Syntax

```
ip-filter (allow|deny) default
ip-filter (allow|deny) (https|icmp|snmp|ssh|ip) [ip
A.B.C.D/M|X:X::X:X/M|A.B.C.D|X:X::X:X]
```

```
ip-filter (allow|deny) ip (A.B.C.D/M|X:X::X:X/M|A.B.C.D|X:X::X:X)

Valid entries:
allow        Allow IPv4/IPv6 rule
deny         Deny IPv4/IPv6 rule
default      Default rule

Possible values for service are:
https        allow/deny HTTPS. This will affect SMS which uses HTTPS
ssh          allow/deny SSH
icmp         allow/deny ICMP/ICMPv6
snmp         allow/deny SNMP
ip           IP address

A.B.C.D/M    IPv4 address with netmask
X:X::X:X/M   IPv6 address with prefix length
A.B.C.D      IPv4 address
X:X::X:X     IPv6 address
```

Example

```
NGFW{running-mgmt}ip-filter allow default
NGFW{running-mgmt}ip-filter allow https ip 192.168.1.0/24
NGFW{running-mgmt}ip-filter deny ip 192.168.1.1
NGFW{running-mgmt}ip-filter deny https ip 2001:2:0:0:0:0:0:1
```

NGFW{running-mgmt}ipaddress

Configure IP address.

Syntax

```
ipaddress (A.B.C.D/M|X:X::X:X/M)
```

Example

```
NGFW{running-mgmt}ipaddress 192.168.1.1/24
NGFW{running-mgmt}ipaddress 100:0:0:0:0:0:0:1/64
```

NGFW{running-mgmt}physical-media

Configure physical-media settings.

Syntax

```
physical-media (auto-neg)|(10half|10full|100half|100full|1000full)

Valid entries:
auto-neg          Enable auto-negotiation (default is on)
SPEED-MODE        Set the port speed
Possible values for SPEED-MODE are:
10half            Supported port speed and mode
10full            Supported port speed and mode
100half           Supported port speed and mode
100full           Supported port speed and mode
1000full          Supported port speed and mode
```

Example

```
NGFW{running-mgmt}physical-media auto-neg
NGFW{running-mgmt}physical-media 1000full
```

NGFW{running-mgmt}route

Add IPv4/IPv6 static route.

Syntax

```
route A.B.C.D/M A.B.C.D [DISTANCE]
route X:X::X:X/M X:X::X:X [DISTANCE]

A.B.C.D/M    Unicast IPv4 prefix address
X:X::X:X/M   Unicast IPv6 prefix address
```

Example

```
NGFW{running-mgmt}route 192.168.0.0/24 192.168.0.2 1
NGFW{running-mgmt}route 2001:2:0:0:0:0:0:0/48 100:0:0:0:0:0:0:2
```

running-multicast-registration Context Commands

NGFW{running}multicast-registration

NGFW{running-multicast-registration}igmp-version

Configure system IGMP version.

Syntax

```
igmp-version default
igmp-version mode (force|default) (igmpv1|igmpv2|igmpv3)

Valid entries:
default        Restore default IGMP version (igmpv3)
mode           Define IGMP version mode (force or default)
IGMPvX         Define IGMP version
```

Example

```
NGFW{running-multicast-registration}igmp-version mode default igmpv3
```

NGFW{running-multicast-registration}mld-version

Configure system MLD version.

Syntax

```
mld-version default
mld-version mode (force|default) (mldv1|mldv2)

Valid entries:
default       Restore default MLD version (mldv2)
mode          Define MLD version mode
MODE          Define MLD mode (force or default)
MLDvX         Define MLD version
```

Example

```
NGFW{running-multicast-registration}mld-version mode default mldv2
```

running-notifycontacts (email) Context Commands

Immediate Commit Feature. Changes take effect immediately.

NGFW{running}notifycontacts

NGFW{running-notifycontacts}contact

Create or edit a notify contact.

Syntax

```
contact CONTACTNAME
contact NEWNAME email
contact NEWNAME snmp COMMUNITY IP [PORT]
```

Example

```
NGFW{running-notifycontacts}contact mycontact1 email
NGFW{running-notifycontacts}contact mycontact1 snmp mysecret 192.168.1.1
```

NGFW{running-notifycontacts}delete

Delete a contact.

Syntax

```
delete contact XCONTACTNAME
```

Example

```
NGFW{running-notifycontacts}delete contact mycontact1
WARNING: Are you sure you want to delete this contact (y/n)? [n]: y
```

NGFW{running-notifycontacts}email-from-address

From email address.

Syntax

```
email-from-address EMAIL
```

Example

```
NGFW{running-notifycontacts}email-from-address mycontact@example.com
```

NGFW{running-notifycontacts}email-from-domain

From domain name.

Syntax

```
email-from-domain DOMAIN
```

Example

```
NGFW{running-notifycontacts}email-from-domain example.com
```

NGFW{running-notifycontacts}email-server

Set mail server IP.

Syntax

```
email-server IP
```

Example

```
NGFW{running-notifycontacts}email-server 192.168.1.1
```

NGFW{running-notifycontacts}email-threshold

Set email threshold in minutes.

Syntax

```
email-threshold THRESHOLD
```

Example

```
NGFW{running-notifycontacts}email-threshold 1
```

NGFW{running-notifycontacts}email-to-default-address

Default to email address.

Syntax

```
email-to-default-address EMAIL
```

Example

```
NGFW{running-notifycontacts}email-to-default-address mycontact@example.com
```

NGFW{running-notifycontacts}rename

Rename contact with new name.

Syntax

```
rename contact XCONTACTNAME NEWNAME
```

Example

```
NGFW{running-notifycontacts}rename contact mycontact1 mycontact2
```

running-notifycontacts-X (SNMP) Context Commands

Immediate Commit Feature. Changes take effect immediately.

NGFW{running-notifycontacts}contact mycontact1
NGFW{running-notifycontacts-mycontact1}community

Sets SNMPv2 community name.

Syntax

```
community COMMUNITY
COMMUNITY   SNMPv2 community name (1-32 characters)
```

Example

```
NGFW{running-notifycontacts-mycontact1}community mysecret
```

NGFW{running-notifycontacts-mycontact1}host

Sets SNMP host IP.

Syntax

```
host IP
```

Example

```
NGFW{running-notifycontacts-mycontact1}host 192.168.1.1
```

NGFW{running-notifycontacts-mycontact1}period

Set contact aggregation period in minutes.

Syntax

```
period PERIOD
```

Example

```
NGFW{running-notifycontacts-mycontact1}period 1
```

NGFW{running-notifycontacts-mycontact1}port

Set SNMP host port.

Syntax

```
port PORT
```

Example

```
NGFW{running-notifycontacts-mycontact1}port 162
```

running-ntp Context Commands

NGFW{running}ntp

NGFW{running-ntp}delete

Delete file or configuration item.

Syntax

```
delete key (all|ID)
delete server (all|HOST)

Valid entries:
key         Delete key from configuration
all         Delete all keys
ID          Key identifier

server      Delete remote NTP server
all         Delete all servers
HOST        Remote server address or name
```

Example

```
NGFW{running-ntp}delete key 1
NGFW{running-ntp}delete key all
NGFW{running-ntp}delete server all
NGFW{running-ntp}delete server 192.168.1.1
```

NGFW{running-ntp}key

Configure NTP authentication key.

Syntax

```
key (1-65535) VALUE

Valid entries:
(1-65535)   Key ID, required for authentication
VALUE       Key value (1-32 characters)
```

Example

```
NGFW{running-ntp}key 1 myauthkey
```

NGFW{running-ntp}ntp

Enable or disable NTP service.

Syntax

```
ntp (enable|disable)
```

Example

```
NGFW{running-ntp}ntp enable
```

NGFW{running-ntp}polling-interval

Configure NTP server minimum polling interval.

Syntax

```
polling-interval SECONDS

SECONDS   Interval in seconds
Possible values for SECONDS are:
   2        2 seconds
   4        4 seconds
   8        8 seconds
   16       16 seconds
   32       32 seconds
   64       64 seconds
```

Example

```
NGFW{running-ntp}polling-interval 16
```

NGFW{running-ntp}server

Configure remote NTP server.

Syntax

```
server (dhcp|A.B.C.D|X:X::X:X|FQDN) [key ID] [prefer]

dhcp     Get server address from dhcp
NAME     NTP remote server
key      Key to be used
ID       Key identifier
prefer   Mark server as preferred
```

Example

```
NGFW{running-ntp}server 192.168.1.1 key 1 prefer
```

running-phase1-proposal-X Context Commands and their Usage

NGFW{running}vpn ipsec

NGFW{running-ipsec}phase1 2 proposal myphase1

NGFW{running-phase1-proposal-myphase1}auth

ISAKMP authentication mechanism.

Syntax

```
auth local (pre-shared-key|rsasig) remote
(eap-mschapv2|pre-shared-key|rsasig|eap-radius) [xauth (local|radius)]
```

Example

```
NGFW{running-phase1-proposal-myphase1}auth local pre-shared-key remote
pre-shared-key
```

NGFW{running-phase1-proposal-myphase1}dh-group

ISAKMP Diffie-Hellman group.

Syntax

```
dh-group (1|2|5|14)
```

Example

```
NGFW{running-phase1-proposal-myphase1}dh-group 5
```

NGFW{running-phase1-proposal-myphase1}encryption

ISAKMP encryption algorithm.

Syntax

```
encryption (3des|aes128|aes192|aes256)
```

Example

```
NGFW{running-phase1-proposal-myphase1}encryption aes256
```

NGFW{running-phase1-proposal-myphase1}hash

ISAKMP hash algorithm.

Syntax

```
hash (md5|sha1)
```

Example

```
NGFW{running-phase1-proposal-myphase1}hash sha1
```

NGFW{running-phase1-proposal-myphase1}lifetime

ISAKMP security association lifetime. 86400 seconds commonly used in phase 1 is 24 hours.

Syntax

```
lifetime LIFE-DURATION LIFE-UNIT
lifetime (1-65535) (min|sec|hour)
```

Example

```
NGFW{running-phase1-proposal-myphase1}lifetime 24 hour
```

running-phase1-proposal-X Context Commands and their Usage

NGFW{running}vpn ipsec

NGFW{running-ipsec}phase2 2 proposal myphase2

NGFW{running-phase2-proposal-myphase2}auth2

IPsec authentication algorithm.

Syntax

```
auth2 (hmac-md5|hmac-sha1) [hmac-sha1|hmac-md5]
```

Example

```
NGFW{running-phase2-proposal-myphase2}auth2 hmac-sha1
NGFW{running-phase2-proposal-myphase2}auth2 hmac-md5 hmac-sha1
NGFW{running-phase2-proposal-myphase2}auth2 hmac-sha1 hmac-md5
```

NGFW{running-phase2-proposal-myphase2}dh-group

Perfect Forward Secrecy Diffie-Hellman group.

Syntax

```
dh-group (1|2|5|14|none)
```

Example

```
NGFW{running-phase2-proposal-myphase2}dh-group 5
```

NGFW{running-phase2-proposal-myphase2}encryption2

IPsec encryption algorithm.

Syntax

```
encryption2 (3des|aes128|aes192|aes256|null) [3des|aes128|aes192|aes256|null]{0,4}
```

Example

```
NGFW{running-phase2-proposal-myphase2}encryption2 aes256 aes192 aes128 3des
NGFW{running-phase2-proposal-myphase2}encryption2 aes256
```

NGFW{running-phase2-proposal-myphase2}lifetime

IP security association lifetime.

Syntax

```
lifetime LIFE-DURATION LIFE-UNIT
lifetime (1-4,294,967,295) (hour|min|sec|byte)
```

Example

```
NGFW{running-phase2-proposal-myphase2}lifetime 4,718,592,000 byte
NGFW{running-phase2-proposal-myphase2}lifetime 3600 sec
```

running-ospf Context Commands

NGFW{running}router ospf

NGFW{running-ospf}area

Configure an OSPF area, area range, or virtual link.

Syntax

```
area (A.B.C.D|(0-4294967295)) range A.B.C.D/M [not-advertised]
area (A.B.C.D|(0-4294967295)) (stub|nssa|tsa)
area (A.B.C.D|(0-4294967295)) default-cost (0-16777215)
area (A.B.C.D|(0-4294967295)) virtual-link A.B.C.D
area (A.B.C.D|(0-4294967295)) virtual-link A.B.C.D dead-interval VALUE
area (A.B.C.D|(0-4294967295)) virtual-link A.B.C.D hello-interval VALUE
area (A.B.C.D|(0-4294967295)) virtual-link A.B.C.D retransmit-interval VALUE
area (A.B.C.D|(0-4294967295)) virtual-link A.B.C.D transmit-delay VALUE
```

```
area (A.B.C.D|(0-4294967295)) virtual-link A.B.C.D authentication simple
SIMPLE-PASSWORD
area (A.B.C.D|(0-4294967295)) virtual-link A.B.C.D authentication md5 KEY-ID
MD5-KEY-STRING

(0-4294967295)   OSPF area ID as a decimal value
A.B.C.D          OSPF area ID in IP address format
```

Example

```
NGFW{running-ospf}area 1 ?
Valid entries at this position are:
  default-cost   Set the summary-default cost of a NSSA or stub area
  nssa           Configure a not-so-stubby area (NSSA)
  range          Summarize routes matching address/mask prefix
  stub           Configure a stubby area
  tsa            Configure a totally stubby area (TSA)
  virtual-link   Configure a virtual link
```

NGFW{running-ospf}default-metric

Set default metric of routes redistributed into OSPF.

Syntax

```
default-metric (1-16777214)
```

Example

```
NGFW{running-ospf}default-metric 1
```

NGFW{running-ospf}delete

Delete file or configuration item.

Syntax

```
delete area AREA-ID range A.B.C.D/M
delete area AREA-ID (stub|nssa|tsa)
delete area AREA-ID default-cost
delete area AREA-ID virtual-link A.B.C.D
delete area AREA-ID virtual-link A.B.C.D dead-interval
delete area AREA-ID virtual-link A.B.C.D hello-interval
delete area AREA-ID virtual-link A.B.C.D retransmit-interval
delete area AREA-ID virtual-link A.B.C.D transmit-delay
delete area AREA-ID virtual-link A.B.C.D authentication simple
delete area AREA-ID virtual-link A.B.C.D authentication md5 KEY-ID
delete default-metric
delete distance VALUE
delete distance (external|inter-area|intra-area) <1-255>
delete passive-interface INTERFACE
delete redistribute PROTOCOL
delete rfc1583-compatible
delete router-id
```

Example

```
NGFW{running-ospf}delete distance ?
Valid entries at this position are:
  VALUE        OSPF Administrative distance
  external     The distance for external routes
  inter-area   The distance for inter-area routes
  intra-area   The distance for intra-area routes
```

NGFW{running-ospf}disable

Disable Open Shortest Path First (OSPF).

Syntax

```
disable
```

Example

```
NGFW{running-ospf}disable
```

NGFW{running-ospf}distance

Set OSPF administrative distance.

Syntax

```
distance (1-255)
distance (external|inter-area|intra-area) (1-255)

(1-255) OSPF Administrative distance
external     Configure the distance for external routes
inter-area   Configure the distance for inter-area routes
intra-area   Configure the distance for intra-area routes
```

Example

```
NGFW{running-ospf}distance external 1
```

NGFW{running-ospf}enable

Enable Open Shortest Path First (OSPF).

Syntax

```
enable
```

Example

```
NGFW{running-ospf}enable
```

NGFW{running-ospf}passive-interface

Suppress routing updates on an interface.

Syntax

```
passive-interface INTERFACE
```

Example

NGFW{running-ospf}passive-interface *name*

NGFW{running-ospf}redistribute

Redistribute routes from another routing protocol.

Syntax

```
redistribute PROTOCOL [metric-type (1-2)] [metric (0-16777214)] [route-map
ROUTE-MAP]

Possible values for PROTOCOL are:
connected      Connected
static         Static routes
```

```
rip             Routing Information Protocol (RIP)
bgp             Border Gateway Protocol (BGP)

metric-type     OSPF exterior metric type for redistributed routes
(1-2)           Set OSPF exterior type metric
metric          Metric
(0-16777214)    Set metric for redistributed routes
route-map       Route map reference
ROUTE-MAP       Route map name
```

Example

```
NGFW{running-ospf}redistribute rip metric-type ?
Valid entry at this position is:
  <1-2>   Set OSPF exterior type metric

NGFW{running-ospf}redistribute rip metric-type 1 route-map name
```

NGFW{running-ospf}rfc1583-compatible

Enable RFC-1583 compatibility (Disabled by default).

Syntax

```
rfc1583-compatible
```

Example

```
NGFW{running-ospf}rfc1583-compatible
```

NGFW{running-ospf}router-id

OSPF router-id.

Syntax

```
router-id A.B.C.D
A.B.C.D     OSPF router ID in IP address format
```

Example

```
NGFW{running-ospf}router-id 198.51.100.150
```

running-ospfv3 Context Commands

NGFW{running}router ospfv3

NGFW{running-ospfv3}area

Configure an OSPFv3 area, area range, or virtual link.

Syntax

```
area (A.B.C.D|(0-4294967295)) range X:X::X:X/M
area (A.B.C.D|(0-4294967295)) (stub|nssa|tsa)
area (A.B.C.D|(0-4294967295)) virtual-link A.B.C.D
area (A.B.C.D|(0-4294967295)) virtual-link A.B.C.D [hello-interval VALUE]
area (A.B.C.D|(0-4294967295)) virtual-link A.B.C.D [hello-interval VALUE]
[retransmit-interval VALUE]
area (A.B.C.D|(0-4294967295)) virtual-link A.B.C.D [hello-interval VALUE]
[retransmit-interval VALUE] [transmit-delay VALUE]
area (A.B.C.D|(0-4294967295)) virtual-link A.B.C.D [hello-interval VALUE]
[retransmit-interval VALUE] [transmit-delay VALUE] [dead-interval VALUE]
```

Example

```
NGFW{running-ospfv3}area 2 ?
```

```
Valid entries at this position are:
  nssa           Configure a not-so-stubby area (NSSA)
  range          Summarize routes matching address/mask (border routers only)
  stub           Configure a stubby area
  tsa            Configure a totally stubby area (TSA)
  virtual-link   Configure a virtual link over a transit area
```

NGFW{running-ospfv3}delete

Delete file or configuration item.

Syntax

```
delete area AREA-ID AREA-TYPE
delete area AREA-ID range X:X::X:X/M
delete area AREA-ID virtual-link A.B.C.D
delete area AREA-ID virtual-link A.B.C.D dead-interval
delete area AREA-ID virtual-link A.B.C.D hello-interval
delete area AREA-ID virtual-link A.B.C.D retransmit-interval
delete area AREA-ID virtual-link A.B.C.D transmit-delay
delete passive-interface INTERFACE
delete redistribute PROTOCOL
delete router-id
```

```
Valid entries:
area                Delete OSPFv3 area
passive-interface   Reactivate an interface
redistribute        Delete route redistribution from another protocol
router-id           Delete OSPFv3 router ID
```

Example

```
NGFW{running-ospfv3}delete area 1 range 100:0:0:0:0:0:0:0/64
NGFW{running-ospfv3}delete redistribute ?
Valid entries at this position are:
  connected   Connected
  static      Static routes
  ripng       Routing Information Protocol next generation (RIPng)
```

NGFW{running-ospfv3}disable

Disable Open Shortest Path First (OSPFv3).

Syntax

```
disable
```

Example

```
NGFW{running-ospfv3}disable
```

NGFW{running-ospfv3}enable

Enable Open Shortest Path First (OSPFv3).

Syntax

```
enable
```

Example

```
NGFW{running-ospfv3}enable
```

NGFW{running-ospfv3}nsf

OSPFv3 non-stop forwarding.

Syntax

```
nsf (enable|disable)
enable    Enable Graceful Restarts with Grace time of 120
disable   Disable Graceful Restarts
```

Example

```
NGFW{running-ospfv3}nsf enable
```

NGFW{running-ospfv3}passive-interface

Suppress routing updates on an interface.

Syntax

```
passive-interface INTERFACE
```

Example

```
NGFW{running-ospfv3}passive-interface name
```

NGFW{running-ospfv3}redistribute

Redistribute routes from another routing protocol.

Syntax

```
redistribute PROTOCOL [metric-type (1-2)] [metric (0-16777214)] [route-map
ROUTE-MAP]

PROTOCOL       OSPFv3 protocol list
Possible values for PROTOCOL are:
connected      Connected
static         Static routes
ripng          Routing Information Protocol next generation (RIPng)

metric-type  OSPFv3 exterior metric type for redistributed routes
(1-2)        Set OSPFv3 exterior metric type
(0-16777214) Set metric for redistribute routes
route-map    Route map reference
ROUTE-MAP    Route map name
```

Example

```
NGFW{running-ospfv3}redistribute static metric 2
```

NGFW{running-ospfv3}router-id

OSPFv3 router-id.

Syntax

```
router-id ROUTER-ID

router-id   OSPFv3 router ID
ROUTER-ID   OSPFv3 router ID in IPv4 address format
```

Example

```
NGFW{running-ospfv3}router-id 198.51.100.1
```

running-pim-smv4 Context Commands

NGFW{running}router pim-smv4

NGFW{running-pim-smv4}bsr-candidate

Toggle bootstrap router (BSR) candidate.

Syntax

```
bsr-candidate interface INTERFACE
bsr-candidate priority (0-255)

interface   Interface that has global address for Bootstrap messages
priority    Priority of the BSR candidate
```

Example

```
NGFW{running-pim-smv4}bsr-candidate priority 2
```

NGFW{running-pim-smv4}delete

Delete file or configuration item.

Syntax

```
delete bsr-candidate
delete dr-priority
delete rp-address (all|(A.B.C.D A.B.C.D/M))
delete rp-candidate
delete rp-candidate group (all|A.B.C.D/M)
delete threshold

Valid entries:
bsr-candidate   Toggle bootstrap router (BSR) candidate
dr-priority     Delete the DR priority set for the device
rp-address      Static group-to-RP mapping
rp-candidate    Delete the RP-candidate configuration
rp-candidate    Toggle RP candidate
threshold       Shortest path tree switch threshold
```

Example

```
NGFW{running-pim-smv4}delete bsr-candidate
```

NGFW{running-pim-smv4}disable

Disable PIM-SM IPv4 on the device.

Syntax

```
disable
```

Example

```
NGFW{running-pim-smv4}disable
```

NGFW{running-pim-smv4}dr-priority

Configure the DR priority for the device.

Syntax

```
dr-priority (0-4294967295)
(0-4294967295) The priority used to elect the DR
```

Example

```
NGFW{running-pim-smv4}dr-priority 2
```

NGFW{running-pim-smv4}enable

Enable PIM-SM IPv4 on the device.

Syntax

```
enable
```

Example

```
NGFW{running-pim-smv4}enable
```

NGFW{running-pim-smv4}rp-address

Static mapping of multicast groups to RP.

Syntax

```
rp-address A.B.C.D A.B.C.D/M
```

```
A.B.C.D      IPv4 address for static RP
A.B.C.D/M    IPv4 multicast group for static RP
```

Example

```
NGFW{running-pim-smv4}rp-address 198.51.0.100
```

NGFW{running-pim-smv4}rp-candidate

Toggle RP candidate.

Syntax

```
rp-candidate group A.B.C.D/M
rp-candidate interface INTERFACE
rp-candidate priority (0-255)
```

```
group       Specifies multicast group range for RP candidate
interface   Interface that has global address for Candidate RP advertising
priority    Priority of the RP candidate
```

Example

```
NGFW{running-pim-smv4}rp-candidate priority 1
```

NGFW{running-pim-smv4}threshold

Data rate that triggers shortest path tree switch.

Syntax

```
threshold RATE
```

```
threshold   Shortest path tree switch threshold
RATE        The rate for shortest path tree switching (1-4294967295 bytes/s).
            Default: 1000 bytes/s.
```

Example

```
NGFW{running-pim-smv4}threshold 1000
```

running-pim-smv6 Context Commands

NGFW{running}router pim-smv6

NGFW{running-pim-smv6}bsr-candidate

Toggle bootstrap router (BSR) candidate.

Syntax

```
bsr-candidate interface INTERFACE
bsr-candidate priority (0-255)

Interface   Interface that has global address for Bootstrap messages
priority    Priority of the BSR
```

Example

```
NGFW{running-pim-smv6}bsr-candidate priority 1
```

NGFW{running-pim-smv6}delete

Delete file or configuration item.

Syntax

```
delete bsr-candidate
delete dr-priority
delete rp-address (all|(X:X::X:X X:X::X:X/M))
delete rp-candidate
delete rp-candidate group (all|X:X::X:X/M)
delete threshold
Valid entries:
  bsr-candidate   Toggle bootstrap router (BSR) candidate
  dr-priority     Delete the DR priority set for the device
  rp-address      Delete group-to-RP mapping
  rp-candidate    Delete the RP-candidate configuration
  rp-candidate    Toggle RP candidate
  threshold       Shortest path tree switch threshold
```

Example

```
NGFW{running-pim-smv6}delete rp-address ?
Valid entries at this position are:
  X:X::X:X   Specified static RP IPv6 address
  all        Delete ALL group-to-RP mapping
```

NGFW{running-pim-smv6}disable

Disable PIM-SM IPv6 on the device.

Syntax

```
disable
```

Example

```
NGFW{running-pim-smv6}disable
```

NGFW{running-pim-smv6}dr-priority

Configure the DR priority for the device.

Syntax

```
dr-priority (0-4294967295)
(0-4294967295) The priority used to elect the DR.
```

Example

```
NGFW{running-pim-smv6}dr-priority 2
```

NGFW{running-pim-smv6}enable

Enable PIM-SM IPv6 on the device.

Syntax

```
enable
```

Example

```
NGFW{running-pim-smv6}enable
```

NGFW{running-pim-smv6}rp-address

Static mapping of multicast groups to RP.

Syntax

```
rp-address X:X::X:X X:X::X:X/M
```

```
rp-address   Static group-to-RP mapping
X:X::X:X     IPv6 address for staic RP
X:X::X:X/M   IPv6 multicast group prefix for static RP
```

Example

```
NGFW{running-pim-smv6}rp-address ?
Valid entry at this position is:
  X:X::X:X   IPv6 address for staic RP
```

NGFW{running-pim-smv6}rp-candidate

Toggle RP candidate.

Syntax

```
rp-candidate group X:X::X:X/M
rp-candidate interface INTERFACE
rp-candidate priority <0-255>
```

```
group       Specifies multicast group range for RP candidate
interface   Interface that have global address for Candidate RP advertising
priority    Priority of the RP
```

Example

```
NGFW{running-pim-smv6}rp-candidate priority 2
```

NGFW{running-pim-smv6}threshold

Data rate at which to perform shortest path tree switch.

Syntax

```
threshold RATE
```

```
threshold   Shortest path tree switch threshold
```

```
RATE        The rate for shortest path tree switching (1-4294967295 bytes/s).
Default: 1000 bytes/s
```

Example

```
NGFW{running-pim-smv6}threshold 1000
```

running-pppoeX Context Commands

NGFW{running}interface pppoe0

NGFW{running-pppoe0}auth

Authenticated configuration.

Syntax

```
auth ppp reply (chap|chap-md5|ms-chapv2|pap|ms-chap)
auth ppp user-id USER PASSWORD
```

```
ppp   Configure PPP authenticated options
```

Example

```
NGFW{running-pppoe0}auth ppp reply chap-md5
NGFW{running-pppoe0}auth ppp user-id myuser mypassword
```

NGFW{running-pppoe0}autoconfv6

Enable or disable IPv6 autoconfiguration on interface.

Syntax

```
autoconfv6 (enable|disable)
```

Example

```
NGFW{running-pppoe0}autoconfv6 enable
```

NGFW{running-pppoe0}bind

Bind PPPoE interface to specific ethernet port.

Syntax

```
bind (none|ethernetX)
```

```
ethX   Ethernet port name
none   Do not bind this PPPoE interface
```

Example

```
NGFW{running-pppoe0}bind ethernet5
NGFW{running-pppoe0}bind none
```

NGFW{running-pppoe0}delete

Delete file or configuration item.

Syntax

```
delete auth ppp reply all
delete auth ppp reply (chap|chap-md5|ms-chapv2|pap|ms-chap)
delete auth ppp user-id
delete ip igmp
delete ip igmp version
delete ipv6 mld
```

```
delete ipv6 mld version
delete log-option ppp all
delete log-option ppp PPP-LOG-OPTION
delete prefix (all|X:X::X:X/M)
delete shutdown

Valid entries:
auth         Authenticated configuration
ip           Delete IP settings
ipv6         Delete IPv6
log-option   Delete service log option
prefix       Delete IPv6 prefix
shutdown     Shutdown logical interface state
```

Example

```
NGFW{running-pppoe0}delete auth ppp reply chap-md5
NGFW{running-pppoe0}delete auth ppp user-id
NGFW{running-pppoe0}delete ip igmp version
NGFW{running-pppoe0}delete ip igmp
NGFW{running-pppoe0}delete ipv6 mld
NGFW{running-pppoe0}delete log-option ppp auth
NGFW{running-pppoe0}delete prefix 100::/64
NGFW{running-pppoe0}delete shutdown
```

NGFW{running-pppoe0}description

Enter description for the interface.

Syntax

```
description TEXT
```

Example

```
NGFW{running-pppoe0}description "pppoe interface 0"
```

NGFW{running-pppoe0}dns-request

Configure IP DNS server address request.

Syntax

```
dns-request (enable|disable)
```

Example

```
NGFW{running-pppoe0}dns-request enable
```

NGFW{running-pppoe0}ip

Configure IP settings.

Syntax

```
ip igmp
ip igmp version (1|2|3)
```

Example

```
NGFW{running-pppoe0}ip igmp version 3
```

NGFW{running-pppoe0}ipcp

Enable or disable IPCP for IPv4.

Syntax

```
ipcp (enable|disable)
```

Example

```
NGFW{running-pppoe0}ipcp enable
NGFW{running-pppoe0}ipcp disable
```

NGFW{running-pppoe0}ipv6

Configure IPv6 settings.

Syntax

```
ipv6 mld
ipv6 mld version (1|2)
```

Example

```
NGFW{running-pppoe0}ipv6 mld version 2
```

NGFW{running-pppoe0}ipv6cp

Enable or disable IPCP for IPv6.

Syntax

```
ipv6cp (enable|disable)
```

Example

```
NGFW{running-pppoe0}ipv6cp enable
```

NGFW{running-pppoe0}keep-alive

LCP keep alive period in seconds.

Syntax

```
keep-alive ppp disable
keep-alive ppp (default|(0-600)) [retry (0-600)]
```

Example

```
NGFW{running-pppoe0}keep-alive ppp default retry 1
NGFW{running-pppoe0}keep-alive ppp disable
```

NGFW{running-pppoe0}log-option

Add service log option.

Syntax

```
log-option ppp all
log-option ppp (PPP-LOG-OPTION)

PPP-LOG-OPTION valid entries:
all      Enable all optional log items
auth     Link authentication events
ipcp     IPCP events and negotiation
ipv6cp   IPV6CP events and negotiation
```

```
l2tp     L2TP high level events
l2tp2    L2TP more detailed events
l2tp3    L2TP packet dumps
pptp     PPTP high level events
pptp2    PPTP more detailed events
pptp3    PPTP packet dumps
lcp      LCP events and negotiation
phys     Physical layer events
radius   Radius authentication events
echo     Keep-alive events
bund     Bundle events
iface    IP interface and route management events
link     Link events
frame    Dump all incoming and outgoing frames
fsm      All state machine events (except echo and reset)
```

Example

```
NGFW{running-pppoe0}log-option ppp auth
```

NGFW{running-pppoe0}mru

Configure interface MRU.

Syntax

```
mru (default|(64-65535))
```

Example

```
NGFW{running-pppoe0}mru 1500
NGFW{running-pppoe0}mru default
```

NGFW{running-pppoe0}mtu

Configure interface MTU.

Syntax

```
mtu (default|(68-9216))
```

Example

```
NGFW{running-pppoe0}mtu default
NGFW{running-pppoe0}mtu 1500
```

NGFW{running-pppoe0}prefix

Configure IPv6 prefix.

Syntax

```
prefix X:X::X:X/M [valid-lifetime (1-4294967295)] [preferred-lifetime
(1-4294967295)]

X:X::X:X/M           IPv6 prefix
valid-lifetime       Configure valid lifetime
<1-4294967295>       Valid lifetime in seconds (default is 2592000)
preferred-lifetime   Configure preferred lifetime
<1-4294967295>       Preferred lifetime in seconds
(default is 604800 - cannot exceed valid lifetime)
```

Example

```
NGFW{running-pppoe0}prefix 100:0:0:0:0:0:0:0/64 valid-lifetime 2592000
preferred-lifetime 604800
```

NGFW{running-pppoe0}ra-autoconf-level

Modify IPv6 Router Advertisement autoconfiguration level.

Syntax

```
ra-autoconf-level AUTOCONF

Possible values for AUTOCONF are:
none        No parameter is autoconfigured
address     Address is autoconfigured
other       Some other parameters are autoconfigured
full        Most parameters are autoconfigured
```

Example

```
NGFW{running-pppoe0}ra-autoconf-level full
```

NGFW{running-pppoe0}ra-interval

Modify IPv6 Router Advertisement interval value.

Syntax

```
ra-interval (90-1800000)
INTERVAL   Router Advert emission period (in milliseconds)
```

Example

```
NGFW{running-pppoe0}ra-interval 600
```

NGFW{running-pppoe0}ra-interval-transmit

Modify IPv6 Router Advertisement interval transmit.

Syntax

```
ra-interval-transmit (enable|disable)
```

Example

```
NGFW{running-pppoe0}ra-interval-transmit enable
```

NGFW{running-pppoe0}ra-lifetime

Modify IPv6 Router Advertisement prefix lifetime in seconds.

Syntax

```
ra-lifetime (0-9000000)
```

Example

```
NGFW{running-pppoe0}ra-lifetime 1800
```

NGFW{running-pppoe0}ra-mtu

Modify IPv6 Router Advertisement MTU value.

Syntax

```
ra-mtu (none|(68-9216))
none     Not configured
MTU      MTU value advertised (0 if none)
```

Example

```
NGFW{running-pppoe0}ra-mtu 1500
```

NGFW{running-pppoe0}ra-transmit-mode

Modify IPv6 Router Advertisement transmit mode.

Syntax

```
ra-transmit-mode MODE

Possible values for MODE are:
always     Router Advert message is always sent
never      Router Advert message is never sent
smart      Router Advert message is sent if a prefix is defined
```

Example

```
NGFW{running-pppoe0}ra-transmit-mode smart
```

NGFW{running-pppoe0}service

Configure PPPoE service name.

Syntax

```
service (none|NAME)
```

Example

```
NGFW{running-pppoe0}service myPPPoEservice
NGFW{running-pppoe0}service none
```

NGFW{running-pppoe0}shutdown

Shutdown logical interface state.

Syntax

```
shutdown
```

Example

```
NGFW{running-pppoe0}shutdown
```

NGFW{running-pppoe0}tcp4mss

Configure interface TCP MSS for IPv4.

Syntax

```
tcp4mss (disable|automatic|(4-65535))

Valid entries:
disable     Disable service
automatic   Automatically select TCP MSS based on interface MTU
VALUE       TCP MSS value for IPv4
```

Example

```
NGFW{running-pppoe0}tcp4mss automatic
```

NGFW{running-pppoe0}tcp6mss

Configure interface TCP MSS for IPv6.

Syntax

```
tcp6mss (disable|automatic|(4-65535))

Valid entries:
disable     Disable service
automatic   Automatically select TCP MSS based on interface MTU
VALUE       TCP MSS value for IPv6
```

Example

```
NGFW{running-pppoe0}tcp6mss automatic
```

running-pptpX Context Commands

NGFW{running}interface pptp0

NGFW{running-pptp0}always-ack

Enable or disable always-ack option.

Syntax

```
always-ack (enable|disable)
```

Example

```
NGFW{running-pptp0}always-ack enable
NGFW{running-pptp0}always-ack disable
```

NGFW{running-pptp0}auth

Authenticated configuration.

Syntax

```
auth ppp reply ALGORITHM
auth ppp user-id USER PASSWORD
```

Example

```
NGFW{running-pptp0}auth ppp reply chap-md5
NGFW{running-pptp0}auth ppp user-id myuser mypassword
```

NGFW{running-pptp0}autoconfv6

Enable or disable IPv6 autoconfiguration on interface.

Syntax

```
autoconfv6 (enable|disable)
```

Example

```
NGFW{running-pptp0}autoconfv6 enable
```

NGFW{running-pptp0}bind

Configure binding addresses of the pptp tunnel.

Syntax

```
bind (none|(A.B.C.D A.B.C.D))
```

Example

```
NGFW{running-pptp0}bind 192.168.1.1 192.168.100.1
```

NGFW{running-pptp0}delayed-ack

Enable or disable delayed-ack option.

Syntax

```
delayed-ack (enable|disable)
```

Example

```
NGFW{running-pptp0}delayed-ack enable
```

NGFW{running-pptp0}delete

Delete file or configuration item.

Syntax

```
delete auth ppp reply all
delete auth ppp reply (chap|chap-md5|ms-chapv2|pap|ms-chap)
delete auth ppp user-id
delete ip igmp
delete ip igmp version
delete ipv6 mld
delete ipv6 mld version
delete log-option ppp all
delete log-option ppp PPP-LOG-OPTION
delete prefix (all|X:X::X:X/M)
delete shutdown
```

Example

```
NGFW{running-pptp0}delete auth ppp reply chap-md5
NGFW{running-pptp0}delete auth ppp user-id
NGFW{running-pptp0}delete ip igmp version
NGFW{running-pptp0}delete ip igmp
NGFW{running-pptp0}delete ipv6 mld
NGFW{running-pptp0}delete log-option ppp all
NGFW{running-pptp0}delete prefix 100::/64
NGFW{running-pptp0}delete shutdown
```

NGFW{running-pptp0}description

Enter description for the interface.

Syntax

```
description TEXT
```

Example

```
NGFW{running-pptp0}description "pptp interface 0"
```

NGFW{running-pptp0}dns-request

Configure IP DNS server address request.

Syntax

```
dns-request (enable|disable)
```

Example

```
NGFW{running-pptp0}dns-request enable
NGFW{running-pptp0}dns-request disable
```

NGFW{running-pptp0}ip

Configure IP settings.

Syntax

```
ip igmp
ip igmp version (1|2|3)
```

Example

```
NGFW{running-pptp0}ip igmp version 3
```

NGFW{running-pptp0}ipcp

Enable or disable IPCP for IPv4.

Syntax

```
ipcp (enable|disable)
```

Example

```
NGFW{running-pptp0}ipcp enable
NGFW{running-pptp0}ipcp disable
```

NGFW{running-pptp0}ipv6

Configure IPv6 settings.

Syntax

```
ipv6 mld
ipv6 mld version (1|2)
```

Example

```
NGFW{running-pptp0}ipv6 mld version 2
```

NGFW{running-pptp0}ipv6cp

Enable or disable IPCP for IPv6.

Syntax

```
ipv6cp (enable|disable)
```

Example

```
NGFW{running-pptp0}ipv6cp enable
```

NGFW{running-pptp0}keep-alive

LCP keep alive period in seconds.

Syntax

```
keep-alive ppp disable
keep-alive ppp (default|(0-600)) [retry (0-600)]
```

Example

```
NGFW{running-pptp0}keep-alive ppp default retry 1
NGFW{running-pptp0}keep-alive ppp disable
```

NGFW{running-pptp0}log-option

Add service log option.

Syntax

```
log-option ppp all
log-option ppp (PPP-LOG-OPTION)

PPP-LOG-OPTION valid entries:
all      Enable all optional log items
auth     Link authentication events
ipcp     IPCP events and negotiation
ipv6cp   IPV6CP events and negotiation
l2tp     L2TP high level events
l2tp2    L2TP more detailed events
l2tp3    L2TP packet dumps
pptp     PPTP high level events
pptp2    PPTP more detailed events
pptp3    PPTP packet dumps
lcp      LCP events and negotiation
phys     Physical layer events
radius   Radius authentication events
echo     Keep-alive events
bund     Bundle events
iface    IP interface and route management events
link     Link events
frame    Dump all incoming and outgoing frames
fsm      All state machine events (except echo and reset)
```

Example

```
NGFW{running-pptp0}log-option ppp all
```

NGFW{running-pptp0}mru

Configure interface MRU.

Syntax

```
mru (default|(64-65535))
```

Example

```
NGFW{running-pptp0}mru 1500
NGFW{running-pptp0}mru default
```

NGFW{running-pptp0}mtu

Configure interface MTU.

Syntax

```
mtu (default|(68-9216))
```

Example

```
NGFW{running-pptp0}mtu 1500
```

NGFW{running-pptp0}prefix

Configure IPv6 prefix.

Syntax

```
prefix X:X::X:X/M [valid-lifetime (1-4294967295)] [preferred-lifetime
(1-4294967295)]
```

Example

```
NGFW{running-pptp0}prefix 100:0:0:0:0:0:0:0/64 valid-lifetime 2592000
preferred-lifetime 604800
```

NGFW{running-pptp0}ra-autoconf-level

Modify IPv6 Router Advertisement autoconfiguration level.

Syntax

```
ra-autoconf-level (none|address|other|full)

Valid entries:
none        No parameter is autoconfigured
address     Address is autoconfigured
other       Some other parameters are autoconfigured
full        Most parameters are autoconfigured
```

Example

```
NGFW{running-pptp0}ra-autoconf-level full
NGFW{running-pptp0}ra-autoconf-level ?
```

NGFW{running-pptp0}ra-interval

Modify IPv6 Router Advertisement interval value in milliseconds.

Syntax

```
ra-interval (90-1800000)
```

Example

```
NGFW{running-pptp0}ra-interval 600
```

NGFW{running-pptp0}ra-interval-transmit

Modify IPv6 Router Advertisement interval transmit.

Syntax

```
ra-interval-transmit (enable|disable)
```

Example

```
NGFW{running-pptp0}ra-interval-transmit enable
```

NGFW{running-pptp0}ra-lifetime

Modify IPv6 Router Advertisement prefix lifetime in seconds.

Syntax

```
ra-lifetime (0-9000000)
```

Example

```
NGFW{running-pptp0}ra-lifetime 1800
```

NGFW{running-pptp0}ra-mtu

Modify IPv6 Router Advertisement MTU value.

Syntax

```
ra-mtu (none|(68-9216))
```

Example

```
NGFW{running-pptp0}ra-mtu 1500
```

NGFW{running-pptp0}ra-transmit-mode

Modify IPv6 Router Advertisement transmit mode.

Syntax

```
ra-transmit-mode (always|never|smart)
```

```
Valid entries:
always       Router Advert message is always sent
never        Router Advert message is never sent
smart        Router Advert message is sent if a prefix is defined
```

Example

```
NGFW{running-pptp0}ra-transmit-mode smart
```

NGFW{running-pptp0}shutdown

Shutdown logical interface state.

Syntax

```
shutdown
```

Example

```
NGFW{running-pptp0}shutdown
```

NGFW{running-pptp0}tcp4mss

Configure interface TCP MSS for IPv4.

Syntax

```
tcp4mss (disable|automatic|(4-65535)
```

Example

```
NGFW{running-pptp0}tcp4mss automatic
```

NGFW{running-pptp0}tcp6mss

Configure interface TCP MSS for IPv6.

Syntax

```
tcp6mss (disable|automatic|(4-65535)
```

Example

```
NGFW{running-pptp0}tcp6mss automatic
```

NGFW{running-pptp0}windowing

Enable or disable windowing option.

Syntax

```
windowing (enable|disable)
```

Example

```
NGFW{running-pptp0}windowing enable
NGFW{running-pptp0}windowing disable
```

running-rep Context Commands

Immediate Commit Feature. Changes take effect immediately.

NGFW{running}rep

NGFW{running-rep}delete

Delete file or configuration item.

Syntax

```
delete group REPGROUP
delete profile REPPROFILE

Valid entries:
group     Reputation group
profile   Delete reputation profile
```

Example

```
NGFW{running-rep}delete group myrepgroup
WARNING: Are you sure you want to delete reputation group (y/n)? [n]: y
NGFW{running-rep}delete profile myrepprofile
WARNING: Are you sure you want to delete profile (y/n)? [n]: y
```

NGFW{running-rep}group

Create or enter reputation group context.

Syntax

```
group REPGROUP

Valid entries:
REPGROUP      Reputation usergroup name
```

Example

```
NGFW{running-rep}group myrepgroup
NGFW{running-rep-myrepgroup}
NGFW{running-rep-myrepgroup}help
Valid commands are:
```

```
  delete domain DOMAINNAME
  delete ip SOURCEIP
  description DESCRIPTION
  display
  domain NEWDOMAINNAME
  help [full|COMMAND]
  ip SOURCEIP
```

NGFW{running-rep}profile

Create or enter reputation profile context.

Syntax

```
profile REPPROFILE
```

Example

```
NGFW{running-rep}profile myprofile
NGFW{running-rep-myprofile}help
Valid commands are:
  CHECK-ADDRESS ACTION
  action-when-pending ACTION
  delete dns-except DOMAINNAME
  delete filter ALLGROUPNAME
  delete ip-except SOURCEIP DESTINATIONIP
  display
  dns-except NEWDOMAINNAME
  filter ALLGROUPNAME( enable [threshold [XACTIONSETNAME]])|( disable)
  help [full|COMMAND]
  ip-except SOURCEIP DESTINATIONIP
```

NGFW{running-rep}rename

Rename a reputation profile or group.

Syntax

```
rename group REPGROUP NEWREPGROUP
rename profile REPPROFILE NEWREPPROFILE

Valid entries:
group     Reputation group
profile   Reputation profile
```

Example

```
NGFW{running-rep}rename profile oldname newname
```

running-rep-X (group X) Context Commands

Immediate Commit Feature. Changes take effect immediately.

NGFW{running-rep}group 1

NGFW{running-rep-1}delete

Delete file or configuration item.

Syntax

```
delete domain DOMAINNAME
delete ip (A.B.C.D|A.B.C.D/M|X:X::X:X|X:X::X:X/M)
```

```
Valid entries:
domain   Domain name
ip       IP address IPv4/IPv6/CIDR
```

Example

```
NGFW{running-rep-1}delete domain example.com
NGFW{running-rep-1}delete ip 192.168.1.1
NGFW{running-rep-1}delete ip 100:0:0:0:0:0:0:0/64
```

NGFW{running-rep-1}description

Add a description to the reputation group.

Syntax

```
description DESCRIPTION
```

Example

```
NGFW{running-rep-1}description "Rep Group 1"
```

NGFW{running-rep-1}domain

New domain name.

Syntax

```
domain NEWDOMAIN
```

Example

```
NGFW{running-rep-1}domain example.com
```

NGFW{running-rep-1}ip

IP address IPv4/IPv6.

Syntax

```
ip (A.B.C.D|A.B.C.D/M|X:X::X:X|X:X::X:X/M)
```

Example

```
NGFW{running-rep-1}ip 192.168.1.1
NGFW{running-rep-1}ip 192.168.1.0/24
NGFW{running-rep-1}ip 100:0:0:0:0:0:0:1
NGFW{running-rep-1}ip 100:0:0:0:0:0:0:0/64
```

running-rep-X (profile X) Context Commands

Immediate Commit Feature. Changes take effect immediately.

NGFW{running-rep}profile abc

NGFW{running-rep-abc}action-when-pending

Set pending action to permit or drop.

Syntax

```
action-when-pending (permit|drop)
```

Example

```
NGFW{running-rep-abc}action-when-pending permit
```

NGFW{running-rep-abc}check-source-address

Enables or disables check source address.

Syntax

```
check-source-address (enable|disable)

Valid entries:
enable      Enable check source address
disable     Disable check source address
```

Example

```
NGFW{running-rep-abc}check-source-address enable
```

NGFW{running-rep-abc}check-destination-address

Enables or disables check destination address.

Syntax

```
check-destination-address (enable|disable)
```

Example

```
NGFW{running-rep-abc}check-destination-address enable
```

NGFW{running-rep-abc}delete

Delete file or configuration item.

Syntax

```
delete dns-except DOMAINNAME
delete filter REPGROUP
delete ip-except (A.B.C.D|A.B.C.D/M|X:X::X:X|X:X::X:X/M)
(A.B.C.D|A.B.C.D/M|X:X::X:X|X:X::X:X/M)
```

Example

```
NGFW{running-rep-abc}delete dns-except example.com
NGFW{running-rep-abc}delete filter "myrepgroup"
NGFW{running-rep-abc}delete ip-except 192.168.1.1 192.168.2.2
NGFW{running-rep-abc}delete ip-except 2001:2:0:0:0:0:0:0/48 2001:db8:0:0:0:0:0:0/32
```

NGFW{running-rep-abc}dns-except

DNS domain exception.

Syntax

```
dns-except DOMAINNAME
```

Example

```
NGFW{running-rep-abc}dns-except example.com
```

NGFW{running-rep-abc}filter

Add a reputation filter rule.

Syntax

```
filter REPGROUP disable
filter REPGROUP enable [THRESHOLD [ACTIONSET]]
```

```
Valid entries:
enable        Enable filter rule
THRESHOLD     Set threshold (0-100)
ACTIONSET     Apply action set name
disable       Disable filter rule
```

Example

```
NGFW{running-rep-abc}filter "myrepgroup" enable
NGFW{running-rep-abc}filter "myrepgroup" enable 0 "Block + Notify"
```

NGFW{running-rep-abc}ip-except

Add IP address exception.

Syntax

```
ip-except SOURCEIP DESTINATIONIP

SOURCEIP        A.B.C.D or A.B.C.D/M or X:X::X:X or X:X::X:X/M
DESTINATIONIP   A.B.C.D or A.B.C.D/M or X:X::X:X or X:X::X:X/M
```

Example

```
NGFW{running-rep-abc}ip-except 192.168.1.1 192.168.2.2
NGFW{running-rep-abc}ip-except 2001:2:0:0:0:0:0:0/48 2001:db8:0:0:0:0:0:0/32
```

running-rip Context Commands

NGFW{running}router rip

NGFW{running-rip}default-metric

Set default metric for imported routes.

Syntax

```
default-metric (1-16)
```

Example

```
NGFW{running-rip}default-metric 2
```

NGFW{running-rip}delete

Delete file or configuration item.

Syntax

```
delete default-metric (1-16)
delete distance (1-255)
delete equal-cost (2-255)
delete passive-interface INTERFACE
delete redistribute (connected|ospf|static|bgp)
delete timers basic
delete triggered-updates
delete version (1|2)

Valid entries:
default-metric      Reset default metric for imported routes
distance            Reset administrative distance for routes learned via RIP to
                    default
equal-cost          Reset equal-cost to default
passive-interface   Enable RIP routing updates on an interface
redistribute        Delete redistribute routes from another routing protocol
timers              Reset basic RIP timers to default
```

```
triggered-updates   Disable triggered-updates
version             Reset RIP version to default
```

Example

```
NGFW{running-rip}delete default-metric 1
NGFW{running-rip}delete distance 120
NGFW{running-rip}delete equal-cost 2
NGFW{running-rip}delete passive-interface ethernet1
NGFW{running-rip}delete redistribute static
NGFW{running-rip}delete timers basic
NGFW{running-rip}delete triggered-updates
NGFW{running-rip}delete version 2
```

NGFW{running-rip}disable

Disable Routing Information Protocol (RIP).

Syntax

```
disable
```

Example

```
NGFW{running-rip}disable
```

NGFW{running-rip}distance

Set administrative distance for routes learned via RIP.

Syntax

```
distance (1-255)
```

Example

```
NGFW{running-rip}distance 120
```

NGFW{running-rip}distribute-list

Filter networks for RIP routing updates.

Syntax

```
distribute-list ACCESS-LIST (in|out) INTERFACE
```

Example

```
NGFW{running-rip}distribute-list myaccesslist in ethernet5
```

NGFW{running-rip}enable

Enable Routing Information Protocol (RIP).

Syntax

```
enable
```

Example

```
NGFW{running-rip}enable
```

NGFW{running-rip}equal-cost

Set the equal cost for ECMP.

Syntax

```
equal-cost (2-255)
```

Example

```
NGFW{running-rip}equal-cost 2
```

NGFW{running-rip}passive-interface

Suppress RIP routing updates on an interface.

Syntax

```
passive-interface (default|INTERFACE)

Valid entries:
default             "default" for all interfaces
INTERFACE           Interface name
```

Example

```
NGFW{running-rip}passive-interface ethernet1
```

NGFW{running-rip}redistribute

Redistribute routes from another routing protocol.

Syntax

```
redistribute (connected|ospf|static|bgp) [metric (0-15)] [route-map ROUTE-MAP]

Valid entries:
connected    Connected
static       Static routes
ospf         Open Shortest Path First (OSPF)
bgp          Border Gateway Protocol (BGP)

metric       Metric
(0-15)       Metric for redistributed routes
route-map    Route map reference
ROUTE-MAP    Pointer to route-map entries
```

Example

```
NGFW{running-rip}redistribute static metric 1 route-map myroutemap1
```

NGFW{running-rip}timers

Set basic RIP timers.

Syntax

```
timers basic ROUTING-TABLE-UPDATE ROUTING-INFORMATION-TIMEOUT GARBAGE-COLLECTION

Valid entries:
basic                         Set basic RIP timers
ROUTING-TABLE-UPDATE          Routing table update timer value (0-65535)
ROUTING-INFORMATION-TIMEOUT   Routing information timeout timer value (0-65535)
GARBAGE-COLLECTION            Garbage collection timer value (0-65535)
```

Example

```
NGFW{running-rip}timers basic 30 180 120
```

NGFW{running-rip}triggered-updates

Enable RIP triggered-updates.

Syntax

```
triggered-updates
```

Example

```
NGFW{running-rip}triggered-updates
```

NGFW{running-rip}version

Set RIP version.

Syntax

```
version (1-2)
```

Example

```
NGFW{running-rip}version 2
```

running-ripng Context Commands

NGFW{running}router ripng

NGFW{running-ripng}default-metric

Set default metric for imported routes.

Syntax

```
default-metric DEFAULT-METRIC

DEFAULT-METRIC (1-16)
```

Example

```
NGFW{running-ripng}default-metric 1
```

NGFW{running-ripng}delete

Delete file or configuration item.

Syntax

```
delete default-metric DEFAULT-METRIC
delete distance DISTANCE
delete distribute-list ACCESS-LIST (in|out) INTERFACE
delete equal-cost COST
delete passive-interface INTERFACE
delete redistribute PROTOCOL
delete timers basic
delete triggered-updates

Valid entries:
default-metric      Reset default metric for imported routes
distance            Reset administrative distance for routes learned via RIPng to
                    default
distribute-list     Delete RIPng distribute list entry
equal-cost          Reset equal-cost to default
passive-interface   Enable RIPng routing updates on an interface
redistribute        Delete redistribute routes from another routing protocol
timers              Reset basic RIPng timers to default
triggered-updates   Disable triggered-updates
```

Example

```
NGFW{running-ripng}delete triggered-updates
```

NGFW{running-ripng}disable

Disable Routing Information Protocol next generation (RIPng).

Syntax

```
disable
```

Example

```
NGFW{running-ripng}disable
```

NGFW{running-ripng}distance

Set administrative distance for routes learned by way of RIPng.

Syntax

```
distance DISTANCE
DISTANCE   Distance (1-255)
```

Example

```
NGFW{running-ripng}distance 2
```

NGFW{running-ripng}distribute-list

Filter networks in RIPng routing updates.

Syntax

```
distribute-list ACCESS-LIST (in|out) INTERFACE
```

```
Valid entries:
distribute-list   Filter networks in RIPng routing updates
ACCESS-LIST       Access list name
in                Incoming
out               Outbound
INTERFACE         Interface name
```

Example

```
NGFW{running-ripng}distribute-list mylist in ?
Valid entry at this position is:
  INTERFACE   Interface name
```

NGFW{running-ripng}enable

Enable Routing Information Protocol next generation (RIPng).

Syntax

```
enable
```

Example

```
NGFW{running-ripng}enable
```

NGFW{running-ripng}equal-cost

Set the equal cost for ECMP.

Syntax

```
equal-cost EQUAL-COST

EQUAL-COST (2-255)
```

Example

```
NGFW{running-ripng}equal-cost 2
```

NGFW{running-ripng}passive-interface

Suppress RIPng routing updates on an interface.

Syntax

```
passive-interface (default|INTERFACE)

default     "default" for all interfaces
INTERFACE   Interface name
```

Example

```
NGFW{running-ripng}passive-interface default
```

NGFW{running-ripng}redistribute

Redistribute routes from another routing protocol.

Syntax

```
redistribute PROTOCOL [metric (0-16)] [route-map ROUTE-MAP]

Possible values for PROTOCOL are:
connected    Connected
static       Static routes
ospfv3       Open Shortest Path First (OSPFv3)

metric       Metric
(0-16)       Metric for redistributed routes
route-map    Route map reference
ROUTE-MAP    Pointer to route-map entries
```

Example

```
NGFW{running-ripng}redistribute connected
```

NGFW{running-ripng}timers

Set basic RIPng timers.

Syntax

```
timers basic ROUTING-TABLE-UPDATE ROUTING-INFORMATION-TIMEOUT GARBAGE-COLLECTION

Valid entries:
basic                         Set basic RIPng timers
ROUTING-TABLE-UPDATE          Routing table update timer value (0-65535)
ROUTING-INFORMATION-TIMEOUT   Routing information timeout timer value (0-65535)
GARBAGE-COLLECTION            Garbage collection timer value (0-65535)
```

Example

```
NGFW{running-ripng}timers basic 60 90 120
```

NGFW{running-ripng}triggered-updates

Enable RIPng triggered-updates.

Syntax

```
triggered-updates
```

Example

```
NGFW{running-ripng}triggered-updates
```

running-route-map Context Commands

NGFW{running}route-map mymap permit 10

NGFW{running-route-map}delete

Delete file or configuration item.

Syntax

```
delete match as-path
delete match community-list
delete match ip address ACCESS-LIST-NAME
delete match ip next-hop A.B.C.D
delete match metric
delete set as-path prepend
delete set comm-list
delete set community
delete set ip next-hop A.B.C.D
delete set local-preference
delete set metric
```

Example

```
NGFW{running-route-map}delete match as-path
NGFW{running-route-map}delete match community-list
NGFW{running-route-map}delete match ip next-hop 198.162.0.24
NGFW{running-route-map}delete match metric
NGFW{running-route-map}delete set as-path prepend
```

NGFW{running-route-map}match

Specifies the matching condition.

Syntax

```
match as-path ASPATH-LIST-NAME
match community-list COMMUNITY-LIST-NAME
match ip address ACCESS-LIST-NAME
match ip next-hop A.B.C.D
match metric (1-65535)
```

Example

```
NGFW{running-route-map}match metric 2
```

NGFW{running-route-map}set

Sets the route attributes.

Syntax

```
set as-path prepend( ASNUMBER){1,24}
set comm-list COMMUNITY-LIST-NAME delete
```

```
set community ((AA:NN)|internet|local-as|no-advertise|no-export)
set ip next-hop A.B.C.D
set local-preference (0-65535)
set metric (1-65535)
```

Example

```
NGFW{running-route-map}set as-path prepend 64497
NGFW{running-route-map}set as-path prepend 64496 64511 65536 65551
```

running-schedules Context Commands

NGFW{running}schedules

NGFW{running-schedules}delete

Deletes a schedule.

Syntax

```
delete schedule (all|SCHEDULENAME)
```

Example

```
NGFW{running-schedules}delete schedule myhours1
NGFW{running-schedules}delete schedule all
```

NGFW{running-schedules}rename

Rename a schedule.

Syntax

```
rename schedule SCHEDULENAME NEWSCHEDULENAME
```

Example

```
NGFW{running-schedules}rename schedule myhours1 myhours2
```

NGFW{running-schedules}schedule

Create or enter a schedule context.

Syntax

```
schedule SCHEDULENAME
```

Example

```
NGFW{running-schedules}schedule myhours1
```

running-schedules-X Context Commands

NGFW{running-schedules}schedule myhours1

NGFW{running-schedule-myhours1}delete

Delete a schedule-entry.

Syntax

```
delete schedule-entry (all|SCHEDULENAME)
```

Example

```
NGFW{running-schedule-myhours1}delete schedule-entry -mtwtf- from 09:00 to 10:00
```

NGFW{running-schedule-myhours1}description

Enter description for the segment.

Syntax

```
description TEXT
```

Example

```
NGFW{running-schedule-myhours1}description "After Normal Business Hours"
```

NGFW{running-schedule-myhours1}schedule-entry

Add a schedule entry.

Syntax

```
schedule-entry DAYS START-TIME
```

Example

```
NGFW{running-schedule-myhours1}schedule-entry s-----s from 00:00 to 23:59
NGFW{running-schedule-myhours1}schedule-entry -mtwtf- from 18:00 to 23:59
NGFW{running-schedule-myhours1}schedule-entry -mtwtf- from 00:00 to 07:00
NGFW{running-schedule-myhours1}schedule-entry -mtwtf- from 09:00 to 10:00
```

running-segmentX Context Commands

NGFW{running}segment0

NGFW{running-segment0}bind

Bind ethernet port pairs to segment.

Syntax

```
bind (ethernet1+ethernet2 | ethernet3+ethernet4 | ethernet5+ethernet6 |
ethernet7+ethernet8)
```

Example

```
NGFW{running-segment0}bind ethernet1+ethernet2
```

NGFW{running-segment0}delete

Delete binding.

Syntax

```
delete (bind|high-availability|link-down)

Valid entries:
bind                    Unbind ethernet port pairs
high-availability   Intrinsic HA Layer 2 Fallback action
link-down           Link down synchronization mode
```

Example

```
NGFW{running-segment0}delete bind
NGFW{running-segment0}delete high-availability
NGFW{running-segment0}delete link-down
```

NGFW{running-segment0}description

Enter description for the segment.

Syntax

```
description TEXT
```

Example

```
NGFW{running-segment0}description "My Segment"
```

NGFW{running-segment0}high-availability

Intrinsic HA Layer 2 Fallback action block or permit.

Syntax

```
high-availability (block|permit)

block     Enable block all
permit    Enable permit all
```

Example

```
NGFW{running-segment0}high-availability permit
```

NGFW{running-segment0}link-down

Link down synchronization mode.

Syntax

```
link-down breaker [wait-time WAIT-TIME]
link-down hub
link-down wire [wait-time WAIT-TIME]

Valid entries:
breaker     Enable breaker action
hub         Enable hub action
wire        Enable wire action
WAIT-TIME   Time to wait before synchronizing in seconds
```

Example

```
NGFW{running-segment0}link-down wire wait-time 30
```

NGFW{running-segment0}restart

Restart both ethernet ports of segment.

Syntax

```
restart
```

Example

```
NGFW{running-segment0}restart
```

running-services Context Commands

NGFW{running}services

NGFW{running-services}delete

Delete service(s).

Syntax

```
delete service (all|SERVICENAME)
```

Example

```
NGFW{running-services}delete service myservice2
NGFW{running-services}delete service all
```

NGFW{running-services}rename

Rename service.

Syntax

```
rename service SERVICENAME NEWSERVICENAME
```

Example

```
NGFW{running-services}rename service myservice1 myservice2
```

NGFW{running-services}service

Create or enter a service context.

Syntax

```
service SERVICENAME
```

Example

```
NGFW{running-services}service myservice1
```

running-services-X Context Commands

NGFW{running-services}service myservice1
NGFW{running-services-myservice1}delete

Delete service parameters.

Syntax

```
delete icmp (all|NAME|NUMBER)
delete icmpv6 (all|NAME|NUMBER)
delete port tcp PORT [to LASTPORT]
delete port udp PORT [to LASTPORT]
delete port tcp all
delete port udp all
delete protocol (all|PROTONUM)
delete service (all|SERVICENAME)

Valid entries:
icmp       Delete ICMPv4
icmpv6     Delete ICMPv6
port       Delete port(s)
protocol   Delete packet protocol number(s)
service    Delete member service
```

Example

```
NGFW{running-services-myservice1}delete icmp any
NGFW{running-services-myservice1}delete icmpv6 any
NGFW{running-services-myservice1}delete port udp 53
NGFW{running-services-myservice1}delete port tcp all
NGFW{running-services-myservice1}delete protocol 6
NGFW{running-services-myservice1}delete service http
NGFW{running-services-myservice1}delete service dns
```

NGFW{running-services-myservice1}description

Apply service description.

Syntax

```
description TEXT
```

Example

```
NGFW{running-services-myservice1}description "my service 1"
```

NGFW{running-services-myservice1}icmp

Apply ICMPv4.

Syntax

```
icmp (NAME|NUMBER)

ICMP-CODENAMES    Apply ICMPv4 code name
NUMBER            Apply ICMP type number (0-255)
```

Example

```
NGFW{running-services-myservice1}icmp any
NGFW{running-services-myservice1}icmp 0
NGFW{running-services-myservice1}icmp echo-reply
```

NGFW{running-services-myservice1}icmpv6

Apply ICMPv6.

Syntax

```
icmpv6 (NAME|NUMBER)

ICMP6-CODENAMES   Apply ICMPv6 code name
NUMBER            Apply ICMPv6 type number (0-255)
```

Example

```
NGFW{running-services-myservice1}icmpv6 any
NGFW{running-services-myservice1}icmpv6 129
NGFW{running-services-myservice1}icmpv6 echo-reply
```

NGFW{running-services-myservice1}port

Apply TCP or UDP port number.

Syntax

```
port tcp PORT [to LASTPORT]
port udp PORT [to LASTPORT]

Valid entries:
tcp         Apply TCP
PORT        Apply port number
to          Set port range to
LAST-PORT   Apply last port of range
udp         Apply UDP
```

Example

```
NGFW{running-services-myservice1}port tcp 80 to 88
NGFW{running-services-myservice1}port udp 53
```

NGFW{running-services-myservice1}protocol

Apply protocol number.

Syntax

```
protocol IPPROTOCOL
IPPROTOCOL    Apply packet protocol number
```

Example

```
NGFW{running-services-myservice1}protocol 6
```

NGFW{running-services-myservice1}service

Apply member service.

Syntax

```
service SERVICENAME
SERVICENAME    Existing service name
```

Example

```
NGFW{running-services-myservice1}service http
NGFW{running-services-myservice1}service dns
```

running-smr Context Commands

NGFW{running}router smr

NGFW{running-smr}delete

Delete file or configuration item.

Syntax

```
delete dscp xmit
delete monitor A.B.C.D/M A.B.C.D [INTERFACE]
delete timer
delete ttl xmit

Valid entries:
dscp      Delete the DSCP value in the outbound ICMP packets
monitor   Monitored route
timer     Base timer
ttl       Delete the TTL setting for ICMP packets
```

Example

```
NGFW{running-smr}delete dscp xmit
NGFW{running-smr}delete timer
NGFW{running-smr}delete monitor 198.162.0.100/24 ?
Valid entry at this position is:
  A.B.C.D   The Gateway of the route
```

NGFW{running-smr}dscp

Define the global DSCP value.

Syntax

```
dscp xmit 0xXX

xmit   Define the DSCP in the outbound ICMP packets
0xXX   6-bit Hexadecimal value (0x0 - 0x3f)
```

Example

```
NGFW{running-smr}dscp xmit 0x0
```

NGFW{running-smr}monitor

Define monitoring parameters for a route.

Syntax

```
monitor A.B.C.D/M A.B.C.D MULT MAXFAILURE [A.B.C.D]
monitor A.B.C.D/M A.B.C.D MULT MAXFAILURE distance DISTANCE [A.B.C.D]

monitor      Monitor a static route
A.B.C.D/M    The monitored route
A.B.C.D      The Gateway of the route
MULT         Timer multiplier for the polling (range: 1-255)
MAXFAILURE   Failure limit for the polling (range: 1-16)
A.B.C.D      Probe target different from the route gateway
distance     Administrative distance of the route
DISTANCE     Administrative distance value (default: 10, range: 1-255)
```

Example

```
NGFW{running-smr}monitor 192.168.0.100/24 192.168.0.102 2 3
```

NGFW{running-smr}timer

Define time base for polling.

Syntax

```
timer MSEC
MSEC    base timer in milliseconds (50-300000). Default: 200
```

Example

```
NGFW{running-smr}timer 200
```

NGFW{running-smr}ttl

Define TTL of ICMP packets.

Syntax

```
ttl recv (1-255)
ttl xmit (1-255)

Valid entries:
recv   Define expected TTL of received ICMP packets
xmit   Define TTL of transmitted ICMP echo packets
```

Example

```
NGFW{running-smr}ttl recv 10
```

running-snat Context Commands

NGFW{running}src-nat

NGFW{running-snat}delete

Delete source NAT rule(s).

Syntax

```
delete rule (all|SRCNATRULEID)
```

Example

```
NGFW{running-snat}delete rule 123
```

NGFW{running-snat}rename

Rename source NAT rule.

Syntax

```
rename rule SRCNATRULEID NEWSRCNATRULEID
```

Example

```
NGFW{running-snat}rename rule 123 snat1
```

NGFW{running-snat}rule

Create or enter a rule context.

Syntax

```
rule (auto|SRCNATRULEID) [POSITION_VALUE]
```

Example

```
NGFW{running-snat}rule 123
```

running-snat-rule-X Context Commands

NGFW{running-snat}rule snat1

NGFW{running-snat-rule-snat1}delete

Delete file or configuration item.

Syntax

```
delete dst-zone (include|exclude) (all|ZONENAME)
delete src-address (include|exclude) group ADDRESSGROUP
delete dst-address (include|exclude) group ADDRESSGROUP
delete src-address (include|exclude) ipaddress A.B.C.D
delete dst-address (include|exclude) ipaddress A.B.C.D
delete src-address (include|exclude) ipaddress A.B.C.D/M
delete dst-address (include|exclude) ipaddress A.B.C.D/M
delete src-address (include|exclude) range A.B.C.D A.B.C.D
delete dst-address (include|exclude) range A.B.C.D A.B.C.D
delete translate-to interface
delete translate-to ipaddress (A.B.C.D|A.B.C.D/M)
delete translate-to range A.B.C.D A.B.C.D

Valid entries:
dst-address    Delete destination addresses
dst-zone       Delete destination security zone
src-address    Delete source addresses
translate-to   Apply translation
```

Example

```
NGFW{running-snat-rule-snat1}delete translate-to range 192.168.1.100 192.168.1.200
NGFW{running-snat-rule-snat1}delete dst-zone include all
NGFW{running-snat-rule-snat1}delete dst-address include ipaddress 192.168.1.0/24
```

```
NGFW{running-snat-rule-snat1}delete src-address exclude ipaddress 192.168.1.1
```

NGFW{running-snat-rule-snat1}description

Apply rule description.

Syntax

```
description TEXT
```

Example

```
NGFW{running-snat-rule-snat1}description "source nat rule 1"
```

NGFW{running-snat-rule-snat1}dst-address

Apply destination address.

Syntax

```
dst-address (include|exclude) group ADDRESSGROUP
dst-address (include|exclude) ipaddress A.B.C.D
dst-address (include|exclude) ipaddress A.B.C.D/M
dst-address (include|exclude) range A.B.C.D A.B.C.D
```

Example

```
NGFW{running-snat-rule-snat1}dst-address include ipaddress 192.168.1.0/24
NGFW{running-snat-rule-snat1}dst-address exclude ipaddress 192.168.1.1
NGFW{running-snat-rule-snat1}dst-address include range 192.168.1.100 192.168.1.200
```

NGFW{running-snat-rule-snat1}dst-zone

Apply destination security zone.

Syntax

```
dst-zone (include|exclude) ZONENAME
```

Example

```
NGFW{running-snat-rule-snat1}dst-zone include myzone1
NGFW{running-snat-rule-snat1}dst-zone exclude myzone1
```

NGFW{running-snat-rule-snat1}move

Move rule position in the rule table.

Syntax

```
move after SRCNATRULEID
move before SRCNATRULEID
move to position VALUE

Valid entries:
after          Move rule position after the rule identifier
SRCNATRULEID   Apply source NAT rule identifier
before         Move rule position before the rule identifier
to             Move to rule position
position       Apply rule position
VALUE          Apply rule position number
```

Example

```
NGFW{running-snat-rule-snat1}move after snat1
```

```
NGFW{running-snat-rule-snat1}move before snat1
NGFW{running-snat-rule-snat1}move to position 1
```

NGFW{running-snat-rule-snat1}src-address

Apply source address.

Syntax

```
src-address (include|exclude) group ADDRESSGROUP
src-address (include|exclude) ipaddress A.B.C.D
src-address (include|exclude) ipaddress A.B.C.D/M
src-address (include|exclude) range A.B.C.D A.B.C.D
```

Example

```
NGFW{running-snat-rule-snat1}src-address include ipaddress 192.168.1.0/24
NGFW{running-snat-rule-snat1}src-address exclude ipaddress 192.168.1.1
NGFW{running-snat-rule-snat1}src-address include range 192.168.1.100 192.168.1.200
```

NGFW{running-snat-rule-snat1}translate-to

Apply translation.

Syntax

```
translate-to interface
translate-to ipaddress (A.B.C.D|A.B.C.D/M)
translate-to range A.B.C.D A.B.C.D

Valid entries:
interface   Apply translate interface
ipaddress   Apply IP address
range       Apply IP address range
```

Example

```
NGFW{running-snat-rule-snat1}translate-to interface
NGFW{running-snat-rule-snat1}translate-to ipaddress 192.168.1.1
NGFW{running-snat-rule-snat1}translate-to ipaddress 192.168.1.0/24
NGFW{running-snat-rule-snat1}translate-to range 192.168.1.100 192.168.1.200
```

running-snmp Context Commands

NGFW{running}snmp

NGFW{running-snmp}authtrap

Enable or disable SNMP authentication failure trap.

Syntax

```
authtrap (enable|disable)
```

Example

```
NGFW{running-snmp}authtrap enable
```

NGFW{running-snmp}community

Configure SNMP read-only community.

Syntax

```
community COMMUNITY [SOURCE]
```

```
COMMUNITY   Text to identify SNMP system community
SOURCE      IP (A.B.C.D|X:X::X:X), subnet (A.B.C.D/M|X:X::X:X/M), or "default"
default     allow any IPv4/6 source
```

Example

```
NGFW{running-snmp}community mycommunity default
```

NGFW{running-snmp}delete

Delete file or configuration item.

Syntax

```
delete community (COMMUNITY|all)
delete trapsession ((A.B.C.D|X:X::X:X|FQDN) ver VERSION)|all)
delete username (USERNAME|all)

Valid entries:
community     Delete SNMP read-only community
trapsession   Delete a configured trap session
username      Delete a configured user
```

Example

```
NGFW{running-snmp}delete community mycommunity
NGFW{running-snmp}delete community all
NGFW{running-snmp}delete trapsession 192.168.1.1 ver 3
NGFW{running-snmp}delete trapsession all
```

NGFW{running-snmp}engineID

Configure SNMPv3 engine ID.

Syntax

```
engineID ENGINE-ID
ENGINE-ID   SNMPv3 Engine ID (1-32 hex octets, ex: 0x800012ef0302a11aab33f4)
```

Example

```
NGFW{running-snmp}engineID 0x800012ef0302a11aab33f4
```

NGFW{running-snmp}snmp

Enable or disable SNMP.

Syntax

```
snmp (enable|disable)
```

Example

```
NGFW{running-snmp}snmp enable
```

NGFW{running-snmp}trapsession

Configure SNMP v2c or v3 trap destinations.

Syntax

```
trapsession (A.B.C.D|X:X::X:X|FQDN) [port PORT] ver 2c COMMUNITY [inform]
trapsession (A.B.C.D|X:X::X:X|FQDN) [port PORT] ver 3 USERNAME level noAuthNoPriv
            [inform]
```

```
trapsession (A.B.C.D|X:X::X:X|FQDN) [port PORT] ver 3 USERNAME level authNoPriv
            authtype (MD5|SHA) AUTHPASS [inform]
trapsession (A.B.C.D|X:X::X:X|FQDN) [port PORT] ver 3 USERNAME level authPriv
            authtype (MD5|SHA) AUTHPASS privproto PRIVPROTO [PRIVPASS] [inform]

Valid entries:
HOST            IP address or DNS host name
port            Configure SNMP port
PORT            SNMP port (default 162)
ver             Configure SNMP version (2c, or 3)
2c              SNMPv2c
COMMUNITY       Text to identify SNMP system community
inform          Send information message instead of a trap
3               SNMPv3
USERNAME        Text to identify USM user name (for authentication/privacy)
level           Configure security level (noAuthNoPriv|authNoPriv/|authPriv)
noAuthNoPriv    No authentication, no privacy
authNoPriv      Authentication, no privacy
authtype        Configure authentication type (MD5|SHA)
AUTHTYPE        Authentication type
Possible values for AUTHTYPE are:
    MD5             Message Digest 5
    SHA             Secure Hash Algorithm
AUTHPASS        Authentication passphrase - must be at least 8 characters
authPriv        Authentication and privacy
privproto       Configure privacy protocol (DES|AES)
PRIVPROTO       Privacy protocol
Possible values for PRIVPROTO are:
    DES             Data Encryption Security
    AES             Advanced Encryption Security
PRIVPASS        Optional privacy passphrase - must be at least 8 characters
```

Example

```
NGFW{running-snmp}trapsession snmpserver.example.com ver 2c mycommunity inform
NGFW{running-snmp}trapsession 192.168.1.1 port 162 ver 2c mycommunity
NGFW{running-snmp}trapsession 192.168.1.1 port 162 ver 3 mysnmpusername level
authNoPriv authtype SHA mysnmppassword inform
NGFW{running-snmp}trapsession 100:0:0:0:0:0:0:1 ver 3 mysnmpusername level
authNoPriv authtype SHA mysnmppassword inform
```

NGFW{running-snmp}username

Configure SNMPv3 USM read-only user.

Syntax

```
username USERNAME level noAuthNoPriv
username USERNAME level authNoPriv authtype AUTHTYPE AUTHPASS
username USERNAME level authPriv authtype AUTHTYPE AUTHPASS privproto PRIVPROTO
         [PRIVPASS]

Valid entries:
USERNAME        Text to identify USM user name (for authentication/privacy)
level           Configure security level (noAuthNoPriv|authNoPriv/|authPriv)
noAuthNoPriv    No authentication, no privacy
authNoPriv      Authentication, no privacy
authtype        Configure authentication type (MD5|SHA)
AUTHTYPE        Authentication type
Possible values for AUTHTYPE are:
    MD5             Message Digest 5
    SHA             Secure Hash Algorithm
```

```
AUTHPASS       Authentication passphrase - must be at least 8 characters
authPriv       Authentication and privacy
privproto      Configure privacy protocol (DES|AES)
PRIVPROTO      Privacy protocol
Possible values for PRIVPROTO are:
    DES            Data Encryption Security
    AES            Advanced Encryption Security
PRIVPASS       Optional privacy passphrase - must be at least 8 characters
```

Example

```
NGFW{running-snmp}username mysnmpusername level noAuthNoPriv
NGFW{running-snmp}username mysnmpusername level authNoPriv authtype SHA
mysnmppassword
NGFW{running-snmp}username mysnmpusername level authPriv authtype SHA mysnmppassword
privproto AES mysnmpprivpassword
```

running-vlanX Context Commands

NGFW{running}interface vlan0

NGFW{running-vlan0}arp/ndp

Enable or disable ARP and NDP on interface.

Syntax

```
arp/ndp (enable|disable)
```

Example

```
NGFW{running-vlan0}arp/ndp enable
```

NGFW{running-vlan0}autoconfv6

Enable or disable IPv6 autoconfiguration on interface.

Syntax

```
autoconfv6 (enable|disable)
```

Example

```
NGFW{running-vlan0}autoconfv6 enable
```

NGFW{running-vlan0}bind

Bind an interface to vlan.

Syntax

```
bind PORT id vlanid

PORT     Bind interface over ethernet, aggregated link or VLAN port
id       VLAN ID
vlanid   VLAN ID
```

Example

```
NGFW{running-vlan0}bind ethernet2 ?
Valid entry at this position is:
  id   VLAN ID
```

NGFW{running-vlan0}delete

Delete file or configuration item.

Syntax

```
delete bind
delete ip igmp
delete ip igmp version
delete ip ospf area
delete ip ospf authentication mode md5 (1-255) KEY
delete ip ospf authentication mode text KEY
delete ip ospf cost (1-65535)
delete ip ospf dead-interval (1-65535)
delete ip ospf hello-interval (1-65535)
delete ip ospf priority (0-255)
delete ip ospf retransmit-interval (3-65535)
delete ip ospf transmit-delay (1-65535)
delete ip pim-sm
delete ip rip
delete ip rip authentication mode md5
delete ip rip authentication mode text
delete ip rip receive version (v1-only|v2-only|v1-or-v2)
delete ip rip send version (v1-only|v2-only|v1-or-v2)
delete ip rip split-horizon
delete ipaddress (all|A.B.C.D/M|X:X::X:X/M)
delete ipaddress dhcpv4
delete ipaddress dhcpv6
delete ipv6 mld
delete ipv6 mld version
delete ipv6 ospfv3 area
delete ipv6 ospfv3 cost
delete ipv6 ospfv3 dead-interval
delete ipv6 ospfv3 hello-interval
delete ipv6 ospfv3 priority
delete ipv6 ospfv3 retransmit-interval
delete ipv6 ospfv3 transmit-delay
delete ipv6 pim-sm
delete ipv6 ripng
delete ipv6 ripng split-horizon
delete prefix (all|X:X::X:X/M)
delete shutdown

Valid entries:
bind        Bind an interface to vlan
ip          Configure IP settings
ip          Delete IP settings
ipaddress   Delete DHCPv4 client context
ipaddress   Delete DHCPv6 client context
ipaddress   Delete IP address
ipv6        Configure IPv6 settings
ipv6        Delete IPv6
prefix      Delete IPv6 prefix
shutdown    Shutdown logical interface state
```

Example

```
NGFW{running-vlan0}delete bind
NGFW{running-vlan0}delete ip igmp
NGFW{running-vlan0}delete ip rip authentication mode md5
```

NGFW{running-vlan0}description

Enter description for the interface.

Syntax

```
description TEXT
```

Example

```
NGFW{running-vlan0}description "My interface description"
```

NGFW{running-vlan0}ip

Configure IP settings.

Syntax

```
ip igmp
ip igmp version (1|2|3)
ip ospf area (A.B.C.D|(0-4294967295))
ip ospf authentication mode md5 (1-255) KEY
ip ospf authentication mode text KEY
ip ospf cost (1-65535)
ip ospf dead-interval (1-65535)
ip ospf hello-interval (1-65535) [A.B.C.D]
ip ospf priority (0-255)
ip ospf retransmit-interval (3-65535)
ip ospf transmit-delay (1-65535)
ip pim-sm
ip rip
ip rip authentication mode md5 (0-2147483647) KEY
ip rip authentication mode text
ip rip receive version (v1-only|v2-only|v1-or-v2)
ip rip send version (v1-only|v2-only|v1-or-v2)
ip rip split-horizon [poison-reverse]
```

Example

```
NGFW{running-vlan0}ip igmp
NGFW{running-vlan0}ip ospf area 192.168.0.24
```

NGFW{running-vlan0}ipaddress

Configure IP address.

Syntax

```
ipaddress (A.B.C.D/M|X:X::X:X/M) [primary]
ipaddress (dhcpv4|dhcpv6)

Valid entries:
A.B.C.D/M    IPv4 address with netmask length
X:X::X:X/M   IPv6 address with prefix length
dhcpv4       Configure DHCPv4 client
dhcpv6       Enter DHCPv6 client context
```

Example

```
NGFW{running-vlan0}ipaddress dhcpv4
```

NGFW{running-vlan0}ipv6

Configure IPv6 settings.

Syntax

```
ipv6 mld
```

```
ipv6 mld version (1|2)
ipv6 ospfv3 area (A.B.C.D|<0-4294967295>)
ipv6 ospfv3 cost COST
ipv6 ospfv3 dead-interval VALUE
ipv6 ospfv3 hello-interval VALUE
ipv6 ospfv3 priority VALUE
ipv6 ospfv3 retransmit-interval VALUE
ipv6 ospfv3 transmit-delay VALUE
ipv6 pim-sm
ipv6 ripng
ipv6 ripng split-horizon (simple|poison-reverse|inactive)

Valid entries:
mld                   Configure MLD settings
ospfv3                Configure OSPFv3 over the interface
pim-sm                Configure PIM-SM over the interface
ripng                 Configure RIPng over the interface
area                  Enable the interface in an OSPFv3 area
<0-4294967295>        OSPFv3 area ID as a decimal value
A.B.C.D               OSPFv3 area ID in IP address format
cost                  OSPFv3 interface cost
COST                  Cost value (1-65535)
dead-interval         Interval after which a neighbor is declared dead
VALUE                 Dead interval value (1-65535)
hello-interval        Interval between HELLO packets
VALUE                 Hello interval value (1-65535)
priority              OSPFv3 interface priority
VALUE                 Priority value (0-255)
retransmit-interval   Interval between retransmitting lost link state advertisements
VALUE                 Retransmit interval value (3-65535)
transmit-delay        Link state transmit delay
VALUE                 Transmit delay value (1-65535)
```

Example

```
NGFW{running-vlan0}ipv6 mld
NGFW{running-vlan0}ipv6 ripng split-horizon simple
```

NGFW{running-vlan0}mtu

Configure interface MTU.

Syntax

```
mtu (default|VALUE)

default   Default value is applied
VALUE     Interface MTU value (68-9216)
```

Example

```
NGFW{running-vlan0}mtu default
```

NGFW{running-vlan0}prefix

Configure IPv6 prefix.

Syntax

```
prefix X:X::X:X/M [valid-lifetime (1-4294967295)] [preferred-lifetime
(1-4294967295)]
Valid entries:
X:X::X:X/M           IPv6 prefix
```

```
valid-lifetime       Configure valid lifetime
(1-4294967295)       Valid lifetime in seconds (default is 2592000)
preferred-lifetime   Configure preferred lifetime
(1-4294967295)       Preferred lifetime in seconds
                     (default is 604800 - cannot exceed valid lifetime)
```

Example

```
NGFW{running-vlan0}prefix 2001:db8::/32
NGFW{running-vlan0}prefix 2001:db8::/32 valid-lifetime 2592000
```

NGFW{running-vlan0}ra-autoconf-level

Modify IPv6 Router Advertisement autoconfiguration level.

Syntax

```
ra-autoconf-level AUTOCONF
```

```
Valid entries:
AUTOCONF            Router Advert Autoconfiguration level (DHCP)
Possible values for AUTOCONF are:
none                No parameter is autoconfigured
address             Address is autoconfigured
other               Some other parameters are autoconfigured
full                Most parameters are autoconfigured
```

Example

```
NGFW{running-vlan0}ra-autoconf-level full
```

NGFW{running-vlan0}ra-interval

Modify IPv6 Router Advertisement interval value.

Syntax

```
ra-interval INTERVAL
```

```
Valid entries:
INTERVAL   Router Advert emission period (in milliseconds)
```

Example

```
NGFW{running-vlan0}ra-interval 240
```

NGFW{running-vlan0}ra-interval-transmit

Modify IPv6 Router Advertisement interval transmit.

Syntax

```
ra-interval-transmit (enable|disable)
```

```
Valid entries:
enable    Enable router advertisement
disable   Disable router advertisement
```

Example

```
NGFW{running-vlan0}ra-interval-transmit enable
```

NGFW{running-vlan0}ra-lifetime

Modify IPv6 Router Advertisement prefix lifetime in seconds.

Syntax

```
ra-lifetime (0-9000000)
```

Example

```
NGFW{running-vlan0}ra-lifetime 9000000
```

NGFW{running-vlan0}ra-mtu

Modify IPv6 Router Advertisement MTU value.

Syntax

```
ra-mtu (none|MTU)

none     Not configured
MTU      MTU value advertised (68-9216)(0 if none)
```

Example

```
NGFW{running-vlan0}ra-mtu 9216
```

NGFW{running-vlan0}ra-transmit-mode

Modify IPv6 Router Advertisement transmit mode.

Syntax

```
ra-transmit-mode MODE

MODE          Router Advertisement transmit mode
Possible values for MODE are:
always        Router Advert message is always sent
never         Router Advert message is never sent
smart         Router Advert message is sent if a prefix is defined
```

Example

```
NGFW{running-vlan0}ra-transmit-mode always
```

NGFW{running-vlan0}shutdown

Shutdown logical interface state.

Syntax

```
shutdown
```

Example

```
NGFW{running-vlan0}shutdown
```

NGFW{running-vlan0}tcp4mss

Configure interface TCP MSS for IPv4.

Syntax

```
tcp4mss (disable|automatic|VALUE)

Valid entries:
disable     Disable service
```

```
automatic   Automatically select TCP MSS based on interface MTU
VALUE       TCP MSS value for IPv4 (4-65535)
```

Example

```
NGFW{running-vlan0}tcp4mss 4
```

NGFW{running-vlan0}tcp6mss

Configure interface TCP MSS for IPv6.

Syntax

```
tcp6mss (disable|automatic|VALUE)
```

```
Valid entries:
disable     Disable service
automatic   Automatically select TCP MSS based on interface MTU
VALUE       TCP MSS value for IPv6 (4-65535)
```

Example

```
NGFW{running-vlan0}tcp6mss automatic
```

running-zones Context Commands

NGFW{running}zones

NGFW{running-zones}delete

Delete security zone(s).

Syntax

```
delete zone (all|ZONENAME)
```

```
Valid entries:
zone        Delete security zone(s)
all         All settings
ZONENAME    Existing security zone name
```

Example

```
NGFW{running-zones}delete zone all
NGFW{running-zones}delete zone myzone1
```

NGFW{running-zones}rename

Rename a specified zone.

Syntax

```
rename zone ZONENAME NEWZONENAME
```

```
Valid entries:
zone           Enter security zone context
ZONENAME       Existing security zone name
NEWZONENAME    New security zone name
```

Example

```
NGFW{running-zones}rename zone myzone1 myzone2
```

NGFW{running-zones}zone

Enter security zone context.

Syntax

```
zone ZONENAME
```

Example

```
NGFW{running-zones}zone myzone1
```

running-zones-X Context Commands

NGFW{running-zones}zone myzone1

NGFW{running-zones-myzone1}application-visibility

Enable or Disable application visibility.

Syntax

```
application-visibility (enable|disable)
```

Example

```
NGFW{running-zones-myzone1}application-visibility enable
```

NGFW{running-zones-myzone1}bind

Bind interfaces to zones.

Syntax

```
bind INTERFACE
```

Example

```
NGFW{running-zones-myzone1}bind ethernet5
```

NGFW{running-zones-myzone1}delete

Delete file or configuration item.

Syntax

```
delete bind (INTERFACE|all)
```

```
Valid entries:
bind        Bind interfaces to zones
INTERFACE   Delete interface from zone
all         Delete all interfaces bound to the zone
```

Example

```
NGFW{running-zones-myzone1}delete bind ethernet5
```

NGFW{running-zones-myzone1}description

Enter description for the zone.

Syntax

```
description TEXT
```

Example

```
NGFW{running-zones-myzone1}description "my zone 1"
```