FORCEPOINT

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Forcepoint Appliances
Command Line Interface (CLI) Guide

V Series, X Series, & Virtual Appliances

v8.4.x

Contents

1 Forcepoint Appliances Command Line Interface

The command line interface (CLI) is a text-based user interface for configuring, monitoring, and troubleshooting Forcepoint™ Appliances. For more information about Forcepoint Appliances, see the Forcepoint Appliances Getting Started Guide.

This guide describes the syntax and usage of each CLI command, including:

Use the Forcepoint Appliances API to write scripts to execute configuration changes and perform updates across multiple appliances.

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Conventions

Administrators who are new to the appliance CLI may benefit from these quick summaries:

Logon and authentication

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There are several ways to connect to the CLI. Once connected, log on to the CLI with the **admin** credentials. The password is set initially during firstboot and can be changed in the CLI.

Connection via **SSH is available on all Forcepoint Appliances platforms.** When SSH access is enabled (default), connect to the CLI using a terminal emulator and SSH. On a Windows system, use PuTTY or similar. On a Mac system use Terminal. Connect to the appliance management interface IP address (interface C) on port 22.

On V Series or X Series appliances you can also access the CLI in these ways:

- Use the Virtual Console feature of the integrated DELL Remote Access Controller (iDRAC).
- Attach a keyboard and monitor directly to the appliance.
- Connect directly via the serial port or a KVM.

On a VMware virtual appliance, in addition to SSH you can access the CLI via the vSphere Client.

> **Note**
> Your logon session terminates automatically after 15 minutes of inactivity.

CLI modes and account privileges

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By default, only the **admin** account is enabled on each appliance. This is the account password that you set during the firstboot process.

Three working modes (sometimes called contexts) are supported by the Command Line Interface (CLI) and are available to every person logged on as admin.

Mode Name	Description
view	The default mode. Used for displaying status and settings.
config	The mode required for changing settings and enabling/disabling options.
diagnose	The mode used to perform troubleshooting. It provides support for system and network test commands.

Immediately after logon, an admin is always in the **view** mode.

To move from **view** to the **config** mode, enter **config** on the command line. The **admin** password is required for this mode switch.

To move from **view** to the **diagnose** mode, enter **diagnose** on the command line.

To return to the **view** mode from **config** or **diagnose**, enter **exit** on the command line.

You cannot move from **config** directly to **diagnose** or vice versa.

> **Tip**
>
> In order to toggle more easily between diagnose and config modes, an admin may choose to open two sessions (**diagnose** mode and **config** mode) at the same time.

- Only one person logged in as **admin** can work in **config** mode at a time.
- If needed, a person logged in as **admin** who is working in the **view** mode can use the following command to immediately bump the admin who is working in the **config** mode:

    ```
    clear session --config
    ```

    This moves the administrator who had been working in **config** mode back into the **view** mode.

A person logged in as **admin** has full privileges in the **view**, **config**, and **diagnose** modes. While working in the **config** mode, an admin can optionally enable two accounts:

- The **audit** account is for colleagues who need to view settings. This account can work only in the **view** mode and can use only **show** and **exit** commands.
- The **tech-support** account is for use by Forcepoint technicians to provide technical support.

Basic account management

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A person who is logged in as **admin** and working in the **config** mode can view, enable, and disable the **audit** account status and can change the password for the

admin and **audit** accounts. An admin user can also display, create, modify, or delete a user account.

Configure accounts

Action and Syntax	Details

Change the password for the admin account.
 	
`set account admin`
`  --password`
	You are prompted to enter the current password, and then prompted to enter and confirm the new password.
	
	Note that the admin password is first set when you run the firstboot script.
	
	The password must be 8 to 15 characters in length and it must include:
	
	● At least one uppercase character
	● At least one lowercase character
	● At least one number
	● At least one character in the set:
	! # % & ' ( ) * + , - . / ; < = > ? @ [ ] ^ _ { | } ~
	
	Exclude all of the following:
	
	● The special characters: space $: ` \ "
	● The previous 3 passwords for the account
	● The device's hostname
	● The user name of any appliance service account (admin, root, tech-support, audit)
	● Common appliance- or company-related names

See if the audit account is enabled or disabled.
 	
`show account audit`
`  --status`
	The audit account is disabled by default.

Action and Syntax	Details

Enable or disable the audit account.
 	
`set account audit`
` --status <enabled|disabled>`
 	
Set or change the audit account password.
 	
`set account audit`
` --password`
You are prompted to enter the password.
	The --status and --password parameters cannot be used at the same time.
	
	When enabling the audit account for the first time, also set a password.
	
	The password must be 8 to 15 characters in length and it must include:
	● At least one uppercase character
	● At least one lowercase character
	● At least one number
	● At least one character in the set:
	 ! # % & ' ( ) * + , - . / ; < = > ? @
	 [ ] ^ _ {
		} ~
		Exclude all of the following:
		● The special characters: space $: ` \ "
		● The previous 3 passwords for the account
		● The device's hostname
		● The user name of any appliance service account (admin, root, tech-support, audit)
		● Common appliance- or company-related names.

Enable or disable remote CLI access via SSH.
 	
`set access ssh`
` --status <enabled|disabled>`
	SSH status is enabled or disabled for all active accounts.
	
	Valid users include admin, audit, and tech-support. There is no access via SSH for the root user, as this is a reserved internal account.

Display whether remote CLI access via SSH is enabled or disabled.
 	
`show access ssh`
` --status`	

Display the admin account email address. `show account email`	

Define an email address to use for admin account password recovery.
 	
`set account email`
` --address <address>`
	A temporary password is sent to this email address when you request automated password recovery help.
	
	You must also define an SMTP server. (See next command.)
	
	Technical Support can also manually issue a temporary password if you provide the security code you see in the appliance iDRAC console.

Send a test email using the email/SMTP configuration. `send test_email`	
Display the SMTP server settings used with the admin email address to facilitate password recovery. `show account smtp`	Displays: ● Server IP address or hostname ● Server port ● Server user name ● Server password

Action and Syntax	Details

Define an SMTP server for use during admin account password recovery.
 	
``
set account smtp
  --host <location>
  --port <port>
  --user <name>
``
	Password recovery requires you to define:
	1. An SMTP server
	2. A valid email address to receive a temporary password
	
	The host location can be either the SMTP server's IPv4 address or its hostname.
	
	The SMTP port is optional (set to 25, by default).
	
	The user is the account to use to connect to the SMTP server.
	
	Example:
	``
	(config)# set account smtp
	  --host 10.0.0.25 --port 25
	  --user smtpuser
	``

For admin account password recovery, enter **Ctrl**+**P** at the console logon prompt. The old password will be overwritten as soon as the admin types "yes" in the confirmation dialog box.	If you have lost or forgotten your admin password, you can either: ● Have a temporary password sent to the email address configured on the appliance. ● Contact Technical Support to receive a temporary password by providing the security code displayed on the console. Use the temporary password to log on to the appliance. You will be prompted to set a new password. The password must be 8 to 15 characters in length and it must include: ● At least one uppercase character ● At least one lowercase character ● At least one number ● At least one character in the set: ! # % & ' ( ) * + , - . / ; < = > ? @ [ ] ^ _ {	} ~ Exclude all of the following: ● The special characters: space $: ` \ " ● The previous 3 passwords for the account ● The device's hostname ● The user name of any appliance service account (admin, root, tech-support, audit) Common appliance- or company-related names
Delete the password recovery email address. ``` delete account email ```	
Delete SMTP settings. ``` delete account smtp ```	

Action and Syntax	Details

Display Technical Support account access or activity history.
 	
`show account tech-support`
`  --status`
`show account tech-support`
`  --history`
	The --status and --history parameters cannot be used at the same time.
	
	The activity history includes both local and remote access via the tech-support account.

Enable or disable access for Technical Support.
 	
`set account tech-support`
`  --status <enabled|disabled>`
	A temporary tech support password is generated when you enable this access. Technical Support retrieves the passcode from a special URL.
	
	To allow Technical Support remote access, SSH access must also be enabled with:
	
	`set access ssh --status enabled`
	
	When a technician uses the tech-support account, the session ends automatically after 15 minutes of inactivity.
	
	View the logon history of the tech-support account with:
	
	`show account tech-support`
	`  --history`

Show users or show a specific user.
 	
`show user`
`[--name <unique_user_name>]`
	Name: (optional) User name for the account to display.
	
	Example:
	
	`(view)# show user --name jdoe`

Create a user account.
 	
`create user`
`--name <unique_user_name>`
`--type <audit|admin>`
`[--status <enabled|disabled>]`
	Name: User name for the account to display.
	
	The user name must:
	● Contain only lower case letters, numbers, and the underscore character (_)
	● Be 30 or fewer characters
	● Begin with the underscore character or a letter
	
	Type: Account authorization type (audit or admin)
	
	Status: (optional) Initial status of the user (enabled or disabled). Default is disabled.
	
	Example:
	
	`(config)# create user`
	`--name jdoe --status enabled`
	`--type audit`

Action and Syntax	Details
Update user account settings. ```set user --name <unique_user_name> --type <audit|admin> [--status <enabled|disabled>] [--password]```	**Name:** User name for the account to display. **Type:** Account authorization type (audit or admin) **Status:** (optional) Initial status of the user (enabled or disabled). Default is disabled. **Password:** (optional) Specify an account password using the interactive menu. Example: ```(config)# set user --name jdoe --password --status enabled --type audit```
Delete a user account. ```delete user [--name <unique_user_name>]```	**Name:** (optional) User name for the account to display. Example: ```(config)# delete user --name <jdoe>```

Session management

Action and Syntax	Details
Enter the appliance CLI config mode. ```config```	The admin must be in **view** mode to access **config** mode. The admin password is required. Audit accounts do not have access to this mode.
Enter the appliance CLI diagnose mode. ```diagnose```	The admin must be in **view** mode to access **diagnose** mode.
Display connection information for active CLI sessions. ```show session```	
End a config mode session immediately. ```clear session --config```	Ends the session for whichever admin is in config mode, and allows another admin to enter config mode.
Exit the current config mode. ```exit```	If you are working in the **config** or **diagnose** mode, you return to the **view** mode. If you are in the **view** mode, your session ends and you exit the appliance CLI.

Command syntax

The CLI syntax follows this format:

```
Command + Option + Parameter
```

Typically, verbs such as **show, set,** and **save** are used to view status or statistics, to change the configuration, and to initiate actions.

For example:

```
# set system clock --date <yyyy/mm/dd>
```

In this example:

- **set system** is the command.
- **clock** is the option.
- **--date** is the parameter, the value of which takes the format yyyy/mm/dd.

Other conventions include:

- Angled bracket, which indicate the value or set of options available for a parameter:

  ```
  --mask <ip_address>
  --module <email|web|proxy>
  ```
- Square brackets, which indicate that the parameter is optional:

  ```
  [--description <description>]
  ```
- Pipes or vertical bars, which separate parameter options:

  ```
  <email|web|proxy>
  ```

Some commands have options and parameters, while others do not. Please refer to *Help for CLI commands*, page 9, for more details.

Help for CLI commands

Assistance is built into the CLI.

> 💡 **Tip**
>
> Use the **help** command, the **question mark character** (?), and the **tab** key to access help information.

Use the **help** command to access help information at any level.

```
# help
# help show
# help show log
```

Use the question mark character (**?**) to display help information for the current command path without pressing **Enter** and without losing the current input.

```
# ?
# show ?
# show system ?
```

Use the tab key to auto-complete command words, or to display a list of available words or phrases to complete a command.

Use the up and down arrow keys to scroll through the recently-used commands.

System configuration

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Use the System Configuration commands to view, set, or change:

- *Time and date*, page 11
- *Host name and description*, page 14
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Time and date

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All servers in your deployment that host TRITON Architecture components must be synchronized to within 2 minutes. Use of an NTP server is recommended.

Action and Syntax	Details
View the system date and time. `show system clock`	The time and date format is: yyyy/mm/dd hh:mm:ss

Set system time and date manually.
`set system clock`
`  --date <yyyy/mm/dd>`
`  --time <hh:mm:ss>`
	Stop all Forcepoint services before changing the time. Then, set the time **and** make certain that the time is consistent across all servers running services. Finally, start appliance services.
	If you do not stop the Forcepoint services first, client updates and policy changes entered after the time reset are not saved.
	Note that instead of setting the time manually, you can synchronize with a Network Time Protocol (NTP) server. See "set system ntp" below.

View the configured time zone.
`show system timezone`
	Example:
	`(view)# show system timezone`
	`Timezone: (GMT-08:00) Pacific`
	`Time (US & Canada)`

View supported timezone formats.
`show system timezone-list`
	Example:
	`(view)# show system timezone-`
	`list`
	`Index    Zone Name`
	`-----------------------`
	`1       (GMT-11:00) Midway`
	`Island, Samoa`
	`2       (GMT-10:00) Hawaii`
	`3       (GMT-09:00) Alaska`
	`...`

Action and Syntax	Details

Set the timezone for this appliance.
 	
`set system timezone`
`  --zone <zone_name>`
`  --index <zone_index>`
	Greenwich Mean Time (GMT), the default, is also known as Universal Time, Coordinated (UTC). Other time zones are calculated by adding or subtracting from GMT. GMT is sometimes chosen to provide a common time stamp for geographically distributed systems.
	
	Zone: The name of the timezone. Enter the name of the timezone in quotation marks. Case-sensitive.
	
	Index: The number assigned to the timezone.
	
	Example of setting the timezone using the zone name:
	
	`(config)# set system timezone`
	`    --zone "Central Time"`
	`(config)# show system timezone`
	`Timezone: (GMT-06:00) Central`
	`Time(US & Canada)`
	
	Example of setting the timezone using the zone index number:
	
	`(config)# set system timezone`
	`    --index 9`
	`(config)# show system timezone`
	`Timezone: (GMT-06:00) Central`
	`Time (US & Canada)`
	
	To see a timezone index list, use:
	
	`show system timezone-list`

View the configured NTP servers. `show system ntp`	

Action and Syntax	Details

Configure timezone synchronization with up to 3 NTP servers.
 	
``
set system ntp
  --status <enabled|disabled>
  --server <server1>
    [<server2>,<server3>]
``
	To synchronize with a Network Time Protocol (NTP) server (www.ntp.org.), set the status to "enabled" and enter the address of a primary NTP server. The secondary and tertiary servers are optional.
	
	If you synchronize the system clock with an NTP server, NTP protocol packets and their response packets must be allowed on any firewall or NAT device between an appliance and the NTP server. Ensure that you have outbound connectivity to the NTP servers. Add a firewall rule that allows outbound traffic to UDP port 123 for the NTP server.
	
	If interface C on an appliance is not connected to the Internet, then you must provide a way for interface C to reach an NTP server. One solution is to install an NTP server on the local network where interface C can reach it.
	
	Status: enabled or disabled.
	
	Server: The server to synchronize with.
	
	Example:
	
	``
	(config)# set system ntp
	--status enabled --server
	1.us.pool.ntp.org,2.us.pool.ntp.
	org,3.pool.ntp.org
	``

Synchronize the time with the NTP servers. ``` sync system ntp ```	Use this command to manually synchronize the time with the NTP servers.

Host name and description

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Action and Syntax	Details
View the appliance hostname and description. `show system host`	The hostname is set initially during the firstboot wizard.

Change the hostname and description for the appliance.
 	
`set system host`
`--name <name>`
`[--description`
`<description>]`
	You may choose to use the fully qualified hostname plus a user-defined description.
	
	Name: The hostname must be 1 to 60 characters long.
	
	● The first character must be a letter.
	● Other characters can be letters, numbers, dashes, or periods.
	● The name cannot end with a period.
	● The name cannot have 2 periods in a row.
	
	For Web mode appliances where Content Gateway will be configured to perform Integrated Windows Authentication (IWA), the hostname cannot exceed 11 characters, excluding the domain name.
	
	In addition, if the hostname is changed after the appliance has been joined to a domain, IWA will immediately stop working and will not work again until the domain is unjoined and then re-joined with the new hostname.
	
	For more information, see the "Integrated Windows Authentication" topic in the Content Gateway Manager Help.
	
	Description (*optional*): A unique appliance description to help you identify and manage the system.
	
	● May contain up to 100 characters
	
	Example:
	
	`(config)# set system host --name`
	`fp-apweb1.example.com`
	`--description "New York`
	`gateway."`

User certificates

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Certificates can be assigned to custom users who will be using the appliance's API and do not wish to use password authentication. Note that neither the default appliance users (admin and audit) nor FSAM/SSO users can be assigned certificates.

Action and Syntax	Details
List the user certificates. ```show certificate [--level <ca|user>] [--user <string>]```	**Level:** (optional if used with "user" parameter) Choose "ca" for intermediate or root certificates, or "user" for client certificates. If not specified, all types will display. **User:** (optional) The user name for which to show the certificate. Example: ```(view)# show certificate --level ca```
Load a certificate from the filestore to the appliance. Optionally, rename an existing certificate. ```load certificate --location <filestore_alias> --name <cert_name> [--new_name <new_cert_name>] [--user <string>] --level <ca|user>```	**Location:** The filestore where the certificate is stored. **Name:** The name of the certificate on the appliance. **New_name** (optional): The new name for the certificate when stored on the appliance. **User** (optional): The user name for which to show the certificate. **Level:** (optional) Choose "ca" for intermediate or root certificates, or "user" for client certificates. If not specified, all types will display. Example: ```(config)# load certificate --location clmftp --name cert.crt --new_name clm.cert```
Delete a certificate on the appliance. ```delete certificate [--name <cert_name>] [--level <ca|user>]```	**Name:** (optional) The name of the certificate on the appliance. **Level:** (optional) Choose "ca" for intermediate or root certificates, or "user" for client certificates. If not specified, all types will display. Example: ```(config)# delete certificate --name clm.cert```

Filestore definition and file save commands

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A filestore is a remote (off-box) location that you define for storing backup and configuration files. The filestore can be FTP, Samba, or TFTP. It allows you to either load files onto the server (upgrades, hotfixes, or routes) or save files from the server to

be edited/viewed outside the appliance (logs or routes). You can create a maximum of 10 filestores.

Action and Syntax	Details

Display all filestore aliases.
 	
  `show filestore`
    `[--alias <alias_name>]`
	Alias: (optional) Displays the unique name for the remote storage location.

Define a remote location to host backup and configuration files.
 	
  `set filestore`
    `--alias <name>`
    `--type <ftp|samba|tftp>`
    `--host <ip_address>`
    `--path <share_directory>`
    `[--user <user_name>]`
    `[--port <port>]`
	Alias: Provide a unique name for the remote storage location.
	
	The alias must be between 1 and 60 characters and begin with a letter. It may contain letters, numbers, periods, and hyphens, but may not contain 2 consecutive periods, nor end with a period.
	
	Type: Specify the protocol to use to connect to the filestore (FTP, Samba, or TFTP).
	
	Host: Provide the IP address of the machine hosting the filestore.
	
	Path: Give the directory path to the shared location on the remote server.
	
	User: (optional) Provide a user account with full permissions to the filestore. Format must be *domain_name/user_name*.
	
	Port: (optional) Specify a port to use to connect to the filestore.
	
	Example:
	
	  `(config)# set filestore`
	  `--alias fstore --type ftp`
	  `--host 10.10.10.6`
	  `--path . --user jdoe`
	
	Example without a user:
	
	  `(config)# set filestore`
	  `--alias tftp-store --type ftp`
	  `--host 10.10.10.5`
	  `--path /ftp/myfiles`
	
	Example of domain-based authentication with the domain "acme" and the user "jdoe":
	
	  `(config)# set filestore`
	  `--alias fstore`
	  `--type samba --host 10.123.48.70`
	  `--path myfiles`
	  `--user acme/jdoe`
	
	Example using a subfolder:
	
	  `(config)# set filestore`
	  `--alias fstore`
	  `--type samba --host 10.123.48.70`
	  `--path myfiles/myfolder`
	  `--user jdoe`

Action and Syntax	Details

Delete one or more filestore aliases.
 	
`delete filestore`
`  --alias <filestore_1>,`
`[filestore_2],[filestore_n]`
	You can specify a comma-separated list of filestore aliases (no spaces).
	
	Example:
	`  delete filestore`
	`    --alias ftp-fs1,samba-fs5`

Save the appliance MIB file to the specified location.
 	
`save mibfile`
`  --location <filestore_alias>`
	Saves the MIB file to a remote storage location defined by the "set filestore" command.
	
	Example:
	`  save mibfile`
	`    --location ftp-fs1`

Summarize configuration data and save it to a specified location.
 	
`save configsummary`
`  --location <filestore_alias>`
	Saves your configuration data to a remote storage location defined by the "set filestore" command.
	
	May be requested by Technical Support for analyzing unexpected behavior.
	
	Example:
	`  save configsummary`
	`    --location ftp-fs1`

Save SNMP trap events settings for editing or later use.
 	
`save trap`
`  --location <filestore_alias>`
`[--default]`
	Saves trap settings for editing. If "--default" is not specified, saves current trap settings.
	
	NOTE: Upon install, trap events are *enabled*, but the default configuration for saving trap events in *disabled*.
	
	Example:
	`  save trap`
	`    --location ftp-fs1`

Zip a log file and save it to a remote filestore.
 	
`save log`
`  --module`
`<all|app|email|network-`
`agent|proxy|web>`
`  --type`
`<all|audit|module|system|>`
`  --location <filestore_alias>`
	Specify which module logs to save, which type of logs to save, and where to save the file.
	
	The module options are **all** or **app**, both of which currently save logs for all modules.
	
	The log types are **all**, **system**, or **audit**.
	
	Audit log: audit.log
	System log: cli.log
	Email log: ESG.log
	Web log: Websense.log
	Proxy log: content_gateway.log
	Network Agent log: NetworkAgent.log
	
	Example:
	`save log`
	` --module all --type system`
	` --location samba-fs5`

Appliance interface configuration

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Use the following command sets to configure the Forcepoint Appliances interface.

Display appliance interface configurations

Action and Syntax	Details

Display the current network interface configuration.
 	
`show interface info`
`  [--module`
`<app|email|proxy|web|network`
`-agent>]`
	If the interface has been configured with an IP address, the output will include enabled/disabled status.
	Module: The appliance module.
	Example:
	`  (config)# show interface info`
	`  --module email`

Display the unused physical interfaces. `show interface unused`	Example: `  (view)# show interface unused`

Set appliance interface configurations

> ⚠️ **Warning**
> Do not change the C interface IP address.
>
> If you must change the C interface IP address, please contact Forcepoint Technical Support for assistance.
>
> Changing the C interface IP address breaks the communication path to critical off-appliance Architecture components.

Action and Syntax	Details
Enable or disable the specified interface. ```set interface status --interface <e2|p2> --status <enabled|disabled>```	**Interface:** The interface to enable or disable. **Status:** Enable or disable the interface. Example: ```(config)# set interface status --interface e2 --status enabled```
Configure appliance interface in IPv4 settings. ```set interface ipv4 --interface <c|n|p1|p2|e1|e2> --ip <ipv4_address> --mask <ipv4_netmask> [--gateway <ipv4_address>]```	**Interface:** The interface being configured. **ip:** IP address in IPv4 format. **Mask:** (required only if the IPv4 has not yet been set) Netmask in IPv4 format. **Gateway:** (optional) Gateway IPv4 address. Note: This command sets the gateway to the interface. Setting the interface parameter to P1 with an IP address in the gateway parameter will assign the gateway to P1 even if P2 is enabled. Example: ```(config)# set interface ipv4 --interface c --ip 10.206.6.195 --gateway 10.206.7.254```
Delete appliance IPv4 settings. ```delete interface ipv4 --interface <n|p1|p2|e1|e2>```	**Interface:** The interface being configured. Example: ```(config)# delete interface ipv4 --interface e1```
Configure appliance interface in IPv6 settings. ```set interface ipv6 --interface <c|n|p1|p2|e1|e2> [--status <enabled|disabled>] [--ip <ipv6_address>] [--prefixlen <integer>] [--gateway <ipv6_address>]```	**Interface:** The interface being configured. **Status:** Enable or disable IPv6. **ip:** IP address in IPv6 format. **Prefixlen:** IPv6 address prefix length. Must be an integer 1-128; typically 64. **Gateway:** Gateway IPv6 address. Example: ```(config)# set interface ipv6 --interface c --status enabled --ip 1234::4321:0:1234 --prefixlen 64 --gateway 1234::0```

Action and Syntax	Details

Delete appliance IPv6 settings.
 	
```delete interface ipv6```
``` --interface```
``` <n|p1|p2|e1|e2>```
	Interface: The interface being configured.
	Example:
	```(config)# delete interface ipv6```
	```--interface e1```

Configure appliance DNS settings.
 	
```set interface dns```
``` --dns1 <ipv4_address>```
``` [--dns2 <ipv4_address>]```
``` [--dns3 <ipv4_address>]```
``` [--module```
``` <email|network-agent|proxy>]```
	Module: (optional) The appliance module. If no option is entered, DNS for appliance will be configured.
	DNS1: The IP address of the primary domain name server.
	You can optionally also specify a second and third DNS server.
	Example:
	```(config)# set interface dns```
	```--dns1 8.8.8.8 --dns2 8.8.4.4```
	```--dns3 10.51.80.10 --module```
	```proxy```

Delete appliance DNS settings.
 	
```delete interface dns```
``` [--dns-server <dns2|dns3>]```
	Module: The appliance module.
	dns-server: The server whose DNS settings are being deleted. You can only delete one server at a time.
	Example:
	```(config)# delete interface dns```
	```--module proxy --dns-server dns2```

Configure appliance VLAN settings.
 	
```set interface vlan```
``` --interface <c|p1|p2>```
``` --vid <integer>```
	(X Series appliances only)
	Interface: The interface being configured.
	vid: The VLAN ID to be set. Must be an integer 2-4094.
	In order for appliances to receive VLAN traffic, the A1 and A2 switches must be configured for VLAN support. See the <u>Switch Configuration Guide</u> for details.
	Example:
	```(config)# set interface vlan```
	```--interface p1```
	```--vid 260```

Delete appliance VLAN settings.
 	
```delete interface vlan```
``` --interface <c|p1|p2>```
	(X Series appliances only)
	Interface: The interface being configured.
	Example:
	```(config)# delete interface vlan```
	```--interface p1```

Interface bonding

Forcepoint V10000 appliances can bond interfaces for failover or load balancing (sometimes referred to as balance-rr). Interface bonding is not supported on other appliances.

> **Important**
> Do **not** bond interfaces that have different speeds or duplex modes. Doing so can result in performance problems.

Forcepoint V10000 with Forcepoint Web Security

Interfaces E1 and E2 can be cabled to your network and then bonded through software settings to a Content Gateway interface, with E1 optionally bonded to P1, and E2 optionally bonded to P2. No other pairing is possible.

Interface bonding provides these alternatives:

- Active/Standby mode: P1 (or P2) is active, and E1 (or E2) is in standby mode. Only if the primary interface fails would its bonded interface (E1 or E2) become active.
- Load balancing: If the switch or router that is directly connected to the V10000 supports load balancing (etherchannel, trunk group, or similar), then traffic to and from the primary interface can be balanced between the primary interface and its bonded interface (E1 or E2).

You can choose to bond or not bond each Content Gateway interface independently. You do not have to bond at all.

If you do bond an interface, choose one mode for that bonding (either active/standby or load balancing). You do not have to choose the same bonding mode for both interfaces.

Ensure that all interfaces are cabled properly before bonding.

Forcepoint V10000 with Forcepoint Email Security only

Interfaces P1 and P2 can be cabled to your network and then bonded through software settings to a Forcepoint Email Security interface, with P1 optionally bonded to E1, and P2 optionally bonded to E2. No other pairing is possible.

Interface bonding provides these alternatives:

- Active/Standby mode: E1 (or E2) is active, and P1 (or P2) is in standby mode. Only if the primary interface fails would its bonded interface (P1 or P2) become active.
- Load balancing: If the switch or router that is directly connected to the V10000 supports load balancing (etherchannel, trunk group, or similar), then traffic to and from the primary interface can be balanced between the primary interface and its bonded interface (P1 or P2).

You can choose to bond or not bond each Forcepoint Email Security interface independently. You do not have to bond at all.

If you do bond an interface, choose one mode for that bonding (either active/standby or load balancing). You do not have to choose the same bonding mode for both interfaces.

Ensure that all interfaces are cabled properly before bonding.

Action and Syntax	Details
Display the bonded interfaces. `show interface bond`	(V10000 appliances only) Example: `(view)# show interface bond`

Bond the interfaces.
 	
`set interface bond`
`[--mode <active-`
`standby|load-balancing>]`
	(V10000 appliances only)
	
	Forcepoint V10000 appliances that run only one product can bond interfaces for failover or load balancing.
	
	Note: For more information about interface bonding, see the <u>Forcepoint Appliances Getting Started Guide</u>.
	
	Selections are made using a sub-menu in the CLI; if unpopulated, there are no free interfaces.
	
	Mode: (optional) In active-standby mode, interface P1 (or P2) is active, and E1 (or E2) is in stand-by mode. If the primary interface fails, E1 (or E2) becomes active.
	In load balancing mode, traffic to and from the primary interface can be balanced between the primary and the bonded interfaces.
	Mode defaults to active-standby.
	
	Example:
	
	`(config)# set interface bond`
	`--mode load-balancing`

Remove interface bonding. `set interface unbond`	(V10000 appliances only) Selections are made using a sub-menu in the CLI. Example: `(config)# set interface unbond`

Interface assignments

Action and Syntax	Details
Display the interfaces assigned to a module. ```show interface assignment --module <proxy>```	**Module:** The appliance module (proxy only). Example: ```(config)# show interface assignment --module proxy```
Assigns unused interfaces to an application. ```set interface assignment --module <proxy> --interface <e1|e2> --virt_interface <virtual interface> --span_output_interface <virtual or physical interface>```	(V Series only) **Module:** The appliance module (proxy only). **Interface:** The physical interface to assign. **Virt_interface:** The virtual interface to attach to the physical interface. **Span_output_interface:** The interface on which to output span traffic. Example: ```(config)# set interface assignment --module proxy --interface e1 --virt_interface aux1 --span_output_interface aux1```
Delete interface assignments for a module. ```delete interface assignment --module <proxy> --interface <e1|e2>```	**Module:** The appliance module (proxy only). **Interface:** The physical interface to assign. Example: ```(config)# delete interface assignment --module proxy --interface e1```

Interface ports

Action and Syntax	Details
Displays the status of the specified port on a virtual interface. ```show port --module <proxy|web|email|network-agent>```	Example: ```(config)# show port --module email```
Opens or closes the specific port and each interface. ```set port --status <open|close> --protocol <tcp|udp> --port <port_num> --module <proxy|web|email|network-agent>```	**Status:** The status of the port. **Protocol:** Uses the TCP or UDP protocol to read and write data. **Port:** The port to open or close. **Module:** The appliance module. Example: ```(config)# set port --module email --port 25 --protocol tcp --status open```

Action and Syntax	Details
Displays the status of diagnostic ports for use by Tech Support for remote troubleshooting. `show diagnostic_ports`	Example: `(view)# show diagnostic_ports`

Sets the status of diagnostic ports for use by Tech Support for remote troubleshooting.
 	
`set diagnostic_ports`
`  --status <enabled|disabled>`
	Status: The status of the port.
	Example:
	
	`(config)# set diagnostic_ports`
	`  --status enabled`

Support for IPv6

- IPv6 support in Forcepoint Web Security and Forcepoint URL Filtering is **disabled** by default.

> **Important**
>
> After IPv6 support is enable, subsequent disablement requires a full restart of the appliance.

For all web protection solutions, IPv6 support includes:

- Dual IP stack configuration for interfaces C and N
- IPv6 traffic to the Internet or clients on interfaces C and N, including block pages sent on C or N
- IPv6 static routes
- SNMP traps and counters for IPv6 data
- Network diagnostic tools in the Command Line Utility and Command Line Interface

For Forcepoint Web Security, IPv6 support also includes:

- Dual IP stack implementation on interfaces P1 and P2
- Traffic to the Internet or clients on interfaces P1 and P2, and their bonded interface (E1/E2), if configured

Limits and restrictions:

- IPv6-only internal networks are not supported
- IPv4 must be used to communicate among V Series appliances and with TRITON Architecture components

In any field that accepts an IPv6 address, the address can be entered in any format that conforms with the standard. For example:

- Leading zeros within a 16-bit value may be omitted.
- One group of consecutive zeros may be replaced with a double colon.

About appliance management interface (C)

- Communicates with all Forcepoint management interfaces
- Communicates with the management server and Forcepoint DLP (if used)
- Provides inter-appliance communication
- Optionally provides non-HTTP(S) protocol enforcement
- Handles Master Database downloads via the Internet (unless you optionally configure P1 for database downloads).

> **Important**
>
> Changing the C interface IP address is *not* recommended.
>
> The process involves a number of activities, significantly impacts deployment, can cause significant service disruption, and may require you to reinstall of some components.
>
> If your appliance is in production and you must change the C interface IP address, please contact Forcepoint Technical Support for assistance.

About the Content Gateway proxy interfaces (P1, P2)

Content Gateway interfaces P1 and P2 handle traffic directed to and from the Content Gateway proxy module.

- Both the P1 and P2 can be used to accept users' Internet requests (inbound traffic) and communicate with web servers (outbound traffic). In other words, both interfaces can be configured to handle traffic into and out of the proxy.
- Typically, P1 is used for both inbound and outbound traffic; P2 is not used.
- Optionally, configure P1 to accept users' Internet requests (inbound only) and P2 to communicate with web servers (outbound).
- The gateway is assigned using the command "set interface ipv4". Enabling the P2 interface does not automatically move the gateway to the interface.

> **Important**
>
> If you use the P2 interface, the P1 interface is bound to eth0, and the P2 interface is bound to eth1. Keep this in mind when you configure Content Gateway.
>
> For example, suppose you are using a transparent proxy deployment, and the P1 interface is connected to a WCCP router. In this case, you must configure Content Gateway to use eth0 for WCCP communications (in Content Gateway manager, see the General tab of the **Configure > Networking > WCCP** page).

The P1 and P2 interfaces can be in the same or different subnets.

If they are in the same subnet, P2 is the default gateway (which is bound to eth1). Ensure that outbound packets can reach the Internet.

When P1 and P2 are in different subnets, the gateway must be in the same subnet as the appliance interface used to send traffic to the Internet (typically P2). All traffic communicated between Content Gateway and origin servers should go through that interface (P2).

For traffic communicated between Content Gateway and clients, please note:

● If the clients are in the same subnet as P1, then all traffic communicated between Content Gateway and clients should go through P1.

● If the clients are not in the same subnet as P1, then client-to-Content Gateway traffic goes through P1, while Content Gateway-to-client traffic goes through P2, regardless of whether an explicit or transparent deployment is used.

Note, however, that you can set up static routes to send client traffic (on subnets not attached to P1) back through P1 (inbound traffic).

About the Network Agent interface (N)

Network Agent can be used to provide security for protocols other than HTTP and HTTPS. It also provides bandwidth optimization data and enhanced logging detail.

Network Agent continually monitors overall network usage, including bytes transferred over the network. The agent sends usage summaries to other TRITON Architecture components at predefined intervals.

Network Agent is typically configured to see both inbound and outbound traffic in your network. The agent distinguishes between:

● Requests sent from internal machines to internal machines (hits to an intranet server, for example)

● Requests sent from internal machines to external machines such as Web servers (user Internet requests, for example)

You choose whether blocking information for non-HTTP protocols is routed through interface C or interface N.

> **Note**
>
> When Decryption Port Mirroring is activated with the N interface, the Network Agent module is disabled, and a warning message will display. This affects Network-Agent-related commands.
>
> When Decryption Port Mirroring is disabled, the N interface is returned to the Network Agent function and Network Agent will be re-enabled.

About Forcepoint Email Security interfaces (E1, E2)

Forcepoint Email Security interfaces handle bidirectional email protection traffic.

> **Note**
> The names of the interfaces vary depending on the model of appliance.
>
> - With V10000, E1 and E2 are used.
> - With X10G, V5000, and VMware virtual appliances, P1 and P2 are used.

- Both the E1 and E2 interfaces (V10000) or P1 and P2 interfaces (other appliances) can be used to accept inbound traffic and send outbound traffic.
- In many deployments, E1 (or P1) is used for both inbound and outbound traffic; E2 (or P2) is not used.
- E1 (or P1) can be configured to accept inbound traffic and E2 (or P2) can be configured to send outbound traffic.

> **Important**
> On the V10000, if you use the E2 interface, the E1 interface is bound to eth0, and the E2 interface is bound to eth1.
>
> On other appliances, if you use the P2 interface, the P1 interface is bound to eth0, and the P2 interface is bound to eth1.
>
> Keep this in mind when you configure Forcepoint Email Security.

If you use both E1 (or P1) and E2 (or P2), and you locate them in the same subnet, then the default gateway is automatically assigned to E2 (which is bound to eth1). Ensure that outbound packets can reach the Internet.

> **Note**
> The E1 and E2 interfaces are also available for use on the V10K for Decryption Port Mirroring functionality.

Appliance vswitch configuration

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Action and Syntax	Details

Display the virtual switch STP bridge priority setting.
 	
`show vswitch priority`
	(X Series appliances only)
	Example:
	`    (view)# show vswitch priority`
	Output:
	`    rstp_priority  : 61440`

Display the virtual switch STP bridge status.
 	
`show vswitch status`
	(X Series appliances only)
	Example:
	`    (view)# show vswitch status`
	Output:
	`    P2:`
	`       state : down`
	
	`    P1:`
	`       state : active`

Set the virtual switch STP bridge priority value.
 	
`set vswitch stp`
`  --priority <integer>`
	(X Series appliances only)
	Priority: An integer that is a multiple of 4096 in the range of 4096-61440.
	For an explanation of Spanning Tree Protocol bridge priorities, including how the root is determined, see any quality text on layer 2 switching.
	Example:
	`    (config)# set vswitch stp`
	`      --priority 4096`

Content Gateway Decryption Port Mirroring (DPM)

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The Content Gateway proxy can be configured to decrypt HTTPS traffic for analysis. A port mirroring feature delivers all decrypted HTTPS traffic to a physical network interface. This allows a trusted service device to inspect and analyze the decrypted data for its own purpose. Decryption port mirroring is not supported on virtual appliances.

This feature can be enabled and configured using CLI commands.

> **Note**
>
> When Decryption Port Mirroring is activated with the N interface, the Network Agent module is disabled, and a warning message will display. This affects Network-Agent-related commands.
>
> When Decryption Port Mirroring is disabled, the N interface is returned to the Network Agent function and Network Agent will be re-enabled.

> **Note**
>
> In X Series appliances with the switch configuration port installed, you can use the CLI to enable the Decryption Port Mirror feature with the N interface as an SSL mirror port.

For more information, see the Content Gateway Help file.

Action and Syntax	Details

Display the decryption port mirror configuration.
 	
`show decrypt_port_mirror`
	Output:
	`Proxy's Decryption Port Mirroring is disabled.`
	`Interface: Not set`
	`Custom header: X-Proxy-HTTPS:1`

Configure the decryption port mirror.
 	
`set decrypt_port_mirror`
`--status <enabled|disabled>`
`[--interface <e1|e2|n>]`
`[--header <header>]`
	An interactive menu will allow you to configure the decryption port mirror.
	Status: The status of the decryption port mirror (default: disabled).
	Interface: (optional) On the V10K, DPM interface options are E1, E2 or N; on the V5K the only interface option is the N interface.
	Header: (optional) The port mirroring custom header name (default: X-Proxy_HTTPS:1).
	Example:
	`(config)# set`
	`decrypt_port_mirror`
	`--status enabled`
	`--interface n`

Displays the current Internet proxy information. `show internet_proxy`	

Action and Syntax	Details

Configures the proxy the appliance will use to contact Forcepoint servers for hotfixes/upgrades.
 	
`set internet_proxy`
`--ip <ip address>`
`--port <port>`
`[--user <username>]`
`[--password <password>]`
	IP: IP address.
	Port: Proxy port.
	User: (optional) User name.
	Password: (optional) Password.
	Example:
	`(config)# set internet_proxy`
	`--ip 10.10.10.7 --port 3128`
	`--user proxyuser --password`
	`mypassword`

Deletes the Internet proxy configuration. `delete internet_proxy`	

Static routes

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You can use CLI route commands to specify:

● Static routes from subnets and client computers through any active appliance interface, except N.

   If IPv6 is enabled, static IPv6 routes can also be added and imported (not supported in AP-EMAIL).

● Component routes from appliance modules through appliance interface C to subnets.

   IPv6 component routes are **not** supported.

The same route cannot be added for 2 different interfaces on the same module. If attempted, an error message displays.

Static routes that are defined for an interface that is later made inactive remain in the routing table.

Static routes that become invalid because the IP address of the interface changes are disabled.

Static routes can be added and deleted, but not modified. To modify a route, delete it and add a new route specifying the new values.

The static route table has a maximum limit of 5000 entries.

Component routes

Although the appliance management interface (C) is typically reserved for management traffic, in some deployments it is necessary or desirable to route some web or email traffic through the C interface rather than P1/P2 or E1/E2.

The component route table has a maximum limit of 5000 entries.

Action and Syntax	Details
Display the list of configured component routes. `show component_route`	Outputs a table displaying route destination, netmask, module name, and active status.

Configure traffic between components for routing through the appliance.
 	
`set component_route`
`  --dest <ipv4_address>`
`  --mask <ipv4_netmask>`
`  --module <proxy|email>`
	Dest: Destination IP address in IPv4 format.
	Mask: Netmask address in IPv4 format.
	Module: The appliance module.
	Example:
	
	`(config)# set component_route`
	`--dest 11.0.0.0 --mask 255.0.0.0`
	`--module email`

Delete routing between components.
 	
`delete component_route`
`  --dest <ipv4_address>`
`  --mask <ipv4_netmask>`
`  --module <proxy|email>`
	Dest: Destination IP address in IPv4 format.
	Mask: Netmask address in IPv4 format.
	Module: The appliance module.
	Example:
	
	`(config)# delete component_route`
	`--dest 11.0.0.0 --mask 255.0.0.0`
	`--module email`

Display the list of configured static IPv4 routes. `show route`	Outputs a table displaying route destination, netmask, next hop, device, and active status.
(*Web only*) Display the list of configured static IPv6 routes. `show route6`	Outputs a table displaying route destination, netmask, next hop, device, and active status.

Add a static route in IPv4 format.
 	
`set route`
`  --dest <ipv4_address>`
`  --interface <c|p1|p2|e1|e2>`
`  --mask <ipv4_netmask>`
`  --gateway <ipv4_address>`
	Dest: Destination IP address in IPv4 format.
	Interface: The interface name must be p1 or p2.
	Mask: Netmask address in IPv4 format.
	Gateway: The gateway definition in IPv4 format.
	Example:
	
	`(config)# set route --dest`
	`11.0.0.0 --mask 255.0.0.0`
	`--gateway 10.206.7.254`
	`--interface c`

Action and Syntax	Details

(*Web only*) Add a static route in IPv6 format.
 	
``
set route6
  --dest <ipv6_address>
  --interface <c|p1|p2|e1|e2>
  --prefixlen <integer>
  --gateway <ipv6_address>
``
	The interface name must be p1 or p2.
	IP address and gateway definitions must use IPv6 format.
	The **prefixlen** parameter sets the prefix length of the IPv6 address. It must be an integer between 1 and 128.
	Example:
	
	``
	(config)# set route6
	  --dest 2222:3333:4444:5555::0
	  --interface p1 --prefixlen 64
	  --gateway 1234:5678::8765:4321
	``

Delete a single IPv4 static route.
 	
``
delete route
  --dest <ip_address>
  --mask <ipv4_netmask>
  --interface <c|p1|p2|e1|e2>
  --gateway <ipv4_address>
``
	To delete multiple IPv4 routes in a batch, use the "load route" command.
	Dest: Destination IP address in IPv4 format.
	Interface: The interface name must be p1 or p1.
	Mask: Netmask address in IPv4 format.
	Gateway: The gateway definition in IPv4 format.
	Example:
	
	``
	(config)# delete route
	  --dest 1.0.0.0 --mask 255.0.0.0
	  --gateway 10.0.0.1
	  --interface c
	``

(*Web only*) Delete a single IPv6 static route.
 	
``
delete route6
  --dest <ipv6_address>
  --prefixlen <integer>
  [--interface
   <c|p1|p2|e1|e2>]
  [--gateway <ipv6_address>]
``
	To delete multiple IPv6 routes in a batch, use the "load route6" command (described later in this table).
	Example:
	
	``
	(config)# delete route6
	  --dest 8765:4321::0
	  --gateway 1234:5678::87 65:4321
	  --interface p1 --prefixlen 64
	``

Export IPv4 static routes.
 	
``
save route
  --location <filestore_alias>
``
	Saves IPv4 static routes to a remote storage location defined by the "set filestore" command.
	Example:
	
	``
	(config)# save route
	  --location samba-fs5
	``

(*Web only*) Export IPv6 static routes.
 	
``
save route6
  --location <filestore_alias>
``
	Saves IPv6 static routes to a remote storage location defined by the "set filestore" command.
	Example:
	
	``
	(config)# save route6
	  --location samba-fs5
	``

Action and Syntax	Details

Add or delete one or more IPv4 static route definitions via a text file.
 	
``load route
 --file <file_name>
 --location <filestore_alias>
 --action <add|del>```
	The system can handle a maximum of 5000 routes. Each line in the file defines one route.
	
	The line format is:
	``<destination_address> <netmask>
	<gateway> <p1|p2>```
	A blank space separates parameters on a single line.
	
	The following characters serve as separators between lines (individual routes):
	```\n```
	Use the **--action** parameter to specify whether to add or delete the routes in the file.
	
	Example:
	``(config)# load route --file
	add_ipv4.txt --location
	myfilestore --action add```

(*Web only*) Add or delete one or more IPv6 static route definitions via a text file.
 	
``load route6
 --file <file_name>
 --location <filestore_alias>
 --action <add|del>```
	The system can handle a maximum of 5000 routes. Each line in the file defines one route.
	
	The line format is:
	``<destination_address>
	<prefix_length> <gateway>
	<p1|p2>```
	A blank space separates parameters on a single line.
	
	The following characters serve as separators between lines (individual routes):
	```\n```
	Use the **--action** parameter to specify whether to add or delete the routes in the file.
	
	Example:
	``(config)# load route6 --file
	add_ipv6.txt --location
	myfilestore --action add```

Appliance status

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Use these commands to monitor appliance resources and system performance.

Action and Syntax	Details
Display current CPU usage, refreshed every 4 seconds. `show cpu`	Press Ctrl+C to quit.
Display system memory usage, refreshed every 4 seconds. `show mem`	Press Ctrl+C to quit.
View disk IO activity for the present modules, refreshed every 4 seconds. `show diskio`	Press Ctrl+C to quit.

Display disk statistics for all partitions.
 	
`show diskspace`
	Results are shown in these areas:
	● disk position (partition)
	  ■ Email partitions include system and email spool.
	  ■ Web partitions may include fingerprinting, proxy cache, and system.
	● total space
	● used space
	● free space
	● rate in percentage
	The partitions vary depending on whether the appliance security mode is Web or Email.

Display network traffic statistics, refreshed every 5 seconds. `show bandwidth`	Displays bandwidth statistics for each enabled interface. Includes: ● data (byte) ● packets ● packets dropped ● error ● rate (Mbps) ● status Press Ctrl+C to quit.

SNMP monitoring (polling)

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Forcepoint Appliances provide alerting options that include standard SNMP counters and system-level traps.

There are 2 methods of SNMP alerting:

- Allow your SNMP manager to poll the appliance for standard SNMP counters.
- Configure the appliance to send SNMP traps for selected events to your SNMP manager.

Enable SNMP monitoring before enabling and configuring the trap service.

Action and Syntax	Details
Display SNMP monitor server information. `show snmp config`	

Enable or disable SNMP monitoring (polling).
 	
`set snmp service`
`  --status <enabled|disabled>`
	SNMP monitor service and SNMP trap settings are independent, but SNMP monitor service must be enabled before you activate the SNMP trap configuration.
	Example:
	`(config)# set snmp service`
	`  --status enabled`

Configure SNMP v1 monitoring.
 	
`set snmp v1`
`  --community <name>`
	Community name for the appliance. From 5 to 64 characters long with no spaces. Alphanumeric characters and $ ( ) . _ @ = * < > - : , % [ ] | /
	Example:
	`(config)# set snmp v1`
	`  --community testname`

Configure SNMP v2c monitoring.
 	
`set snmp v2c`
`  --community <name>`
	Community name for the appliance. From 5 to 64 characters long with no spaces. Alphanumeric characters and $ ( ) . _ @ = * < > - : , % [ ] | /
	Example:
	`(config)# set snmp v2c`
	`  --community playground`

Configure SNMP v3 monitoring.
 	
`set snmp v3`
`  --securitylevel <level>`
`  ...`
	There are 3 levels of security available for SNMP v3 monitoring:
	No authentication or encryption:
	`noAuthNoPriv`
	Authentication only:
	`authNoPriv`
	Authentication and encryption:
	`authPriv`
	See full syntax for each level, immediately below.

Configure SNMP v3 monitoring with no authentication or encryption.
 	
`set snmp v3`
`  --securitylevel`
`   noAuthNoPriv`
`  --user <username>`
	User specifies the account name to use for SNMP monitoring. Enter a user name between 1 and 15 characters long, with no spaces. Only alphanumeric characters can be used.

Action and Syntax	Details

Configure SNMP v3 monitoring with authentication only.
 	
``
set snmp v3
  --securitylevel authNoPriv
  --user <username>
  --authentication <md5|sha>
``
	User is the account name to use for SNMP communication. Enter a user name between 1 and 15 characters long, with no spaces. Only alphanumeric characters can be used.
	
	SNMP authentication protocol (md5 or sha) specifies an interactive mode for entering the authentication password.
	
	Enter an authentication password between 8 and 64 characters long, with no spaces. All other ASCII characters can be used.
	
	Example password dialog:
	
	``
	(config)# set snmp v3
	--securitylevel authNoPriv
	 --user test
	--authentication md5
	Password: ********
	Confirm password: ********
	``

Configure SNMP v3 monitoring with authentication and encryption.
 	
``
set snmp v3
  --securitylevel authPriv
  --user <username>
  --authentication <md5|sha>
  --encrypt <des|aes>
``
	User is the account name to use for SNMP communication. Enter a name between 1 and 15 characters, with no spaces. Only alphanumeric characters can be used.
	
	SNMP authentication protocol (md5 or sha) specifies interactive mode for entering password.
	
	You are prompted for a password and encryption key. The 1 to 64 characters, and the key 8 to 64 characters long, with no spaces. All other ASCII characters can be used.
	
	Example:
	
	``
	(config)# set snmp v3
	--securitylevel authPriv
	--authentication sha
	--encrypt des --user test
	Password: ********
	Confirm password: ********
	Encrypt key: ********
	Confirm encrypt key: ********
	``

SNMP traps and queries

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Action and Syntax	Details
Display SNMP trap server on/off status and version information. `show trap config`	SNMP monitor service and SNMP trap settings are independent, but SNMP monitor service must be enabled before you activate the SNMP trap configuration.
Display a table of SNMP trap events and settings. `show trap events`	

Save SNMP trap events settings for editing or later use.
 	
    `save trap`
     `--location <filestore_alias>`
     `[--default]`
	Saves default trap settings for editing. If "--default" is not specified, saves current trap settings.
	Example:
	
	    `(config)# save trap --location`
	    `samba-fs`

Enable or disable SNMP traps.
 	
    `set trap service`
     `--status <enabled|disabled>`
	SNMP monitor service and SNMP trap settings are independent, but SNMP monitor service must be enabled to activate the SNMP trap configuration.
	Example:
	
	    `(config)# set trap service`
	    `--status enabled`

Load SNMP trap events configuration from a file.
 	
    `load trap`
     `--location <filestore_alias>`
     `--file <name>`
	Enter the name of a predefined remote filestore alias.
	Example:
	
	    `(config)# load trap --location`
	    `samba-fs`
	    `--file list123`

Send a test trap to verify SNMP communication. `test trap event`	If there is a problem sending the test trap, verify the engine ID and authentication settings and values, and verify that the network allows communication between the appliance and the SNMP manager.

Configure SNMP v1 traps for alerting.
 	
    `set trap v1`
     `--community <name>`
     `--ip <ip_address>`
     `--port <port>`
	Enter a community name, trap server IP address, and port for traps sent by the appliance.
	The community name must be 5 to 64 characters long, with no spaces. Alphanumeric characters and $ ( ) . _ @ = * < > - : , % [ ] | /
	Example:
	
	    `(config)# set trap v1`
	    `--community myv1community --ip`
	    `10.0.0.14`
	    `--port 162`

Action and Syntax	Details

Configure SNMP v2c traps for alerting.
 	
``
set trap v2c
  --community <name>
  --ip <ip_address>
  --port <port>
``
	Enter a community name, trap server IP address, and port for traps sent by the appliance.
	
	The community name must be 5 to 64 characters long, with no spaces. Alphanumeric characters and $ ( ) . _ @ = * < > - : , % [ ] | /
	
	Example:
	
	``
	(config)# set trap v2c --community
	myv2community --ip 10.0.0.13
	--port 162
	``

Configure SNMP v3 traps for alerting.
 	
``
set trap v3
  --engineid <id>
  --ip <ip_address>
  --port <port>
  --securitylevel <level>
...
``
	There are 3 levels of security available for SNMP v3 traps:
	
	No authentication or encryption:
	
	``
	   noAuthNoPriv
	``
	Authentication only:
	
	``
	   authNoPriv
	``
	Authentication and encryption:
	
	``
	   authPriv
	``
	See full syntax for each security level, immediately below.

Configure SNMP v3 traps with no authentication or encryption.
 	
``
set trap v3 --engineid <id>
  --ip <ip_address>
  --port <port>
  --securitylevel
   noAuthNoPriv
  --user <username>
``
	Specify the engine ID, IP address, port, and user name to use for communication with your SNMP manager.
	
	The engine ID is a hexadecimal number between 10 and 64 characters long. The number cannot be all 0 or F characters, and the length of the string must be an even number.
	
	User is the account name to use for SNMP communication. Enter a name between 1 and 15 characters, with no spaces. Only alphanumeric characters can be used.
	
	Example:
	
	``
	(config)# set trap v3 --engineid
	8000000001020304
	--ip 10.0.0.13 --port 162
	--securitylevel noAuthNoPriv
	--user trapuser
	``

Action and Syntax	Details
Configure SNMP v3 traps with authentication only. ``` set trap v3 --engineid <id> --ip <ip_address> --port <port> --securitylevel authNoPriv --user <username> --authentication <md5|sha> ```	Specify the engine ID, IP address, port, and user name to use for communication with your SNMP manager. The engine ID is a hexadecimal number between 10 and 64 characters long. The number cannot be all 0 or F characters, and the length of the string must be an even number. User is the account name to use for SNMP communication. Enter a name with 1-15 alphanumeric characters, with no spaces. Specify the authentication protocol used on the trap server (md5 or sha). You are prompted for a password. Enter a password between 1 and 64 characters, with no spaces. All other ASCII characters can be used. Example: ``` (config)# set trap v3 --engineid 0x802a0581 --ip 10.17.32.5 --port 162 --securitylevel authNoPriv --authentication sha --user test Password: ******** ```
Configure SNMP v3 traps with authentication and encryption. ``` set trap v3 --engineid <id> --ip <ip_address> --port <port> --securitylevel authPriv --user <username> --authentication <md5|sha> --encrypt <des|aes> ```	Specify the engine ID, IP address, port, and user name to use for communication with your SNMP manager. The engine ID is a hexadecimal number between 10 and 64 characters long. The number cannot be all 0 or F characters, and the length of the string must be an even number. User is the account name to use for SNMP communication. Enter a name with 1-15 alphanumeric characters, with no spaces. Specify the authentication protocol used on the trap server (md5 or sha), and the SNMP encryption protocol (des or aes). You are prompted for a password and encryption key. The 1 to 64 characters, and the key 8 to 64 characters long, with no spaces. All other ASCII characters can be used. Example: ``` (config)# Set trap v3 --engineid 8000000001020304 --ip 10.0.0.25 --port 162 --securitylevel authPriv --user trapuser --authentication sha --encrypt md5 ```

Module-specific commands

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The commands are used to configure specific modules (proxy, web, email, or network agent) and can be accessed through the CLI's config mode.

Action and Syntax	Details

Resets the debug output logging level to the default (minimum output).
 	
`set debugging`
`--command reset`
`--module <proxy|web|email>`
	Module: The module you are resetting.
	Command: The command being sent.
	Example:
	`(config)# set debugging`
	`--command reset --module proxy`

Runs the proxy content_line command.
 	
`set proxy content_line`
`--type`
`<clear_cert|reread_config|`
` set>`
`--entry <variable_name>`
`--value <variable_value>`
	Type: The action to apply.
	Entry: The name of a records.conf variable. See [Content Gateway Help](#) for information about content_line and records.config.
	Value: The value to set the variable to.
	Example:
	`(config)# set proxy content_line`
	`--entry`
	`proxy.config.lm.display_reset_al`
	`arm --value 1 --type set`

Starts, stops, or restarts the Content Gateway Policy Engine.
 	
`set proxy policy_engine`
`--command`
`<start|stop|restart>`
	Command: The action to apply.
	Example:
	`(config)# set proxy`
	`policy_engine --command stop`

Resets the proxy password.
 	
`set proxy password`
	This command overwrites the old proxy password and displays a new one.
	Example:
	`(config)# set proxy password`
	Output:
	`Proxy password successfully`
	`reset: <new_password>`

Action and Syntax	Details

Enables or disables the specified Web protection service.
 	
`set web control`
`--command <enable|disable>`
`--service <state_server|`
` directory_agent>`
	Command: The action to apply.
	Service: The service to control.
	For information, see the following sections of the of the [Forcepoint Web Security Administrator Help](#):
	● [Reporting components](#)
	● [Policy Server, Filtering Service, and State Server](#)
	● [Directory Agent and hybrid user identification](#)
	Example:
	`(config)# set web control`
	`--command disable --service`
	`multiplexer`

Retrieves the status of or enables/disables the caching of users.
 	
`set web cache_users`
`--command <enable|disable>`
	Command: The action to apply.
	Example:
	`(config)# set web cache_users`
	`--command enable`

Retrieves the status of or enables/disables the User Group IP Precedence.
 	
`set web usr_grp_ip_prec`
`--command <enable|disable>`
	Command: The action to apply.
	For more information, see the [Prioritizing group and domain policies](#) section of the [Forcepoint Web Security Administrator Help](#).
	Example:
	`(config)# set web`
	`usr_grp_ip_prec --command enable`

Resets the email subscription. `set email subscription_reset`	

Email module commands

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The appliance CLI includes some commands that are specific to Forcepoint Email Security operations. These commands require that you be logged in to the email-specific CLI as shown here:

Action and Syntax	Details

Log on to the email-specific CLI.
 	
`login email`
	You must be in the config mode to log on to the email-specific CLI.
	Example:
	`(config)# login email`
	`(config)(Email)#`

Use the Email Security command set to perform the following tasks:

● *Display Email Security system configuration information*

- *Configure Email Security system functions*
- *Configure virtual IP addresses*

A few email-specific commands may be accessible in the appliance CLI, but they are used only in association with Technical Support troubleshooting operations. They are not supported for appliance administrator use, and you receive an error message when you attempt to run them. See *Forcepoint Technical Support troubleshooting commands*, page 45, for a list of these commands.

Display Email Security system configuration information

Action and Syntax	Details

Displays Email Security container and build information
 	
`show email info`
	Output includes the following Email Security information:
	
	`Email Security uptime:`
	`Email Security hostname:`
	`Email Security version:`
	`Email Security build:`
	`Email Security build date:`

Displays Email Security IB installation information `show email info [--ib]`	Output includes IB installation date, description, version, binaries, and any prerequisite IBs or hotfixes.

Displays Email Security subscription information
 	
`show email subscription [--details]`
	Output for `show email subscription`:
	
	`Subscription key: <key number>`
	`Expiration date: <date>`
	`Expires in: <number of days>`
	`Subscribed users: <number of users>`
	`Operational status: <valid or invalid>`
	`When subscription expires: <action for mail processing: allow or block>`
	In addition to the above output, use of the `--details` parameter appends a timestamp of the most recent subscription validation, length of the subscription grace period, and supported product features.

Displays Forcepoint analytics database names and current database update information `show analytic-update info`	Output includes a list of the current Forcepoint Email Security analytics databases and their most recent update versions.
Displays Email Security services along with service operational status and uptime `show service status`	Output includes a list of Email Security services, their current status (on or off), and uptime (if service is running).

Configure Email Security system functions

Action and Syntax	Details

Enables or disables the Email Security x-header creation function
 	
`set email-x-header`
`--status <on|off>`
	Email Security x-header contains email analysis information. This information can be passed to various processing components like filters.
	
	Status: The state of the x-header function
	
	Example:
	
	`(config)(Email)# set`
	`email-x-header --status off`

Defines a new domain group or adds a domain to an existing domain group
 	
`set domain-group`
`--name <group name>`
`[--description] <group`
`description>`
`[--domain] <domain addresses>`
	Name: New or existing domain group name
	
	Description: (optional) Domain group description; multiple-word descriptions must be enclosed in quotation marks ("").
	
	Domain: (optional) Comma-separated domain addresses; "protected" is a reserved word for Protected Domain.
	
	The following characters are not supported in the Name and Description parameters: <, >, &.
	
	Example:
	
	`(config)(Email)# set domain`
	`group --name protected --domain`
	`mydomain.com --description "My`
	`Protected Domain addresses"`

Stops, starts, or restarts Email Security services
 	
`set service`
`--action <stop|start|restart>`
`--name <service_name>`
	Action: The service action to perform
	
	Name: The service name; a list of the service names is available via the "set service --name" help command.
	
	Example:
	
	`(config)(Email)# set service`
	`--action stop --name log`

Configures the specified log file maximum archive size
 	
`set logging`
`--log <threatcat|scanEngine>`
`--rotate <number of files>`
`--size <file size>`
	Log: The log file to archive
	
	Rotate: The maximum number of log files to archive
	
	Size: The maximum size of the log file to archive (in MB)
	
	If the rotate and size parameters are both zero, logging for the specified log is disabled.

Configures Email Security to handle email traffic as if it is received from the specified direction for policy application purposes
 	
`set mta accept-email-traffic-`
`as`
`--direction`
`<default|inbound|internal|`
`outbound>`
	Direction: The direction of email traffic, which determines the email policy used; if default is selected, direction is determined by protected domain.
	
	Example:
	
	`(config)(Email)# set mta accept-`
	`email-traffic-as --direction`
	`default`

Configure virtual IP addresses

Multiple virtual IP addresses can be configured on E1 or E2.

● Virtual IP addresses are used for outbound traffic only.

● Virtual IP addresses are bound to the specified physical interface.

● Virtual IP addresses must be in the same subnet as the specified physical interface.

● A maximum of 10 virtual IP addresses can be specified for each physical interface (E1 and E2).

Multiple virtual interfaces can be helpful to support multiple domains and/or a large volume of outbound traffic.

Action and Syntax	Details

Sets the virtual IP address for the Email module.
 	
`setvirtualip`
`--action <list|add|delete>`
`--interface <eth0|eth1>`
`--ip <ip_address>`
	Action: The action being implemented
	Interface: The interface being configured
	IP: The IP address
	Example:
	
	`(config)(Email)# setvirtualip`
	`--action add --interface eth1`
	`--ip 10.206.143.3`

Action and Syntax	Details

Moves the config and email store to a new appliance.
 	
`migrate interactive`
	Interactive mode is a step-by-step process that requires user input during the migration process.
	Example:
	
	`(config)(Email)# migrate`
	`interactive`

Moves the config and email store to a new appliance.
 	
`migrate silent`
`--host <host_name>`
	Silent mode requires the user to enter only the source appliance (pre-version 8.3) IP address.
	Host: Host name or IP address
	Example:
	
	`(config)(Email)# migrate`
	`silent`
	`--host 10.206.143.3`

Forcepoint Technical Support troubleshooting commands

The following appliance CLI commands may be visible in the CLI, but they are available only for Forcepoint Technical Support operations. They are **not** supported for appliance administrator use.

```
set analytic-update service --status <on|off>
set reporting --status <on|off>
```

```
set email subscription --key <reset|subscription_key>
set mta delivery --status <on|off>
load analytic-db --file <analytics_file> --location
<filestore>
load analytic-db [--factory]
```

Use of these commands generates the following message:

```
Unsupported command. Please contact Forcepoint Technical
Support.
```

Linux settings

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Action and Syntax	Details

Displays Linux kernel parameters.
 	
`show sysctl`
`  --entry <name>`
	This command only affects the values of the following entries:
	  net.piv4.tcp_timestamps
	  net.ipv4.tcp_window_scaling
	Entry: Name in sysctl to view.

Modify Linux kernel parameters at runtime.
 	
`set sysctl`
`  --entry <name>`
`  --value <0|1>`
	This command only affects the values of the following entries:
	  net.piv4.tcp_timestamps
	  net.ipv4.tcp_window_scaling
	Entry: Name in sysctl to modify.
	Value: New value of the entry.

Maintenance and support

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Access the following groups of commands below:

Starting and stopping services

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Action and Syntax	Details
(*Web only*) Start Web module, Content Gateway services, or Network Agent. start <web|proxy|network-agent>	Example: (config)# start web
(*Email only*) Start Forcepoint Email Security services. start email	Example: (config)# start email
(*Web only*) Stop Web module, Content Gateway services, or Network Agent. stop <web|proxy|network-agent>	Example: (config)# stop web
Stop Forcepoint Email Security services. stop email	Example: (config)# stop email
Shut down the appliance. shutdown appliance	Example: (config)# shutdown appliance
Restart the appliance. restart appliance	Example: (config)# restart appliance
(*Web only*) Restart Web module, Content Gateway, or Network Agent. restart <web|proxy|network-agent>	Example: (config)# restart web
(*Email only*) Restart Forcepoint Email Security services. restart email	Example: (config)# restart email

Module status and version details

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Action and Syntax	Details
Displays hardware and software data. `show appliance info`	Displays: ● The appliance uptime ● The appliance hostname ● The hardware platform ● The appliance software version ● The appliance mode ● The policy mode, if the Security mode is Web
Displays the status of services running in each module. `show appliance status`	Output varies based on appliance module.
(*Web only*) Displays status information for the Web module. `show web`	Displays a list of Web services and their status.
(*Web only*) Displays status information for the Content Gateway module. `show proxy`	Displays a list of Proxy services and their status.
(*Email only*) Displays status information for the Email module. `show email`	Displays a list of Email filtering services and their status.
(*Web only*) Displays status information for the Network Agent module. `show network-agent`	Displays a list of Network Agent services and their status.

Setting the Web policy mode

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All machines running Web protection components connect to the policy source machine to get up-to-date policy information.

> **Important**
> Content Gateway must be restarted after the policy mode is changed.

For more information about the policy source and policy modes, see the [Forcepoint Appliances Getting Started Guide](#).

Action and Syntax	Details
Sets the policy mode to full (also known as full policy source). `set mode full`	(Web only) The primary instance of Policy Server also runs on the policy source machine.

Sets the policy mode to user directory and filtering (sometimes referred to as policy lite).
 	
`set mode user`
`--policy-source`
`<off_box_ip_address>`
	(Web only) A user directory and filtering appliance is a lightweight version of the policy source machine.
	Example:
	`set mode user --policy-source`
	`10.10.10.10`

Sets the policy mode to filtering only.
 	
`set mode filter`
`--policy-server`
`<off_box_ip_address>`
	(Web only; unavailable in VA deployments) A filtering only appliance is configured to point to a Policy Server. This works best when the appliance is close to the Policy Server and on the same network.
	Example:
	`set mode filter --policy-server`
	`10.10.10.10`

Appliance hotfixes and upgrades

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All upgrades and hotfixes can be listed in the CLI.

Files are downloaded over port 80. There are 2 ways to retrieve upgrade and hotfix files:

- Download the upgrade or hotfix file directly from Forcepoint download servers:
    - Hotfix server: http://appliancehotfix.websense.com
    - Upgrade server: http://appliancepatch.websense.com

Use "ping" to test connectivity to these servers.

- Go to the [Forcepoint Downloads](#) page. Download the needed files to a filestore, and then upload the files from the filestore to each appliance.

The speed of your Internet connection and the size of the file will influence which method is more efficient for your environment.

Hotfixes

> **Important**
> **Read the hotfix readme file before applying a hotfix.**

A hotfix applies a small patch to the system to fix a specific problem.

- In the majority of cases, you are notified of hotfixes by:
  - A Technical Alert email.
  - A Forcepoint Technical Support agent (the agent provides the name of a specific hotfix to address the problem you reported).
- As a best practice, install all security vulnerability hotfixes.
- A hotfix may address an issue on any module running on your appliance.
  - A hotfix should not be recommended to you for a module that you have not configured or are not running on your appliance.
  - The hotfix facility on the appliance will not install a hotfix that is not valid for the module versions on your appliance.
- A hotfix may have dependencies on one or more other hotfixes, in which case the hotfix facility will not allow the installation of the hotfix until after its dependencies are installed.

Hotfix files are downloaded to and worked with in a filestore that you specify.

Enter the hotfix ID using capital letters.

Use these commands to work with hotfixes:

```
show hotfix history
show hotfix list
load hotfix
install hotfix
uninstall hotfix
delete hotfix
show download hotfix
pause download hotfix
resume download hotfix
cancel download hotfix
```

See the entry for each command in the table below.

Action and Syntax	Details
Display information about applied hotfixes. `show hotfix history`	The list displays all hotfixes installed or uninstalled on the appliance.

View a list of available appliance hotfixes.
 	
`show hotfix list`
` [--id <hotfix_id>]`
` [--module`
`  <app|web|proxy|email>]`
	The simple command, with no parameters, displays all hotfixes available for download from Forcepoint servers or residing on the appliance. Note the name and ID of the hotfix file you want to install.
	
	● If you want to download a hotfix to a remote filestore, you will need the hotfix file name.
	
	Download hotfixes from the **Forcepoint.com > My Account > Downloads > Hotfixes & Patches** page. Select a hotfix to see a detailed description.
	
	● If you want to download a hotfix directly to each appliance, you will need the hotfix ID.
	
	Parameters can narrow the scope of hotfixes displayed:
	
	● Use **--id** to see information about a specific hotfix.
	
	● Use **--module** and specify a module type to see hotfixes for the appliance module (**app**), Web module (**web**), Content Gateway module (**proxy**), or Email Security module (**email**).
	
	`Example:`
	`(view)# show hotfix list`
	`--module web`

Display the status of the hotfix download process.
 	
`show download hotfix`
` --file <filename>`
` --id <hotfix id>`
	The load process is asynchronous, allowing the administrator to perform other CLI tasks while the download occurs.
	
	This command lets the administrator check to see if the download is complete.
	
	● **id:** Specific hotfix ID.
	
	● **File:** Specific hotfix file name.
	
	Example:
	`(view)# show download hotfix`
	`--file myhotfix.rpm`

Action and Syntax	Details

Load the hotfix from a server or filestore to the appliance.
 	
``
load hotfix
  [--id <hotfix_id>]
  [--file <name>]
  [--location <alias>]
``
	Use the "install hotfix" command to install the hotfix on the appliance.
	
	Specify the hotfix ID to load a hotfix from Forcepoint servers, or specify a hotfix file name and location to load the hotfix from a remote filestore. Entering the command with no parameters will display a list of hotfixes.
	
	● Use the "show hotfix --id" command to find the hotfix ID on the download server.
	
	● The filestore alias is created with the "set filestore" command.
	
	Enter the "load hotfix --location <alias>" command with no file name to select the hotfix from a list of files on the filestore. Note that if you change the name of a hotfix file in a filestore, the option cannot be used.
	
	Example:
	
	``
	(config)# load hotfix --location
	  myfilestore --file myhotfix.rpm
	``

Stop, pause, or resume a hotfix download in progress.
 	
``
cancel download hotfix
  [--id <id>]
  [--file <filename>]
 	
pause download hotfix
  [--id <id>]
  [--file <filename>]
 	
resume download hotfix
  [--id <id>]
  [--file <filename>]
``
	This command will cancel the file download. To cancel a paused download, resume the download and then cancel.
	
	Either the "file" or the "ID" parameter is required.
	
	Examples:
	
	``
	(config)# cancel download hotfix
	  --file myhotfix.rpm
	
	(config)# pause download hotfix
	  --id 2
	``

Install a hotfix file on the appliance. ``` install hotfix [--id <hotfix_id>] ```	If no hotfix ID is specified, you can choose from a list of available hotfix files. Example: ``` (config)# install hotfix --id 3 ```

Action and Syntax	Details

Remove a hotfix file from the appliance. This command does not uninstall the hotfix.
 	
`delete hotfix`
`  [--id <hotfix_id>]`
`  [--file <filename>`
	This removes hotfix files that have been transferred to the appliance, but not installed.
	If no hotfix ID is specified, you can choose from a list of available hotfix files.
	ID: (optional) ID of the hotfix file to delete.
	File: (optional) Filename of the hotfix file to delete.
	Example:
	
	`  (config)# delete hotfix`
	`  --id 4`
	
	`  (config)# delete hotfix`
	`  --file myhotfix.rpm`

Uninstall a hotfix from the appliance.
 	
`uninstall hotfix`
`  [--id <hotfix_id>]`
	If no hotfix ID is specified, you can choose from a list of installed hotfixes.
	Example:
	
	`  (config)# uninstall hotfix`
	`  --id 4`

Appliance Upgrades

> **Important**
> **Read the release notes before applying an upgrade.**

A software upgrade upgrades all TRITON Architecture modules on the appliance while preserving the existing settings. Off-appliance TRITON Architecture components must also be upgraded to the same version.

> **Important**
> All TRITON Architecture software in your deployment must be running the same version.
>
> A new appliance at your site should immediately be upgraded to the version running in your deployment.
>
> See the Forcepoint [Certified Product Matrix](#) for information about the software module versions that are compatible with each appliance version.

Upgrade files are downloaded to and worked with in a filestore that you specify.

Use these commands to work with upgrades:

```
show upgrade history
show upgrade list
show upgrade status
```

```
load upgrade
show download upgrade
cancel download upgrade
pause download upgrade
resume download upgrade
install upgrade
```

See the entry for each command in the table below.

After an upgrade is applied, use "show appliance info" to confirm the current appliance version. To view the upgrade log file, use the "show log" commands.

Action and Syntax	Details
Display the upgrades that have been installed on this appliance. `show upgrade history`	Example: `(view)# show upgrade history`
Display a list of upgrades available on Forcepoint servers. `show upgrade list`	Example: `(view)# show upgrade list`
Display status of upgrade package download and installation. `show upgrade status`	Example: `(view)# show upgrade status`

Download or upload an upgrade file.
 	
`load upgrade`
`[--file <filename>]`
`[--location <file location>]`
	If this command is run with no parameters, you will be prompted to download an upgrade from a list.
	File: (optional unless the filestore is TFTP) Name of the upgrade file.
	Location: (optional) Any defined remote filestore alias. A TFTP filestore requires the file parameter.
	Example:
	`(config)# load upgrade --file`
	`newpatch.rpm --location`
	`mypatchserver`

Display the upgrade download status.
 	
`show download upgrade`
`--file <filename>`
	File: Name of the upgrade file.
	Example:
	`(view)# show download upgrade`
	`--file newpatch.rpm`

Cancel an upgrade download.
 	
`cancel download upgrade`
`--file <filename>`
	This command will cancel the file download. To cancel a paused download, resume the download and then cancel.
	File: Name of the upgrade file.
	Example:
	`(config)# cancel download`
	`upgrade --file newpatch.rpm`

Pause an upgrade download.
 	
`pause download upgrade`
`--file <filename>`
	File: Name of the upgrade file.
	Example:
	`(config)# pause download upgrade`
	`--file newpatch.rpm`

Action and Syntax	Details

Resume a paused upgrade download.
 	
`resume download upgrade`
`  --file <filename>`
	File: Name of the upgrade file.
	Example:
	`(config)# resume download upgrade`
	`--file newpatch.rpm`

Install an upgrade file on the appliance.
 	
`install upgrade`
`  --file <upgrade_file>`
	If this command is run with no parameters, you will be prompted to install an upgrade from a list.
	File: Name of the upgrade file.
	Examples:
	
	`  (config)# install upgrade --file`
	`  App-upgrade.iso`

Backup and restore

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It is a best practice to backup appliances regularly. Use "create backup schedule" to define an automated backup schedule.

Backup files can be stored locally—on the appliance, or saved to a filestore that you specify.

There are 2 types of backup:

- A full backup saves all appliance settings, as well as configuration and policy information for all active modules. The best practice is to run a full backup on every appliance in your network on a regular basis.

- A component backup (web or email) saves all configuration information for the selected module. This includes any client and policy data stored on the appliance.

> **Note**
>
> The web component backup does not include the proxy—Content Gateway. Content Gateway backups (snapshots) can be performed in Content Gateway manager. Snapshots must be performed manually; there is no scheduling facility.

Components that do not reside on the appliance (like Log Server and Forcepoint Security Manager) should be backed up at approximately the same time that you back up your appliance. When you restore the system, this allows you to restore from a time-synchronized set of backups on all machines.

Restoring from backup

When a backup is restored, all current settings for the appliance or module are erased. The appliance is always restarted after a restore.

Before performing a restore, stop all TRITON Architecture components running off the appliance.

Full appliance restores and module-specific restores require that these conditions are met:

- The current appliance version must match the version associated with the backup file. Thus, a version 8.4.0 backup can be restored only on an appliance that is at version 8.4.0.

- The module version must match the version associated with the backup file.

- The current appliance mode—Forcepoint Web Security, Forcepoint Email Security, or Forcepoint URL Filtering — must match that of the backup file. For example, a backup from a Forcepoint Email Security appliance must be used to restore a Forcepoint Email Security appliance.

- If the appliance is a web protection appliance, the current appliance policy source mode (full, user, filter) and policy source IP (or policy server IP) must match the policy source mode and IP addresses in effect when the backup file was created.

- The hardware model of the current appliance must be the same as the model that was backed up. For example, a backup from a Forcepoint V10000 Appliance must be used to restore a Forcepoint V10000 Appliance.

- The original appliance that was backed up cannot also be running elsewhere in the network. Restoring a full configuration re-creates the original appliance.

Before restarting the off-box components, ensure that the system time of all TRITON Architecture component hosts is synchronized. You can then restart the TRITON Architecture components located off the appliance.

> ⚠ **Warning**
>
> If the restore process changed appliance IP addresses, you may need to reconfigure or reinstall off-box components to re-establish communication between on-box and off-box components.

Action and Syntax	Details

Display all available backups in a specified location.
 	
`show backup list`
`  --location`
`<local|filestore_alias>`
	Displays the file name, date, and description of each backup file found in the specified location.
	
	● **local** is the current appliance.
	● **filestore_alias** is the filestore alias of a remote storage location.
	
	Example:
	`(view)# show backup list`
	`  --location local`

Display the configured backup schedule. `show backup schedule`	Includes the schedule frequency, the last scheduled backup, the next scheduled backup, and the backup location.

Create an appliance backup now.
 	
`create backup now`
`  --location`
`<local|filestore_alias>`
`  [--desc <description>]`
`  --type <full|email|web>`
	You can back up files onto the appliance (local) or onto a remote filestore. You can restore from either location.
	
	The optional description of the backup is limited to 18 characters.
	
	Example:
	`(config)# create backup now`
	`--location local --desc full-`
	`2017-1-24 --type full`

Restore the appliance configuration settings saved in the specified backup file.
 	
`restore backup`
`  --location`
`<local|filestore_alias>`
`  [--file <file_name>]`
	For location, specify a filestore alias or "local" for a local file.
	
	Optionally specify the name of the backup file to restore. If you do not specify a name, you can choose a file from a list.
	
	Example:
	`(config)# restore backup`
	`--location local --file`
	`mybackup.bak`

Action and Syntax	Details
Define a schedule for automatic backups. ``` create backup schedule --location <local|filestore_alias> --freq <daily|weekly|monthly> --day <Mon|Tue|Wed|Thu| Fri|Sat|Sun> --date <integer> --time <hh:mm> --type <full|web|email> ```	**Location:** You can schedule a backup to the appliance ("local") or to a remote filestore. **Freq:** You can schedule a backup to occur daily, weekly, or monthly. **Day:** If the interval is weekly, also specify the day of the week: Mon, Tue, Wed, Thu, Fri, Sat, or Sun (case-sensitive). **Date:** If the interval is monthly, also specify the day of the month (integer from 1-28). **Time:** For all interval options, specify the time of day in 24-hour format (hh:mm). Do **not** specify seconds. Example of a weekly backup: ``` (config)# create backup schedule --location local --freq weekly day Mon time 01:30 ``` **Type:** The type of backup being created (full appliance backup, email-only, or web-only).
Cancel all scheduled backups. ``` cancel backup schedule ```	

Delete any or all backup files stored locally on the appliance.
 	
``
delete backup
 [--file <file_name|all>]
``
	Optionally takes one of the following values:
	
	● **name**: the name of a specific file
	● **all**: every backup file on the appliance
	
	If the option is not used, interactive mode will be used to select files to delete.
	Examples with file option:
	
	``
	(config)# delete backup --file
	all
	Successfully deleted backup
	file(s).
	
	(config)# delete backup --file
	backupfile123.bak
	Successfully deleted backup
	file(s).
	``
	Example without file option:
	
	``
	(config)# delete backup
	Backup Selection:
	1) backupfile123.bak:
	  Description:
	  Time : 2016-11-18_12:21
	2) backupfile456.bak:
	  Description:
	  Time : 2016-11-18_12:20
	
	Please make a selection (enter
	'q' to quit): 1
	Successfully deleted backup
	file(s).
	``

Collecting a configuration summary for analysis

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Action and Syntax	Details

Create a configuration summary file for Technical Support analysis.
 	
`save configsummary`
`  --location <filestore_alias>`
	Collects both the appliance configuration and all configurations for the modules running on the appliance.
	
	Example:
	
	`save configsummary --location`
	`  samba5`

Log files

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Action and Syntax	Details

Display the last *n* lines of the appliance log file (limit 500).
 	
`show log lastline app`
`  --line <integer>`
`  --type <audit|system>`
	Line (required): The number of lines to display.
	Type (required): The log file type (audit or system).
	Example:
	`(view)# show log lastline app`
	`  --line 3 --type audit`

Display the last *n* lines of the appliance log file (limit 500).
 	
`show log lastline email`
`  --line <integer>`
	Line (required): The number of lines to display.
	Example:
	`(view)# show log lastline email`
	`  --line 3`

Display the last *n* lines of the appliance log file (limit 500).
 	
`show log lastline proxy`
`  --line <integer>`
	Line (required): The number of lines to display.
	Example:
	`(view)# show log lastline proxy`
	`  --line 3`

Display the last *n* lines of the appliance log file (limit 500).
 	
`show log lastline network-`
`agent`
`  --line <integer>`
	Line (required): The number of lines to display.
	Example:
	`(view)# show log lastline`
	`network-agent --line 3`

Display the last *n* lines of the appliance log file (limit 500).
 	
`show log lastline web`
`  --line <integer>`
	Line (required): The number of lines to display.
	Example:
	`(view)# show log lastline web`
	`  --line 3`

Display data as it is appended to the appliance log file.
 	
`show log realtime app`
`[--filter <string>]`
`--type <audit|system>`
`[--timeout <integer>]`
	Filter (optional): Literal string to match. Not a regular expression.
	Type: The log file type (audit or system).
	Timeout (optional): Amount of time to stream log (seconds).
	Example:
	`(view)# show log realtime app`
	`--timeout 20 --type audit`

Display data as it is appended to the appliance log file.
 	
`show log realtime email`
`[--filter <string>]`
`[--timeout <integer>]`
	Filter (optional): Literal string to match. Not a regular expression.
	Timeout (optional): Amount of time to stream log (seconds).
	Example:
	`(view)# show log realtime email`
	`--timeout 20`

Action and Syntax	Details

Display data as it is appended to the appliance log file.
 	
`show log realtime proxy`
`[--filter <string>]`
`[--timeout <integer>]`
	Filter (optional): Literal string to match. Not a regular expression.
	Timeout (optional): Amount of time to stream log (seconds).
	Example:
	`(view)# show log realtime proxy`
	`--timeout 20`

Display data as it is appended to the appliance log file.
 	
`show log realtime network-agent`
`[--filter <string>]`
`[--timeout <integer>]`
	Filter (optional): Literal string to match. Not a regular expression.
	Timeout (optional): Amount of time to stream log (seconds).
	Example:
	`(view)# show log realtime network-`
	`agent`
	`--timeout 20`

Display data as it is appended to the appliance log file.
 	
`show log realtime web`
`[--filter <string>]`
`[--timeout <integer>]`
	Filter (optional): Literal string to match. Not a regular expression.
	Timeout (optional): Amount of time to stream log (seconds).
	Example:
	`(view)# show log realtime web`
	`--timeout 20`

Configure how and when log files are archived.
 	
`set log archive`
`--type <system|audit|email|`
`network-agent|web>`
`--freq <weekly|monthly|`
`yearly>`
`--size <integer|string>`
	When a log file reaches the specified maximum size (between 10 MB and 200 MB), or at the specified frequency interval, the file is archived and a new log file is started.
	The **type** parameter is required, and either the **freq** or the **size** parameter is also required.
	Type: The type of archive (system, audit, email, network-agent, or web).
	Freq: Specifies a frequency interval (weekly, monthly, or yearly).
	Size: The default unit of measurement is bytes. To instead use kilobytes or megabytes, append "k" or "m" to the size. For example:
	`(config)# set log archive --size`
	`50m`
	
	Example:
	`(config)# set log archive --type`
	`audit --size 30m`

Action and Syntax	Details

Display log file archiving settings.
 	
`show log archive`
` --type`
`<system|audit|email|network-`
`agent|web>`
	Determine whether log files are being archived, and if so, what criteria are used to determine when older log data is archived and a new log file is started.
	
	Type: The log type whose settings will be shown (system, audit, email, network-agent, or web).
	
	Example:
	`(view)# show log archive --type`
	`   system`

Zip all log files and save to a remote filestore.
 	
`save log all`
` --location <filestore_alias>`
	Location (required): Remote storage location defined by the "set filestore" command.
	
	Example:
	`(config)# save log all`
	`   --location cli_log`

Zip appliance log files and save to a remote filestore.
 	
`save log app`
` --type <all|audit|system>`
` --location <filestore_alias>`
	Location (required): Remote storage location defined by the "set filestore" command.
	
	Type (required): Type of log file (all, audit, or system).
	
	Example:
	`(config)# save log app`
	`   --type audit --location cli_log`

Zip email log files and save to a remote filestore.
 	
`save log email`
` --location <filestore_alias>`
	Location (required): Remote storage location defined by the "set filestore" command.
	
	Example:
	`(config)# save log email`
	`   --location cli_log`

Zip proxy log files and save to a remote filestore.
 	
`save log proxy`
` --location <filestore_alias>`
	Location (required): Remote storage location defined by the "set filestore" command.
	
	Example:
	`(config)# save log proxy`
	`   --location cli_log`

Zip network agent log files and save to a remote filestore.
 	
`save log network-agent`
` --location <filestore_alias>`
	Location (required): Remote storage location defined by the "set filestore" command.
	
	Example:
	`(config)# save log network-agent`
	`   --location cli_log`

Zip web log files and save to a remote filestore.
 	
`save log web`
` --location <filestore_alias>`
	Location (required): Remote storage location defined by the "set filestore" command.
	
	Example:
	`(config)# save log web`
	`   --location cli_log`

Diagnose

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Action and Syntax	Details
Display the kernel ARP table for the selected module. ```arp [--module <email|proxy|web|network- agent>]```	**Module:** (optional) Enter email, proxy, web, or network-agent.
Display the current Ethernet card settings. Use ethtool to verify local network connectivity. ```ethtool --interface <interface> [--show-offload] [--module <email|proxy|web|network- agent>]```	**Interface:** The interface name. Use the "ifconfig" command to see valid interface options. **Show-offload:** (optional) Show the state of the protocol offload and other features. **Module:** (optional) Enter email, proxy, web, or network-agent. Example: ```(diagnose)# ethtool --interface p1```
Display the status of the currently active network interfaces. Use ifconfig to troubleshoot network interface issues or to identify IP issues. ```ifconfig [--interface <interface>] [--module <email|proxy|web|network- agent>]```	**Interface:** (optional) Any existing interface. **Module:** (optional) Enter email, proxy, web, or network-agent. Example: ```(diagnose)# ifconfig --interface e1```

Netcat (nc) attempts to read and write data across the network to the specified server using the specified protocol.
Use netcat for functional tests of components and verification of connectivity.
 	
``nc
  --protocol <tcp|udp>
  --dest <ipv4_addr|hostname>
  --port <port_number>
  --module
 [<email|proxy|web|network-
agent>]```
	If you are having problems loading a web page or are getting a block, this command can help determine the problem.
	If you see a reset coming from the proxy, you can determine which DOM/module it is coming from.
	Protocol: Uses the TCP or UDP protocol to read and write data.
	Dest: The IPv4 address or hostname of the server.
	Port: Port number of the server.
	Module: Enter email, proxy, web, or network-agent.
	Example:
	``(diagnose)# nc --protocol tcp
	--dest 10.10.10.10 --port 22
	--module email```

Action and Syntax	Details
Print network connections routing tables, interface statistics, and so on. ``` netstat [--module <email|proxy|web|network- agent>] ```	**Module:** (optional) Enter email, proxy, web, or network-agent. Example: ``` (diagnose)# netstat --module web ```

Obtains DNS information for the specified host. Use nslookup to troubleshoot DNS resolution problems.
 	
``
nslookup
  --host
<ipv4_address|hostname>
  [--dns-server
<ipv4_address|hostname>]
  [--module
<email|proxy|web|network-
agent>]
``
	Host: The IPv4 address or hostname to be resolved.
	Dns-server: (optional) The IPv4 address or hostname of the DNS server.
	Module: (optional) Enter email, proxy, web, or network-agent.
	Example:
	``
	(diagnose)# nslookup --host
	10.10.10.10 --dns-server
	20.20.20.20 --module proxy
	``

Verify that a hostname or IP address exists and can accept requests from the selected module, and that DNS is resolving.
Use ping and ping6 to test connectivity with the specified hostname or IP address.
 	
``
ping
  [--interface
<c|n|p1|p2|e1|e2>]
  --dest <ipv4_addr|hostname>
  [--module
<email|proxy|web|network-
agent>]
 	
ping6
  [--interface
<c|n|p1|p2|e1|e2>]
  --dest <ipv6_addr|hostname>
  [--module
<email|proxy|web|network-
agent>]
``
	Ctrl+C to quit.
	Dest: The IPv4 (ping) or IPv6 (ping6) IP address or hostname with which to test connectivity.
	Interface: (optional) The appliance interface. All valid interfaces can be usd including virtual interfaces.
	Module: (optional) If interface C, N, P1, P2, E1, or E2 is chosen, it will be converted to the virtual interface and a message explaining this will be output.
	Example:
	``
	(diagnose)# ping --dest
	10.10.10.10 --module proxy
	--interface eth0
	``

Display the contents of the selected module's kernel IP routing table entries in numeric format. Use route and route6 in complex network environments to see if the environment is set up properly.
 	
``
route
  [--module
<email|proxy|web|network-
agent>]
 	
route6
  [--module
<email|proxy|web|network-
agent>]
``
	Module: (optional) Enter email, proxy, web, or network-agent.
	Example:
	``
	(diagnose)# route --module
	network-agent
	``

Action and Syntax	Details
Display information about packets from the specified network interface, for packets matching the specified Boolean expression.	**tcpdump** is a packet analyzer. Tcpdump intercepts and displays packets being transmitted or received by the specified network interface.

Use tcpdump to determine whether all routing is occurring properly, to and from the interface.
 	
``
tcpdump
  --timeout <timeout value>
  [--file <filename>]
  [--interface <interface>]
  [--expression <filter
expression>]
  [--location
<filestore_alias>]
``
	The output from tcpdump can help you determine whether all routing is occurring properly, to and from the interface. The output is verbose; it displays the data of each package in both hex and ASCII, and it includes a link-level header on each line.
	
	Timeout: The amount of time to run tcpdump before outputting results.
	
	File: (optional) Name of output file located in the filestore.
	
	Interface: (optional) Any existing interface. Interface will display in output as eth0 or eth1.
	
	Expression: (optional) A Boolean expression used to select the packets of interest.
	
	Location: (optional) Name of the filestore location.
	
	Example 1: To capture all TCP traffic to and from the proxy on port 8080, specify:
	
	`"tcp port 8080"`
	Example 2: To capture all TCP traffic to the site google.com, specify:
	
	`"tcp and dst host google.com"`
	Example 3: To capture all TCP traffic from a specific end-user machine, specify:
	
	`"tcp and src host`
	`user.example.com"`
	Note: You can enter a hostname if it is resolvable by a DNS server, but the output uses IP addresses.

Display all Linux processes that are currently running in the selected module. Use top to help diagnose CPU and memory issues. ``` top [--module <email|proxy|web|network- agent>] ```	**Module:** (optional) The appliance module. Example: `(diagnose)# top --module proxy`

Action and Syntax	Details

Display the route used by packets to reach the specified destination.
 	
```traceroute```
``` --dest <ipv4_addr|hostname>```
```[--module```
```<email|proxy|web|network-```
```agent>]```
 	
```traceroute6```
``` --dest <ipv6_addr|hostname>```
```[--module```
```<email|proxy|web|network-```
```agent>]```
	If some machines are not receiving policy enforcement, or if traffic is not getting to the appliance, this displays the devices (or hops) that are between the machines that may be blocking access to the host. Use **tcpdump** to get a packet capture from each device.
	
	If you are having latency issues, traceroute can also help identify potential causes.
	
	Note: traceroute is of limited usefulness if an IP address is being spoofed.
	
	Module: (optional) The appliance module.
	
	Examples:
	
	```(diagnose)# traceroute --dest```
	```www.mywebsite.com```
	``` --module proxy```
	
	```(diagnose)# traceroute6 --dest```
	```1234:5678::8765::4321```
	``` --module email```

Tests connectivity with the specified URL (file download not supported).
 	
```wget```
``` --url <url>```
``` [--module```
```<email|proxy|web|network-```
```agent>]```
	Supports non-interactive download of web pages to help diagnose connectivity issues.
	
	Use **wget**, for example, if you have configured the proxy, but cannot access the Web. **wget** simulates the proxy going out and retrieving content at the specified URL.
	
	wget supports HTTP, HTTPS, and FTP.
	
	Module: (optional) The appliance module.
	
	Example:
	
	```(diagnose)# wget --module email```
	``` --url www.mywebsite.net```

Tests connectivity between the specified URL and the proxy (file download not supported).
 	
```wget-proxy```
``` --url <url>```
``` --proxy-ip <proxy_ip>```
``` --port <port>```
``` [--proxy-user <user_name>]```
``` [--module```
```<email|proxy|web|network-```
```agent>]```
	Url: The URL of the website to which you want to test connectivity
	
	Proxy-ip: The proxy IP address. This is the IP address of the P1 interface on most appliance configurations.
	
	Port: The port on which the proxy expects traffic. 8080 is configured for HTTP by default.
	
	Proxy-user: (optional) The user name of the client, if required for authentication
	
	Module: (optional) The appliance module.
	
	Example:
	
	```(diagnose)# wget-proxy --module```
	```web --port 8080 --proxy-ip```
	```10.206.4.47 --url www.google.com```
	``` --proxy-user myuser```

Action and Syntax	Details
Display the module's logging level status. ```\nget debugging\n --command <status>\n --module\n<proxy|web|email|network-\nagent>\n```	**Command:** status. **Module:** The appliance module. Example: ```\n(diagnose)# get debugging\n--command status --module proxy\nDebug log is disabled\n```
Runs the Content Gateway content line command. ```\nget proxy content_line\n --type <read>\n --entry <config entry>\n```	**Type:** The type of command you are sending to content line. "Read" is the only current option. **Entry:** Used with type option "read". This is the entry in the config that you are reading. Example: ```\n(diagnose)# get proxy\ncontent_line --entry\nproxy.config.lm.display_reset_al\narm --type read\nValue for\nproxy.config.lm.display_reset_al\narm: 1\n```
Stops, starts, or restarts the Conent Gateway Policy Engine. ```\nget proxy policy_engine\n --command <status>\n```	**Command:** The type of command you are sending to content line. "Status" is the only option at this time. Example: ```\n(diagnose)# get proxy\npolicy_engine --command status\nPolicyEngine not registered with\nDSS manager.\n```
Runs and network check against the Content Gateway. ```\nget proxy network_check\n```	Example: ```\n(diagnose)# get proxy\nnetwork_check\n```
Retrieves information from the Policy Broker. ```\nget web policy_broker\n```	Example: ```\n(diagnose)# get web\npolicy_broker\nUnable to connect to the Policy\nServer!\n```
Retrieves the status or enables/disables the caching of users. ```\nget web cache_users\n --command <status>\n```	**Command:** Command to send. "Status" is the only option at this time. Example: ```\n(diagnose)# get web cache_users\n--command status\nCacheWISPUsers=on\n```
Retrieves the status or enables/disables the User Group IP Precedence. ```\nget web usr_grp_ip_prec\n --command <status>\n```	**Command:** Command to send. "Status" is the only option at this time. Example: ```\n(diagnose)# get web\nusr_grp_ip_prec --command status\n\nUserGroupIpPrecedence=false\n```

Action and Syntax	Details
Retrieves the list of log files that can be downloaded to a filestore. `get email log_list`	

Retrieves the specified log file.
 	
`get email log`
`  --alias <filestore alias>`
`  --file <filename>`
	Alias: Filestore location for the file.
	File: Name of file to download.
	Example:
	`(diagnose)# get email log`
	`  --alias liftp --file maillog`

Runs the DIG command.
 	
`get email dig_output`
`  --entry <ip_address|domain`
`name>`
`  --type <mx|txt|x>`
	Entry: Location to run DIG against.
	Type: Option to be passed to.
	Example:
	`(diagnose)# get email dig_output`
	`  --entry 10.206.6.13 --type mx`

Downloads the PEM files to a filestore.
 	
`get email pem --alias`
`<filestore alias>`
	Alias: Filestore location for the file.
	Example:
	`(diagnose)# get email pem`
	`  --alias liftp`

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Ansible

Version 2.1.0.0

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Version 3, 29 June 2007

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Version 1.3

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Crypt Blowfish

Crypt Blowfish

Version 2.1

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Version 9.49.30

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PCI Utilities

Version 3.1.10

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Py2exe

Version 0.6.9

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Python-daemon

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Version 4.8.4

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Pyutmp

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Socks Server 5

Version 3.8.9

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Sshpass

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Yum-utils

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