



TRITON® Appliances Command Line Interface (CLI) Guide

V-Series, X-Series, & Virtual Appliances

v8.3.x

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TRITON® Appliances Command Line Interface

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

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

- [Conventions](#), page 1
- [System configuration](#), page 10
- [Maintenance and support](#), page 42
- [Diagnose](#), page 58

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

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To quickly reference the changes made to the CLI for version 8.3, see the [CLI Command Comparison Table](#).

Conventions

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

- [Logon and authentication](#), page 2
- [CLI modes and account privileges](#), page 2
- [Basic account management](#), page 4
- [Command syntax](#), page 9
- [Help for CLI commands](#), page 9

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 TRITON Appliance 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.

Configure accounts

Action and Syntax	Details
<p>Change the password for the admin account.</p> <pre>set account admin --password</pre> <p>You are prompted to enter the password.</p>	<p>You must know the current admin password to make this change.</p> <p>The admin password is first set when you run the firstboot script.</p> <p>The 8 to 15 characters in length and it must include:</p> <ul style="list-style-type: none"> • At least one uppercase character • At least one lowercase character • At least one number • At least one character in the set: ! # % & ' () * + , - . / ; < = > ? @ [] ^ _ { } ~ <p>Exclude all of the following:</p> <ul style="list-style-type: none"> • 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-related names, such as appliance, filtering, TRITON, AP-WEB, AP-EMAIL, ContentGateway, PolicyBroker, PolicyDatabase, and similar
<p>See if the audit account is enabled or disabled.</p> <pre>show account audit --status</pre>	<p>The audit account is disabled by default.</p>

Action and Syntax	Details
<p>Enable or disable the audit account.</p> <pre>set account audit --status <on off></pre> <p>Set or change the audit account password.</p> <pre>set account audit --password</pre> <p>You are prompted to enter the password.</p>	<p>The --status and --password parameters cannot be used at the same time.</p> <p>When enabling the audit account for the first time, also set a password.</p> <p>The password must be 8 to 15 characters in length and it must include:</p> <ul style="list-style-type: none"> • At least one uppercase character • At least one lowercase character • At least one number • At least one character in the set: ! # % & ' () * + , - . / ; < = > ? @ [] ^ _ { } ~ <p>Exclude all of the following:</p> <ul style="list-style-type: none"> • 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-related names, such as appliance, filtering, TRITON, AP-WEB, AP-EMAIL, ContentGateway, PolicyBroker, PolicyDatabase, and similar
<p>Enable or disable remote CLI access via SSH.</p> <pre>set access ssh --status <on off></pre>	<p>SSH status is enabled or disabled for all active accounts.</p> <p>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.</p>
<p>Display whether remote CLI access via SSH is enabled or disabled.</p> <pre>show access ssh --status</pre>	
<p>Display the admin account email address.</p> <pre>show account email</pre>	
<p>Define an email address to use for admin account password recovery.</p> <pre>set account email --address <address></pre>	<p>A temporary password is sent to this email address when you request automated password recovery help.</p> <p>You must also define an SMTP server. (See next command.)</p> <p>Technical Support can also manually issue a temporary password if you provide the security code you see in the appliance iDRAC console.</p>
<p>Send a test email using the email/SMTP configuration.</p> <pre>send test_email</pre>	

Action and Syntax	Details
<p>Display the SMTP server settings used with the admin email address to facilitate password recovery.</p> <pre>show account smtp</pre>	<p>Displays:</p> <ul style="list-style-type: none"> • Server IP address or hostname • Server port • Server user name • Server password
<p>Define an SMTP server for use during admin account password recovery.</p> <pre>set account smtp --host <location> --port <port> --user <name></pre>	<p>Password recovery requires you to define:</p> <ol style="list-style-type: none"> 1. An SMTP server 2. A valid email address to receive a temporary password <p>The host location can be either the SMTP server's IPv4 address or its hostname.</p> <p>The SMTP port is optional (set to 25, by default).</p> <p>The user is the account to use to connect to the SMTP server.</p> <p>Example:</p> <pre>(config)# set account smtp --host 10.0.0.25 --port 25 --user smtpuser</pre>
<p>For admin account password recovery, enter Ctrl+P at the console logon prompt.</p> <p>The old password will be overwritten as soon as the admin types “yes” in the confirmation dialog box.</p>	<p>If you have lost or forgotten your admin password, you can either:</p> <ul style="list-style-type: none"> • 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. <p>Use the temporary password to log on to the appliance. You will be prompted to set a new password.</p> <p>The 8 to 15 characters in length and it must include:</p> <ul style="list-style-type: none"> • At least one uppercase character • At least one lowercase character • At least one number • At least one character in the set: ! # % & ' () * + , - . / ; < = > ? @ [] ^ _ { } ~ <p>Exclude all of the following:</p> <ul style="list-style-type: none"> • 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) <p>Common appliance-related names, such as appliance, filtering, TRITON, AP-WEB, AP-EMAIL, ContentGateway, PolicyBroker, PolicyDatabase, and similar.</p>

Action and Syntax	Details
Delete the password recovery email address. <pre>delete account email</pre>	
Delete SMTP settings. <pre>delete account smtp</pre>	
Display Technical Support account access or activity history. <pre>show account tech-support --status</pre> <pre>show account tech-support --history</pre>	<p>The --status and --history parameters cannot be used at the same time.</p> <p>The activity history includes both local and remote access via the tech-support account.</p>
Enable or disable access for Technical Support. <pre>set account tech-support --status <on off></pre>	<p>A temporary tech support password is generated when you enable this access. Technical Support retrieves the passcode from a special URL.</p> <p>To allow Technical Support remote access, SSH access must also be enabled with:</p> <pre>set access ssh --status on</pre> <p>When a technician uses the tech-support account, the session ends automatically after 15 minutes of inactivity.</p> <p>View the logon history of the tech-support account with:</p> <pre>show account tech-support --history</pre>

Session management

Action and Syntax	Details
Enter the appliance CLI config mode. <code>config</code>	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. <code>diagnose</code>	The admin must be in view mode to access diagnose mode.
Display connection information for active CLI sessions. <code>show session</code>	
End a config mode session immediately. <code>clear session</code> <code>--config</code>	Ends the session for whichever admin is in config mode, and allows another admin to enter config mode.
Exit the current config mode. <code>exit</code>	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

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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

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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
- [Filestore definition and file save commands](#), page 14
- [Appliance interface configuration](#), page 17
- [Appliance vswitch configuration](#), page 26
- [Content Gateway Decryption Port Mirroring \(DPM\)](#), page 27
- [Static routes](#), page 28
- [Appliance status](#), page 33
- [SNMP monitoring \(polling\)](#), page 33
- [SNMP traps and queries](#), page 36
- [Module-specific commands](#), page 39
- [Linux settings](#), page 41

Time and date

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All servers in your deployment that host TRITON 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. <code>show system clock</code>	The time and date format is: yyyy/mm/dd hh:mm:ss
Set system time and date manually. <code>set system clock</code> --date <yyyy/mm/dd> --time <hh:mm:ss>	Stop all TRITON services before changing the time. Then, set the time and make certain that the time is consistent across all servers running TRITON services. Finally, start appliance services. If you do not stop the 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. <code>show system timezone</code>	Example: (view)# show system timezone Timezone: (GMT-08:00) Pacific Time (US & Canada)
View supported timezone formats. <code>show system timezone-list</code>	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
<p>Set the timezone for this appliance.</p> <pre>set system timezone --zone <zone_name> --index <zone_index></pre>	<p>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.</p> <p>Zone: The name of the timezone. Enter the name of the timezone in quotation marks. Case-sensitive.</p> <p>Index: The number assigned to the timezone.</p> <p>Example of setting the timezone using the zone name:</p> <pre>(config)# set system timezone --zone "Central Time" (config)# show system timezone Timezone: (GMT-06:00) Central Time(US & Canada)</pre> <p>Example of setting the timezone using the zone index number:</p> <pre>(config)# set system timezone --index 9 (config)# show system timezone Timezone: (GMT-06:00) Central Time (US & Canada)</pre> <p>To see a timezone index list, use:</p> <pre>show system timezone-list</pre>
<p>View the configured NTP servers.</p> <pre>show system ntp</pre>	

Action and Syntax	Details
<p>Configure timezone synchronization with up to 3 NTP servers.</p> <pre>set system ntp --status <on off> --server <server1> [<server2>,<server3>]</pre>	<p>To synchronize with a Network Time Protocol (NTP) server (www.ntp.org), set the status to “on” and enter the address of a primary NTP server. The secondary and tertiary servers are optional.</p> <p>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 a 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.</p> <p>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.</p> <p>Example:</p> <pre>(config)# set system ntp --status on --server 1.us.pool.ntp.org,2.us.pool.ntp. org,3.pool.ntp.org</pre>
<p>Synchronize the time with the NTP servers.</p> <pre>sync system ntp</pre>	<p>Use this command to manually synchronize the time with the NTP servers.</p>

Host name and description

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Action and Syntax	Details
View the appliance hostname and description. <code>show system host</code>	The hostname is set initially during the firstboot wizard.
Change the hostname and description for the appliance. <code>set system host --name <name> [--description <description>]</code>	<p>You may choose to use the fully qualified hostname plus a user-defined description.</p> <p>Name: The hostname must be 1 to 60 characters long.</p> <ul style="list-style-type: none"> • 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. <p>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.</p> <p>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.</p> <p>For more information, see the “Integrated Windows Authentication” topic in the Content Gateway Manager Help.</p> <p>Description (<i>optional</i>): A unique appliance description to help you identify and manage the system.</p> <ul style="list-style-type: none"> • May contain up to 100 characters <p>Example:</p> <pre>set system host --name fp-apweb1.example.com --description "New York gateway."</pre>

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).

Action and Syntax	Details
Display all filestore aliases. <pre>show filestore [--alias <alias_name>]</pre>	<p>Alias: (optional) Displays the unique name for the remote storage location.</p>
Define a remote location to host backup and configuration files. <pre>set filestore --alias <name> --type <ftp samba tftp> --host <ip_address> --path <share_directory> [--user <user_name>] [--port <port>]</pre>	<p>Alias: Provide a unique name for the remote storage location.</p> <p>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.</p> <p>Type: Specify the protocol to use to connect to the filestore (FTP, Samba, or TFTP).</p> <p>Host: Provide the IP address of the machine hosting the filestore.</p> <p>Path: Give the directory path to the shared location on the remote server.</p> <p>User: (optional) Provide a user account with full permissions to the filestore. Format must be <i>domain_name/user_name</i>.</p> <p>Port: (optional) Specify a port to use to connect to the filestore.</p> <p>Example:</p> <pre>set filestore --alias fstore --type ftp --host 10.10.10.6 --path . --user jdoe</pre> <p>Example without a user:</p> <pre>set filestore --alias tftp-store --type ftp --host 10.10.10.5 --path /ftp/myfiles</pre> <p>Example of domain-based authentication with the domain “acme” and the user “jdoe”:</p> <pre>set filestore --alias fstore --type samba --host 10.123.48.70 --path myfiles --user acme/jdoe</pre> <p>Example using a subfolder:</p> <pre>set filestore --alias fstore --type samba --host 10.123.48.70 --path myfiles/myfolder --user jdoe</pre>

Action and Syntax	Details
Delete one or more filestore aliases. <pre>delete filestore --alias <filestore_1>, [filestore_2],[filestore_n]</pre>	You can specify a comma-separated list of filestore aliases (no spaces). Example: <pre>delete filestore --alias ftp-fs1,samba-fs5</pre>
Save the appliance MIB file to the specified location. <pre>save mibfile --location <filestore_alias></pre>	Saves the MIB file to a remote storage location defined by the “set filestore” command. Example: <pre>save mibfile --location ftp-fs1</pre>
Summarize configuration data and save it to a specified location. <pre>save configsummary --location <filestore_alias></pre>	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: <pre>save configsummary --location ftp-fs1</pre>
Save SNMP trap events settings for editing or later use. <pre>save trap --location <filestore_alias> [--default]</pre>	Saves trap settings for editing. If “--default” is not specified, saves current trap settings. NOTE: Upon install, trap events are <i>enabled</i> , but the default configuration for saving trap events in <i>disabled</i> . Example: <pre>save trap --location ftp-fs1</pre>
Zip a log file and save it to a remote filestore. <pre>save log --module <all app email network- agent proxy web> --type <all audit module system > --location <filestore_alias></pre>	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: <pre>save log --module all --type system --location samba-fs5</pre>

Appliance interface configuration

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Use the following command sets to configure the TRITON Appliance interface.

- [Display appliance interface configurations, page 17](#)
- [Set appliance interface configurations, page 18](#)
- [Interface bonding, page 19](#)
- [Interface assignments, page 22](#)
- [Interface ports, page 22](#)
- [Support for IPv6, page 23](#)
- [About appliance management interface \(C\), page 24](#)
- [About the Content Gateway proxy interfaces \(P1, P2\), page 24](#)
- [About the Network Agent interface \(N\), page 25](#)
- [About TRITON AP-EMAIL interfaces \(E1, E2\), page 25](#)

Display appliance interface configurations

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

Set appliance interface configurations



Warning

If at all possible, do not change the C interface IP address. If you must change it, see the article [Changing the C Interface IP Address](#).

Action and Syntax	Details
Enable or disable the specified interface. <pre>set interface status --interface <e2 p2> <--disabled --enabled></pre>	Interface: The interface to enable or disable. Example: <pre>(config)# set interface status --interface e2 --enabled</pre>
Configure appliance interface in IPv4 settings. <pre>set interface ipv4 --interface <c n p1 p2 e1 e2> --ip <ipv4_address> --mask <ipv4_netmask> [--gateway <ipv4_address>]</pre>	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: <pre>(config)# set interface ipv4 --interface p1 --ip 10.206.6.195 --gateway 10.206.7.254</pre>
Delete appliance IPv4 settings. <pre>delete interface ipv4 --interface <n p1 p2 e1 e2></pre>	Interface: The interface being configured. Example: <pre>(config)# delete interface ipv4 --interface e1</pre>
Configure appliance interface in IPv6 settings. <pre>set interface ipv6 --interface <c n p1 p2 e1 e2> [--status <enabled disabled>] [--ip <ipv6_address>] [--prefixlen <integer>] [--gateway <ipv6_address>]</pre>	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: <pre>(config)# set interface ipv6 --interface p1 --status enabled --ip 1234::4321:0:1234 --prefixlen 64 --gateway 1234::0</pre>
Delete appliance IPv6 settings. <pre>delete interface ipv6 --interface <n p1 p2 e1 e2></pre>	Interface: The interface being configured. Example: <pre>(config)# delete interface ipv6 --interface e1</pre>

Action and Syntax	Details
Configure appliance DNS settings. <pre>set interface dns --dns1 <ipv4_address> [--dns2 <ipv4_address>] [--dns3 <ipv4_address>] [--module <email network-agent proxy>]</pre>	<p>Module: (optional) The appliance module. If no option is entered, DNS for appliance will be configured.</p> <p>DNS1: The IP address of the primary domain name server.</p> <p>You can optionally also specify a second and third DNS server.</p> <p>Example:</p> <pre>(config)# set interface dns --dns1 8.8.8.8 --dns2 8.8.4.4 --dns3 10.51.80.10 --module proxy</pre>
Delete appliance DNS settings. <pre>delete interface dns [--dns-server <dns2 dns3>]</pre>	<p>Module: The appliance module.</p> <p>dns-server: The server whose DNS settings are being deleted. You can only delete one server at a time.</p> <p>Example:</p> <pre>(config)# delete interface dns --module proxy --dns-server dns2</pre>
Configure appliance VLAN settings. <pre>set interface vlan --interface <c p1 p2> --vid <integer></pre>	<p>(X-Series appliances only)</p> <p>Interface: The interface being configured.</p> <p>vid: The VLAN ID to be set. Must be an integer 2-4094.</p> <p>In order for appliances to receive VLAN traffic, the A1 and A2 switches must be configured for VLAN support. See the Switch Configuration Guide for details.</p> <p>Example:</p> <pre>(config)# set interface vlan --interface p1 --vid 260</pre>
Delete appliance VLAN settings. <pre>delete interface vlan --interface <c p1 p2></pre>	<p>(X-Series appliances only)</p> <p>Interface: The interface being configured.</p> <p>Example:</p> <pre>(config)# delete interface vlan --interface p1</pre>

Interface bonding

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.

V10000 with TRITON AP-WEB

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.

V10000 with TRITON AP-EMAIL only

Interfaces P1 and P2 can be cabled to your network and then bonded through software settings to a TRITON AP-EMAIL 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 TRITON AP-EMAIL 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. <pre>show interface bond</pre>	(V10000 appliances only) Example: <pre>(view)# show interface bond</pre>
Bond the interfaces. <pre>set interface bond [--mode <active-standby load-balancing>]</pre>	(V10000 appliances only) V10000 appliances that run only one product can bond interfaces for failover or load balancing. Note: For more information about interface bonding, see the TRITON Appliances Getting Started Guide . 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: <pre>(config)# set interface bond --mode load-balancing</pre>
Remove interface bonding. <pre>set interface unbond</pre>	(V10000 appliances only) Selections are made using a sub-menu in the CLI. Example: <pre>(config)# set interface unbond</pre>

Interface assignments

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

Interface ports

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

Action and Syntax	Details
Displays the status of diagnostic ports for use by Tech Support for remote troubleshooting. <code>show diagnostic_ports</code>	Example: <code>(view)# show diagnostic_ports</code>
Sets the status of diagnostic ports for use by Tech Support for remote troubleshooting. <code>set diagnostic_ports</code> <code>--status <on off></code>	Status: The status of the port. Example: <code>(config)# set diagnostic_ports</code> <code>--status on</code>

Support for IPv6

- IPv6 support in TRITON AP-WEB and Web Filter & Security 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 TRITON AP-WEB, 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 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 TRITON management interfaces
- Communicates with the TRITON management server and TRITON AP-DATA (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

If at all possible, do not change the C interface IP address. If you must change the C interface IP address, see the article [Changing the C Interface IP Address](#).

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 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.

About TRITON AP-EMAIL interfaces (E1, E2)

TRITON AP-EMAIL 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 TRITON AP-EMAIL.

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.

Appliance vswitch configuration

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Action and Syntax	Details
Display the virtual switch STP bridge priority setting. <code>show vswitch priority</code>	(X-Series appliances only) Example: <code>(view)# show vswitch priority</code> Output: <code>rstp_priority : 61440</code>

Action and Syntax	Details
Display the virtual switch STP bridge status. <pre>show vswitch status</pre>	(X-Series appliances only) Example: <pre>(view)# show vswitch status</pre> Output: <pre>P2: state : down P1: state : active</pre>
Set the virtual switch STP bridge priority value. <pre>set vswitch stp --priority <integer></pre>	(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: <pre>(config)# set vswitch stp --priority 4096</pre>

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.

Available only when the proxy is hosted on a V-Series appliance, the 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.

For more information, see the [Content Gateway Help file](#).

Action and Syntax	Details
Display the decryption port mirror configuration. <pre>show decrypt_port_mirror</pre>	Output: <pre>Proxy's Decryption Port Mirroring is disabled. Interface: Not set Custom header: X-Proxy- HTTPS:1</pre>
Configure the decryption port mirror. <pre>set decrypt_port_mirror --status <on off> [--interface <e1 e2 n>] [--header <header>]</pre>	Status: The status of the decryption port mirror (default: off). Interface: (optional) When DPM is enabled, it will automatically use the N interface. Header: (optional) The port mirroring custom header name (default: X-Proxy_HTTPS:1). Example: <pre>(config)# set decrypt_port_mirror --status on --interface n</pre>
Displays the current Internet proxy information. <pre>show internet_proxy</pre>	
Configures the proxy the appliance will use to contact Forcepoint servers for hotfixes/upgrades. <pre>set internet_proxy --ip <ip address> --port <port> [--user <username>] [--password <password>]</pre>	IP: IP address. Port: Proxy port. User: (optional) User name. Password: (optional) Password. Example: <pre>(config)# set internet_proxy --ip 10.10.10.7 --port 3128 --user proxyuser --password mypassword</pre>
Deletes the Internet proxy configuration. <pre>delete internet_proxy</pre>	

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. <pre>show component_route</pre>	Outputs a table displaying route destination, netmask, module name, and active status.
Configure traffic between components for routing through the appliance. <pre>set component_route --dest <ipv4_address> --mask <ipv4_netmask> --module <proxy email></pre>	Dest: Destination IP address in IPv4 format. Mask: Netmask address in IPv4 format. Module: The appliance module. Example: <pre>(config)# set component_route --dest 11.0.0.0 --mask 255.0.0.0 --module email</pre>
Delete routing between components. <pre>delete component_route --dest <ipv4_address> --mask <ipv4_netmask> --module <proxy email></pre>	Dest: Destination IP address in IPv4 format. Mask: Netmask address in IPv4 format. Module: The appliance module. Example: <pre>(config)# delete component_route --dest 11.0.0.0 --mask 255.0.0.0 --module email</pre>
Display the list of configured static IPv4 routes. <pre>show route</pre>	Outputs a table displaying route destination, netmask, next hop, device, and active status.
(Web only) Display the list of configured static IPv6 routes. <pre>show route6</pre>	Outputs a table displaying route destination, netmask, next hop, device, and active status.
Add a static route in IPv4 format. <pre>set route --dest <ipv4_address> --interface <c p1 p2 e1 e2> --mask <ipv4_netmask> --gateway <ipv4_address></pre>	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: <pre>(config)# set route --dest 11.0.0.0 --mask 255.0.0.0 --gateway 10.206.7.254 --interface c</pre>

Action and Syntax	Details
<p>(Web only) Add a static route in IPv6 format.</p> <pre>set route6 --dest <ipv6_address> --interface <c p1 p2 e1 e2> --prefixlen <integer> --gateway <ipv6_address></pre>	<p>The interface name must be p1 or p2.</p> <p>IP address and gateway definitions must use IPv6 format.</p> <p>The prefixlen parameter sets the prefix length of the IPv6 address. It must be an integer between 1 and 128.</p> <p>Example:</p> <pre>(config)# set route6 --dest 2222:3333:4444:5555::0 --interface p1 --prefixlen 64 --gateway 1234:5678::8765:4321</pre>
<p>Delete a single IPv4 static route.</p> <pre>delete route --dest <ip_address> --mask <ipv4_netmask> --interface <c p1 p2 e1 e2> --gateway <ipv4_address></pre>	<p>To delete multiple IPv4 routes in a batch, use the “load route” command.</p> <p>Dest: Destination IP address in IPv4 format.</p> <p>Interface: The interface name must be p1 or p1.</p> <p>Mask: Netmask address in IPv4 format.</p> <p>Gateway: The gateway definition in IPv4 format.</p> <p>Example:</p> <pre>(config)# delete route --dest 1.0.0.0 --mask 255.0.0.0 --gateway 10.0.0.1 --interface c</pre>
<p>(Web only) Delete a single IPv6 static route.</p> <pre>delete route6 --dest <ipv6_address> --prefixlen <integer> [--interface <c p1 p2 e1 e2>] [--gateway <ipv6_address>]</pre>	<p>To delete multiple IPv6 routes in a batch, use the “load route6” command (described later in this table).</p> <p>Example:</p> <pre>(config)# delete route6 --dest 8765:4321::0 --gateway 1234:5678::87 65:4321 --interface p1 --prefixlen 64</pre>
<p>Export IPv4 static routes.</p> <pre>save route --location <filestore_alias></pre>	<p>Saves IPv4 static routes to a remote storage location defined by the “set filestore” command.</p> <p>Example:</p> <pre>(config)# save route --location samba-fs5</pre>
<p>(Web only) Export IPv6 static routes.</p> <pre>save route6 --location <filestore_alias></pre>	<p>Saves IPv6 static routes to a remote storage location defined by the “set filestore” command.</p> <p>Example:</p> <pre>(config)# save route6 --location samba-fs5</pre>

Action and Syntax	Details
<p>Add or delete one or more IPv4 static route definitions via a text file.</p> <pre>load route --file <file_name> --location <filestore_alias> --action <add del></pre>	<p>The system can handle a maximum of 5000 routes. Each line in the file defines one route.</p> <p>The line format is:</p> <pre><destination_address> <netmask> <gateway> <p1 p2></pre> <p>A blank space separates parameters on a single line.</p> <p>The following characters serve as separators between lines (individual routes):</p> <pre>\r\n</pre> <p>Use the --action parameter to specify whether to add or delete the routes in the file.</p> <p>Example:</p> <pre>(config)# load route --file add_ipv4.txt --location myfilestore --action add</pre>
<p>(Web only) Add or delete one or more IPv6 static route definitions via a text file.</p> <pre>load route6 --file <file_name> --location <filestore_alias> --action <add del></pre>	<p>The system can handle a maximum of 5000 routes. Each line in the file defines one route.</p> <p>The line format is:</p> <pre><destination_address> <prefix_length> <gateway> <p1 p2></pre> <p>A blank space separates parameters on a single line.</p> <p>The following characters serve as separators between lines (individual routes):</p> <pre>\r\n</pre> <p>Use the --action parameter to specify whether to add or delete the routes in the file.</p> <p>Example:</p> <pre>(config)# load route6 --file add_ipv6.txt --location myfilestore --action add</pre>

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. <code>show cpu</code>	Press Ctrl+C to quit.
Display system memory usage, refreshed every 4 seconds. <code>show mem</code>	Press Ctrl+C to quit.
View disk IO activity for the present modules, refreshed every 4 seconds. <code>show diskio</code>	Press Ctrl+C to quit.
Display disk statistics for all partitions. <code>show diskspace</code>	Results are shown in these areas: <ul style="list-style-type: none"> • disk position (partition) <ul style="list-style-type: none"> ■ 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 <p>The partitions vary depending on whether the appliance security mode is Web or Email.</p>
Display network traffic statistics, refreshed every 5 seconds. <code>show bandwidth</code>	Displays bandwidth statistics for each enabled interface. Includes: <ul style="list-style-type: none"> • data (byte) • packets • packets dropped • error • rate (Mbps) • status <p>Press Ctrl+C to quit.</p>

SNMP monitoring (polling)

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TRITON 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. <code>show snmp config</code>	
Enable or disable SNMP monitoring (polling). <code>set snmp service</code> <code>--status <on off></code>	SNMP monitor service and SNMP trap settings are independent, but SNMP monitor service must be enabled before you activate the SNMP trap configuration. Example: <code>(config)# set snmp service</code> <code>--status on</code>
Configure SNMP v1 monitoring. <code>set snmp v1</code> <code>--community <name></code>	Community name for the appliance. From 5 to 64 characters long with no spaces. All other ASCII characters can be used. Example: <code>(config)# set snmp v1</code> <code>--community testname</code>
Configure SNMP v2c monitoring. <code>set snmp v2c</code> <code>--community <name></code>	Community name for the appliance. From 5 to 64 characters long with no spaces. All other ASCII characters can be used. Example: <code>(config)# set snmp v2c</code> <code>--community playground</code>
Configure SNMP v3 monitoring. <code>set snmp v3</code> <code>--securitylevel <level></code> <code>...</code>	There are 3 levels of security available for SNMP v3 monitoring: No authentication or encryption: <code>noAuthNoPriv</code> Authentication only: <code>authNoPriv</code> Authentication and encryption: <code>authPriv</code> See full syntax for each level, immediately below.
Configure SNMP v3 monitoring with no authentication or encryption. <code>set snmp v3</code> <code>--securitylevel</code> <code>noAuthNoPriv</code> <code>--user <username></code>	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
<p>Configure SNMP v3 monitoring with authentication only.</p> <pre>set snmp v3 --securitylevel authNoPriv --user <username> --authentication <md5 sha></pre>	<p>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.</p> <p>SNMP authentication protocol (md5 or sha) specifies an interactive mode for entering the authentication password.</p> <p>Enter an authentication password between 8 and 64 characters long, with no spaces. All other ASCII characters can be used.</p> <p>Example password dialog:</p> <pre>(config)# set snmp v3 --securitylevel authNoPriv --user test --authentication md5 Password: ***** Confirm password: *****</pre>
<p>Configure SNMP v3 monitoring with authentication and encryption.</p> <pre>set snmp v3 --securitylevel authPriv --user <username> --authentication <md5 sha> --encrypt <des aes></pre>	<p>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.</p> <p>SNMP authentication protocol (md5 or sha) specifies interactive mode for entering password.</p> <p>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.</p> <p>Example:</p> <pre>(config)# set snmp v3 --securitylevel authPriv --authentication sha --encrypt des --user test Password: ***** Confirm password: ***** Encrypt key: ***** Confirm encrypt key: *****</pre>

SNMP traps and queries

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Action and Syntax	Details
Display SNMP trap server on/off status and version information. <pre>show trap config</pre>	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. <pre>show trap events</pre>	
Save SNMP trap events settings for editing or later use. <pre>save trap --location <filestore_alias> [--default]</pre>	Saves default trap settings for editing. If “--default” is not specified, saves current trap settings. Example: <pre>(config)# save trap --location samba-fs</pre>
Enable or disable SNMP traps. <pre>set trap service --status <on off></pre>	SNMP monitor service and SNMP trap settings are independent, but SNMP monitor service must be enabled to activate the SNMP trap configuration. Example: <pre>(config)# set trap service --status on</pre>
Load SNMP trap events configuration from a file. <pre>load trap --location <filestore_alias> --file <name></pre>	Enter the name of a predefined remote filestore alias. Example: <pre>(config)# load trap --location samba-fs --file list123</pre>
Send a test trap to verify SNMP communication. <pre>test trap event</pre>	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. <pre>set trap v1 --community <name> --ip <ip_address> --port <port></pre>	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. All other ASCII characters can be used. Example: <pre>(config)# set trap v1 --community myv1community --ip 10.0.0.14 --port 162</pre>

Action and Syntax	Details
Configure SNMP v2c traps for alerting. <pre> set trap v2c --community <name> --ip <ip_address> --port <port> </pre>	<p>Enter a community name, trap server IP address, and port for traps sent by the appliance.</p> <p>The community name must be 5 to 64 characters long, with no spaces. All other ASCII characters can be used.</p> <p>Example:</p> <pre> (config)# set trap v2c --community myv2community --ip 10.0.0.13 --port 162 </pre>
Configure SNMP v3 traps for alerting. <pre> set trap v3 --engineid <id> --ip <ip_address> --port <port> --securitylevel <level> ... </pre>	<p>There are 3 levels of security available for SNMP v3 traps:</p> <p>No authentication or encryption: noAuthNoPriv</p> <p>Authentication only: authNoPriv</p> <p>Authentication and encryption: authPriv</p> <p>See full syntax for each security level, immediately below.</p>
Configure SNMP v3 traps with no authentication or encryption. <pre> set trap v3 --engineid <id> --ip <ip_address> --port <port> --securitylevel noAuthNoPriv --user <username> </pre>	<p>Specify the engine ID, IP address, port, and user name to use for communication with your SNMP manager.</p> <p>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.</p> <p>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.</p> <p>Example:</p> <pre> (config)# set trap v3 --engineid 8000000001020304 --ip 10.0.0.13 --port 162 --securitylevel noAuthNoPriv --user trapuser </pre>

Action and Syntax	Details
<p>Configure SNMP v3 traps with authentication only.</p> <pre>set trap v3 --engineid <id> --ip <ip_address> --port <port> --securitylevel authNoPriv --user <username> --authentication <md5 sha></pre>	<p>Specify the engine ID, IP address, port, and user name to use for communication with your SNMP manager.</p> <p>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.</p> <p>User is the account name to use for SNMP communication. Enter a name with 1-15 alphanumeric characters, with no spaces.</p> <p>Specify the authentication protocol used on the trap server (md5 or sha).</p> <p>You are prompted for a password. Enter a password between 1 and 64 characters, with no spaces. All other ASCII characters are okay.</p> <p>Example:</p> <pre>(config)# set trap v3 --engineid 0x802a0581 --ip 10.17.32.5 --port 162 --securitylevel authNoPriv --authentication sha --user test Password: *****</pre>
<p>Configure SNMP v3 traps with authentication and encryption.</p> <pre>set trap v3 --engineid <id> --ip <ip_address> --port <port> --securitylevel authPriv --user <username> --authentication <md5 sha> --encrypt <des aes></pre>	<p>Specify the engine ID, IP address, port, and user name to use for communication with your SNMP manager.</p> <p>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.</p> <p>User is the account name to use for SNMP communication. Enter a name with 1-15 alphanumeric characters, with no spaces.</p> <p>Specify the authentication protocol used on the trap server (md5 or sha), and the SNMP encryption protocol (des or aes).</p> <p>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.</p> <p>Example:</p> <pre>(config)# Set trap v3 --engineid 8000000001020304 --ip 10.0.0.25 --port 162 --securitylevel authPriv --user trapuser --authentication sha --encrypt md5</pre>

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
<p>Resets the debug output logging level to the default (minimum output).</p> <pre>set debugging --command reset --module <proxy web email></pre>	<p>Module: The module you are resetting.</p> <p>Command: The command being sent. Default: reset.</p> <p>Example:</p> <pre>(config)# set debugging --command reset --module proxy</pre>
<p>Runs the proxy content_line command.</p> <pre>set proxy content_line --type <clear_cert reread_config set> --entry <variable_name> --value <variable_value></pre>	<p>Type: The action to apply.</p> <p>Entry: The name of a records.conf variable. See Content Gateway Help for information about content_line and records.config.</p> <p>Value: The value to set the variable to.</p> <p>Example:</p> <pre>(config)# set proxy content_line --entry proxy.config.lm.display_reset_alarm --value 1 --type set</pre>
<p>Starts, stops, or restarts the Content Gateway Policy Engine.</p> <pre>set proxy policy_engine --command <start stop restart></pre>	<p>Command: The action to apply.</p> <p>Example:</p> <pre>(config)# set proxy policy_engine --command stop</pre>
<p>Resets the proxy password.</p> <pre>set proxy password</pre>	<p>This command overwrites the old proxy password and displays a new one.</p> <p>Example:</p> <pre>(config)# set proxy password</pre> <p>Output:</p> <pre>Proxy password successfully reset: <new_password></pre>

Action and Syntax	Details
<p>Enables or disables the specified Web protection service.</p> <pre>set web control --command <enable disable> --service <state_server directory_agent></pre>	<p>Command: The action to apply.</p> <p>Service: The service to control.</p> <p>For information, see the following sections of the of the TRITON AP-WEB Administrator Help:</p> <ul style="list-style-type: none"> • Reporting components • Policy Server, Filtering Service, and State Server • Directory Agent and hybrid user identification <p>Example:</p> <pre>(config)# set web control --command disable --service multiplexer</pre>
<p>Retrieves the status of or enables/disables the caching of users.</p> <pre>set web cache_users --command <enable disable></pre>	<p>Command: The action to apply.</p> <p>Example:</p> <pre>(config)# set web cache_users --command enable</pre>
<p>Retrieves the status of or enables/disables the User Group IP Precedence.</p> <pre>set web usr_grp_ip_prec --command <enable disable></pre>	<p>Command: The action to apply.</p> <p>For more information, see the Prioritizing group and domain policies section of the TRITON AP-WEB Administrator Help.</p> <p>Example:</p> <pre>(config)# set web usr_grp_ip_prec --command enable</pre>
<p>Resets the email subscription.</p> <pre>set email subscription_reset</pre>	

Email module commands



Note

On an X10G, V5000, and VMware virtual appliance, substitute P1 for E1 and P2 for E2.

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
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)#
Moves the config and email store to a new appliance. migrate interactive	Example: (config)(Email)# migrate interactive
Moves the config and email store to a new appliance. migrate silent --host <host_name> --user <user_name>	Host: Host name or IP address User: User name. Example: (config)(Email)# migrate silent --host 10.206.143.3 --user jdoe
Set 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

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](#), page 42
- [Module status and version details](#), page 43
- [Setting the Web policy mode](#), page 44
- [Appliance hotfixes and upgrades](#), page 45
- [Backup and restore](#), page 51
- [Collecting a configuration summary for analysis](#), page 55
- [Log files](#), page 56

Starting and stopping services

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Action and Syntax	Details
(<i>Web only</i>) Start Web module, Content Gateway services, or Network Agent. start <web proxy network-agent>	Example: (config)# start web
(<i>Email only</i>) Start TRITON AP-EMAIL services. start email	Example: (config)# start email
(<i>Web only</i>) Stop Web module, Content Gateway services, or Network Agent. stop <web proxy network-agent>	Example: (config)# stop web
Stop TRITON AP-EMAIL 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
(<i>Web only</i>) Restart Web module, Content Gateway, or Network Agent. restart <web proxy network-agent>	Example: (config)# restart web
(<i>Email only</i>) Restart TRITON AP-EMAIL 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. <code>show appliance info</code>	Displays: <ul style="list-style-type: none">• 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. <code>show appliance status</code>	Output varies based on appliance module.
(<i>Web only</i>) Displays status information for the Web module. <code>show web</code>	Displays a list of Web services and their status.
(<i>Web only</i>) Displays status information for the Content Gateway module. <code>show proxy</code>	Displays a list of Proxy services and their status.
(<i>Email only</i>) Displays status information for the Email module. <code>show email</code>	Displays a list of Email filtering services and their status.
(<i>Web only</i>) Displays status information for the Network Agent module. <code>show network-agent</code>	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.



Warning

(TRITON AP-WEB only)

Changing the policy mode is not supported on X-Series appliances that have been upgraded to version 8.3 from version 8.2 or earlier. When the “set mode” command is used to change the policy mode, an error is returned. The last line of the error output is:

```
ERROR: [the time]:  
ApplianceModeChanger::main(): Unable to switch  
appliance modes.
```

The policy mode can be changed on version 8.3 X-Series appliances sourced from the factory or that have been re-imaged with version 8.3.

All appliances can use the “set mode” command to change the policy source location (the IP address of the policy source host machine).



Important

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

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

Action and Syntax	Details
Sets the policy mode to full (also known as full policy source). <code>set mode full</code>	(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). <code>set mode user</code> <code>--policy-source</code> <code><off_box_ip_address></code>	(Web only) A user directory and filtering appliance is a lightweight version of the policy source machine. Example: <code>set mode user --policy-source 10.10.10.10</code>
Sets the policy mode to filtering only. <code>set mode filter</code> <code>--policy-server</code> <code><off_box_ip_address></code>	(Web only) 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: <code>set mode filter --policy-server 10.10.10.10</code>

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.

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. <pre>show hotfix history</pre>	The list displays all hotfixes installed or uninstalled on the appliance.
View a list of available appliance hotfixes. <pre>show hotfix list [--id <hotfix_id>] [--module <app web proxy email>]</pre>	<p>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.</p> <ul style="list-style-type: none"> • 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. <p>Parameters can narrow the scope of hotfixes displayed:</p> <ul style="list-style-type: none"> • 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). <p>Example:</p> <pre>(view)# show hotfix list --module web</pre>
Display the status of the hotfix download process. <pre>show download hotfix --file <filename> --id <hotfix id></pre>	<p>The load process is asynchronous, allowing the administrator to perform other CLI tasks while the download occurs.</p> <p>This command lets the administrator check to see if the download is complete.</p> <ul style="list-style-type: none"> • id: Specific hotfix ID. • File: Specific hotfix file name. <p>Example:</p> <pre>(view)# show download hotfix --file myhotfix.rpm</pre>

Action and Syntax	Details
<p>Download or upload a hotfix to the appliance.</p> <pre>load hotfix [--id <hotfix_id>] [--file <name>] [--location <alias>]</pre>	<p>Specify the hotfix ID to download a hotfix from Forcepoint servers, or specify a hotfix file name and location to upload the hotfix from a remote filestore. Entering the command with no parameters will display a list of hotfixes.</p> <ul style="list-style-type: none"> • 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. <p>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.</p> <p>Example:</p> <pre>(config)# load hotfix --location myfilestore --file myhotfix.rpm</pre>
<p>Stop, pause, or resume a hotfix download in progress.</p> <pre>cancel download hotfix [--id <id>] [--file <filename>] pause download hotfix [--id <id>] [--file <filename>] resume download hotfix [--id <id>] [--file <filename>]</pre>	<p>This command will cancel the file download. To cancel a paused download, resume the download and then cancel.</p> <p>Either the “file” or the “ID” parameter is required.</p> <p>Examples:</p> <pre>(config)# cancel download hotfix --file myhotfix.rpm (config)# pause download hotfix --id 2</pre>
<p>Install a hotfix file on the appliance.</p> <pre>install hotfix [--id <hotfix_id>]</pre>	<p>If no hotfix ID is specified, you can choose from a list of available hotfix files.</p> <p>Example:</p> <pre>(config)# install hotfix --id 3</pre>
<p>Remove a hotfix file from the appliance.</p> <pre>delete hotfix [--id <hotfix_id>] [--file <filename>]</pre>	<p>This removes hotfix files that have been transferred to the appliance, but not installed.</p> <p>If no hotfix ID is specified, you can choose from a list of available hotfix files.</p> <p>Example:</p> <pre>(config)# delete hotfix --id 4 (config)# delete hotfix --file myhotfix.rpm</pre>
<p>Uninstall a hotfix from the appliance.</p> <pre>uninstall hotfix [--id <hotfix_id>]</pre>	<p>If no hotfix ID is specified, you can choose from a list of installed hotfixes.</p> <p>Example:</p> <pre>(config)# uninstall hotfix --id 4</pre>

Appliance Upgrades



Important

Read the release notes before applying an upgrade.

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



Important

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

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 “show log”.

Action and Syntax	Details
Display available upgrades, both remote and on the appliance. <pre>show upgrade --list --history --status</pre>	<p>List: Displays a list of available appliance and software upgrades.</p> <p>History: Displays the upgrades that have been installed on this appliance.</p> <p>Status: Displays status of upgrade package download and installation.</p>
Download or upload an upgrade file. <pre>load upgrade [--file <filename>] [--location <file location>]</pre>	<p>If this command is run with no parameters, you will be prompted to download an upgrade from a list.</p> <p>File: (optional unless the filestore is TFTP) Name of the upgrade file.</p> <p>Location: (optional) Any defined remote filestore alias. A TFTP filestore requires the file parameter.</p> <p>Example:</p> <pre>(config)# load upgrade --file newpatch.rpm --location mypatchserver</pre>
Display the upgrade download status. <pre>show download --file <filename></pre>	<p>File: Name of the upgrade file.</p> <p>Example:</p> <pre>(view)# show download --file newpatch.rpm</pre>
Cancel an upgrade download. <pre>cancel download --file <filename></pre>	<p>This command will cancel the file download. To cancel a paused download, resume the download and then cancel.</p> <p>File: Name of the upgrade file.</p>
Pause an upgrade download. <pre>pause download --file <filename></pre>	<p>File: Name of the upgrade file.</p>

Action and Syntax	Details
Resume a paused upgrade download. <pre>resume download --file <filename></pre>	File: Name of the upgrade file.
Install an upgrade file on the appliance. <pre>install upgrade --file <upgrade_file> [--force <upgrade_file></pre>	<p>If this command is run with no parameters, you will be prompted to install an upgrade from a list.</p> <p>File: Name of the upgrade file.</p> <p>Force: (optional) Force the upgrade after ISO verification failure. There must be at least one failed install for a force to work.</p> <p>Examples:</p> <pre>(config)# install upgrade --file App-upgrade.iso (config)# install upgrade --file App-upgrade.iso --force App- upgrade.iso</pre>

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 TRITON 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 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 8.3.0 backup can be restored only on an appliance that is at version 8.3.0.
- The module version must match the version associated with the backup file.
- The current appliance mode—TRITON AP-WEB, TRITON AP-EMAIL, or Web Filter & Security—must match that of the backup file. For example, a backup from a TRITON AP-EMAIL appliance must be used to restore a TRITON AP-EMAIL 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 model V10000 G3 must be used to restore a model V10000 G3 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 component hosts is synchronized. You can then restart the TRITON 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. <pre>show backup list --location <local filestore_alias></pre>	Displays the file name, date, and description of each backup file found in the specified location. <ul style="list-style-type: none"> • local is the current appliance. • filestore_alias is the filestore alias of a remote storage location. Example: <pre>(view)# show backup list --location local</pre>
Display the configured backup schedule. <pre>show backup schedule</pre>	Includes the schedule frequency, the last scheduled backup, the next scheduled backup, and the backup location.
Create an appliance backup now. <pre>create backup now --location <local filestore_alias> [--desc "<description>"] --type <full email web></pre>	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: <pre>(config)# create backup now --location local --desc "full-2017-1-24" --type full</pre>
Restore the appliance configuration settings saved in the specified backup file. <pre>restore backup --location <local filestore_alias> [--file <file_name>]</pre>	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: <pre>(config)# restore backup --location local --file mybackup.bak</pre>

Action and Syntax	Details
<p>Define a schedule of automatic backups.</p> <pre>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></pre>	<p>Location: You can schedule a backup to the appliance (“local”) or to a remote filestore.</p> <p>Freq: You can schedule a backup to occur daily, weekly, or monthly.</p> <p>Day: If the interval is weekly, also specify the day of the week: Mon, Tue, Wed, Thu, Fri, Sat, or Sun (case-sensitive).</p> <p>Date: If the interval is monthly, also specify the day of the month (integer from 1-28).</p> <p>Time: For all interval options, specify the time of day in 24-hour format (hh:mm). Do not specify seconds.</p> <p>Example of a weekly backup:</p> <pre>(config)# create backup schedule --location local --freq weekly day Mon time 01:30</pre> <p>Type: The type of backup being created.</p>
<p>Cancel all scheduled backups.</p> <pre>cancel backup schedule</pre>	
<p>Delete any or all backup files stored locally on the appliance.</p> <pre>delete backup [--file <file_name all>]</pre>	<p>Optionally takes one of the following values:</p> <ul style="list-style-type: none"> • name: the name of a specific file • all: every backup file on the appliance <p>If the option is not used, interactive mode will be used to select files to delete.</p> <p>Examples with file option:</p> <pre>(config)# delete backup --file all Successfully deleted backup file(s).</pre> <pre>(config)# delete backup --file backupfile123.bak Successfully deleted backup file(s).</pre> <p>Example without file option:</p> <pre>(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</pre> <p>Please make a selection (enter 'q' to quit): 1 Successfully deleted backup file(s).</p>

Collecting a configuration summary for analysis

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

Log files

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Action and Syntax	Details
Display a list of log file types. <pre>show log typelist --module <app all></pre>	<p>Specify a specific module whose log file types can be shown. Once the command is entered, an interactive menu will allow you to view the applicable logs.</p> <ul style="list-style-type: none"> • all (default) includes all modules. • app includes the entire appliance. <p>Example:</p> <pre>(view)# show log typelist --module all</pre> <p>Output:</p> <pre>app log type: audit, system Email log type: email</pre> <p>OR</p> <pre>WEB log type: web app log type: audit, system NETWORK-AGENT log type: network-agent PROXY log type: proxy</pre>
Display the last <i>n</i> lines of the appliance log file. <pre>show log lastline --line <integer> --type <audit module system> --module <app email network-agent proxy web></pre>	<p>Line: The number of lines to display.</p> <p>Type: The log file. Use "show log typelist" to get a list of logs.</p> <p>Module: The module that hosts the file. If the --module parameter is used with the "app" option, the options for the --type parameter are "audit" and "system". If other --module options are used, the --type parameter options are "module".</p> <p>Example:</p> <pre>(view)# show log lastline --line 30 --type system --module app</pre>
Display data as it is appended to the appliance log file. <pre>show log realtime --filter <string> --type <audit module system> --module <app email network-agent proxy web> --timeout <integer></pre>	<p>Filter: Literal string to match.</p> <p>Type: The log file. Use "show log typelist" to get a list of logs.</p> <p>Module: The module that hosts the file. If the --module parameter is used with the "app" option, the options for the --type parameter are "audit" and "system". If other --module options are used, the --type parameter options are "module".</p> <p>Example:</p> <pre>(view)# show log realtime --module email --filter license --timeout 40 --type module</pre>

Action and Syntax	Details
<p>Configure how and when log files are archived.</p> <pre>set log archive --type <system audit email network-agent web> --freq <weekly monthly yearly> --size <integer string></pre>	<p>The type parameter is required and either the freq or the size parameter is also required.</p> <p>Type: The type of archive.</p> <p>Freq: Specifies a frequency interval.</p> <p>Size: (optional) The default unit of measurement is bytes. To instead use kilobytes or megabytes, append “k” or “m” to the size. For example:</p> <pre>(config)# set log archive --size 50m</pre> <p>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.</p> <p>Example:</p> <pre>(config)# set log archive --type system --size 50m --freq weekly</pre>
<p>Display log file archiving settings.</p> <pre>show log archive --type <system audit email network- agent web></pre>	<p>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.</p> <p>Example:</p> <pre>(view)# show log archive --type system</pre>
<p>Zip the log file and move it to a remote filestore.</p> <pre>save log --module <all app email network- agent proxy web> --type <all audit module system> --location <filestore_alias></pre>	<p>If the --module parameter is used with the “app” option, the options for the --type parameter are “audit” and “system”. If other --module options are used, the --type parameter options are “module”.</p> <p>The filestore alias of a remote storage location is defined by the “set filestore” command.</p> <p>Example:</p> <pre>(config)# save log --module all --type all --location samba5</pre>

Diagnose

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Action and Syntax	Details
<p>Display the kernel ARP table for the selected module.</p> <pre>arp [--module <email proxy web network- agent>]</pre>	<p>Module: (optional) Enter email, proxy, web, or network-agent.</p>
<p>Display the current Ethernet card settings. Use ethtool to verify local network connectivity.</p> <pre>ethtool --interface <interface> [--show-offload] [--module <email proxy web network- agent>]</pre>	<p>Interface: Any existing interface.</p> <p>Show-offload: (optional) Show the state of the protocol offload and other features.</p> <p>Module: (optional) Enter email, proxy, web, or network-agent.</p> <p>Example:</p> <pre>(diagnose)# ethtool --interface p1</pre>
<p>Display the status of the currently active network interfaces. Use ifconfig to troubleshoot network interface issues or to identify IP issues.</p> <pre>ifconfig [--interface <interface>] [--module <email proxy web network- agent>]</pre>	<p>Interface: (optional) Any existing interface.</p> <p>Module: (optional) Enter email, proxy, web, or network-agent.</p> <p>Example:</p> <pre>(diagnose)# ifconfig --interface e1</pre>
<p>Netcat (nc) attempts to read and write data across the network to the specified server using the specified protocol.</p> <p>Use netcat for functional tests of components and verification of connectivity.</p> <pre>nc --protocol <tcp udp> --dest <ipv4_addr hostname> --port <port_number> --module [<email proxy web network- agent>]</pre>	<p>If you are having problems loading a web page or are getting a block, this command can help determine the problem.</p> <p>If you see a reset coming from the proxy, you can determine which DOM/module it is coming from.</p> <p>Protocol: Uses the TCP or UDP protocol to read and write data.</p> <p>Dest: The IPv4 address or hostname of the server.</p> <p>Port: Port number of the server.</p> <p>Module: Enter email, proxy, web, or network-agent.</p> <p>Example:</p> <pre>(diagnose)# nc --protocol tcp --dest 10.10.10.10 --port 22 --module email</pre>

Action and Syntax	Details
<p>Print network connections routing tables, interface statistics, and so on.</p> <pre>netstat [--module <email proxy web network- agent>]</pre>	<p>Module: (optional) Enter email, proxy, web, or network-agent.</p> <p>Example:</p> <pre>(diagnose)# netstat --module web</pre>
<p>Obtains DNS information for the specified host. Use nslookup to troubleshoot DNS resolution problems.</p> <pre>nslookup --host <ipv4_addr hostname> --dns-server <ipv4_address> [--module <email proxy web network- agent>]</pre>	<p>Host: The IPv4 address or hostname to be resolved.</p> <p>Dns-server: The IPv4 address or hostname of the DNS server.</p> <p>Module: (optional) Enter email, proxy, web, or network-agent.</p> <p>Example:</p> <pre>(diagnose)# nslookup --host 10.10.10.10 --dns-server 20.20.20.20 --module proxy</pre>
<p>Verify that a hostname or IP address exists and can accept requests from the selected module, and that DNS is resolving.</p> <p>Use ping and ping6 to test connectivity with the specified hostname or IP address.</p> <pre>ping [--interface <c n p1 p2 e1 e2>] --dest <ipv4_addr hostname> [--module <email proxy web network- agent>]</pre> <pre>ping6 [--interface <c n p1 p2 e1 e2>] --dest <ipv6_addr hostname> [--module <email proxy web network- agent>]</pre>	<p>Ctrl+C to quit.</p> <p>Dest: The IPv4 (ping) or IPv6 (ping6) IP address or hostname with which to test connectivity.</p> <p>Interface: (optional) The appliance interface. All valid interfaces can be used including virtual interfaces.</p> <p>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.</p> <p>Example:</p> <pre>(diagnose)# ping --dest 10.10.10.10 --module proxy --interface eth0</pre>
<p>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.</p> <pre>route [--module <email proxy web network- agent>]</pre> <pre>route6 [--module <email proxy web network- agent>]</pre>	<p>Module: (optional) Enter email, proxy, web, or network-agent.</p> <p>Example:</p> <pre>(diagnose)# route --module network-agent</pre>

Action and Syntax	Details
<p>Display information about packets from the specified network interface, for packets matching the specified Boolean expression.</p> <p>Use <code>tcpdump</code> to determine whether all routing is occurring properly, to and from the interface.</p> <pre> tcpdump --timeout <timeout value> [--file <filename>] [--interface <interface>] [--expression <filter expression>] [--location <filestore_alias>]</pre>	<p>tcpdump is a packet analyzer. <code>Tcpdump</code> intercepts and displays packets being transmitted or received by the specified network interface.</p> <p>The output from <code>tcpdump</code> 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.</p> <p>Timeout: The amount of time to run <code>tcpdump</code> before outputting results.</p> <p>File: (optional) Name of output file located in the filestore.</p> <p>Interface: (optional) Any existing interface. Interface will display in output as <code>eth0</code> or <code>eth1</code>.</p> <p>Expression: (optional) A Boolean expression used to select the packets of interest.</p> <p>Location: (optional) Name of the filestore location.</p> <p>Example 1: To capture all TCP traffic to and from the proxy on port 8080, specify:</p> <pre>"tcp port 8080"</pre> <p>Example 2: To capture all TCP traffic to the site <code>google.com</code>, specify:</p> <pre>"tcp and dst host google.com"</pre> <p>Example 3: To capture all TCP traffic from a specific end-user machine, specify:</p> <pre>"tcp and src host user.example.com"</pre> <p>Note: You can enter a hostname if it is resolvable by a DNS server, but the output uses IP addresses.</p>
<p>Display all Linux processes that are currently running in the selected module. Use <code>top</code> to help diagnose CPU and memory issues.</p> <pre> top [--module <email proxy web network- agent>]</pre>	<p>Module: (optional) The appliance module.</p> <p>Example:</p> <pre>(diagnose)# top --module proxy</pre>

Action and Syntax	Details
<p>Display the route used by packets to reach the specified destination.</p> <pre> traceroute --dest <ipv4_addr hostname> [--module <email proxy web network- agent>] traceroute6 --dest <ipv6_addr hostname> [--module <email proxy web network- agent>]</pre>	<p>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.</p> <p>If you are having latency issues, traceroute can also help identify potential causes.</p> <p>Note: traceroute is of limited usefulness if an IP address is being spoofed.</p> <p>Module: (optional) The appliance module.</p> <p>Examples:</p> <pre> (diagnose)# traceroute --dest www.mywebsite.com --module proxy (diagnose)# traceroute6 --dest 1234:5678::8765::4321 --module email</pre>
<p>Tests connectivity with the specified URL (file download not supported).</p> <pre> wget --url <url> [--module <email proxy web network- agent>]</pre>	<p>Supports non-interactive download of web pages to help diagnose connectivity issues.</p> <p>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.</p> <p>wget supports HTTP, HTTPS, and FTP.</p> <p>Module: (optional) The appliance module.</p> <p>Example:</p> <pre> (diagnose)# wget --module email --url www.mywebsite.net</pre>
<p>Tests connectivity between the specified URL and the proxy (file download not supported).</p> <pre> wget-proxy --url <url> --proxy-ip <proxy_ip> --port <port> [--proxy-user <user_name>] [--module <email proxy web network- agent>]</pre>	<p>Url: The URL of the website to which you want to test connectivity</p> <p>Proxy-ip: The proxy IP address. This is the IP address of the P1 interface on most appliance configurations.</p> <p>Port: The port on which the proxy expects traffic. 8080 is configured for HTTP by default.</p> <p>Proxy-user: (optional) The user name of the client, if required for authentication</p> <p>Proxy-password: (optional) The password of proxy-user, if required for authentication</p> <p>Module: (optional) The appliance module.</p> <p>Example:</p> <pre> (diagnose)# wget-proxy --module web --port 8080 --proxy-ip 10.206.4.47 --url www.google.com --proxy-user myuser</pre>

Action and Syntax	Details
<p>Display the module's logging level status.</p> <pre>get debugging --command <status> --module <proxy web email network- agent></pre>	<p>Command: status.</p> <p>Module: The appliance module.</p> <p>Example:</p> <pre>(diagnose)# get debugging --command status --module proxy Debug log is disabled</pre>
<p>Runs the Content Gateway content line command.</p> <pre>get proxy content_line --type <read> --entry <config entry></pre>	<p>Type: The type of command you are sending to content line. "Read" is the only option at this time.</p> <p>Entry: Used with type of 'read'. This is the entry in the config that you are reading.</p> <p>Example:</p> <pre>(diagnose)# get proxy content_line --entry proxy.config.lm.display_reset_al arm --type read Value for proxy.config.lm.display_reset_al arm: 1</pre>
<p>Stops, starts, or restarts the Content Gateway Policy Engine.</p> <pre>get proxy policy_engine --command <status></pre>	<p>Command: The type of command you are sending to content line. "Status" is the only option at this time.</p> <p>Example:</p> <pre>(diagnose)# get proxy policy_engine --command status PolicyEngine not registered with DSS manager.</pre>
<p>Runs and network check against the Content Gateway.</p> <pre>get proxy network_check</pre>	<p>Example:</p> <pre>(diagnose)# get proxy network_check</pre>
<p>Retrieves information from the Policy Broker.</p> <pre>get web policy_broker</pre>	<p>Example:</p> <pre>(diagnose)# get web policy_broker Unable to connect to the Policy Server!</pre>
<p>Retrieves the status or enables/disables the caching of users.</p> <pre>get web cache_users --command <status></pre>	<p>Command: Command to send. "Status" is the only option at this time.</p> <p>Example:</p> <pre>(diagnose)# get web cache_users --command status CacheWISPUUsers=on</pre>
<p>Retrieves the status or enables/disables the User Group IP Precedence.</p> <pre>get web usr_grp_ip_prec --command <status></pre>	<p>Command: Command to send. "Status" is the only option at this time.</p> <p>Example:</p> <pre>(diagnose)# get web usr_grp_ip_prec --command status UserGroupIpPrecedence=false</pre>

Action and Syntax	Details
Retrieves the list of log files that can be downloaded to a filestore. <pre>get email log_list</pre>	
Retrieves the specified log file. <pre>get email log --alias <filestore alias> --file <filename></pre>	Alias: Filestore location for the file. File: Name of file to download. Example: <pre>(diagnose)# get email log --alias liftp --file maillog</pre>
Runs the DIG command. <pre>get email dig_output --entry <ip_address domain name> --type <mx txt x></pre>	Entry: Location to run DIG against. Type: Option to be passed to. Example: <pre>(diagnose)# get email dig_output --entry 10.206.6.13 --type mx</pre>
Downloads the PEM files to a filestore. <pre>get email pem --alias <filestore alias></pre>	Alias: Filestore location for the file. Example: <pre>(diagnose)# get email pem --alias liftp</pre>

2

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Ansible

Version 2.1.0.0

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Archive Zip

Version 1.3

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Crypt Blowfish

Crypt Blowfish

Version 2.1

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GNU GRUB 2

Version 2.02

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Initscripts

Version 9.49.30

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Nisedit

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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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Python-lockfile

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Python-Perf

Version 4.8.4

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Pyutmp

Version 0.2.1

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Socks Server 5

Version 3.8.9

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Sshpass

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Wxpython

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Yum-utils

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