Websense V-Series Console Help

Websense® V-Series Appliance

TRITON AP-WEB and TRITON AP-EMAIL

Models: V10000, V5000

v8.0.x

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Contents

1 V-Series Overview

Help | V-Series Appliance | Version 8.0.x

The Websense® V-Series™ appliance analyzes web traffic, email traffic, or both in real-time and applies security policies.

TRITON® AP-WEB

When Websense TRITON AP-WEB modules are enabled, the appliance:

- Instantly categorizes new sites and dynamic content, proactively discovering security risks, and blocking unwanted content and malware per administrator configured policy.
- Provides advanced analytics—including rules, signatures, heuristics, and application behaviors—to detect and block proxy avoidance, hacking sites, adult content, botnets, keyloggers, phishing attacks, spyware, and many other types of unsafe content.
- Closes a common security gap: decrypting and scanning SSL traffic before it enters the network.

> **Note**
> References to TRITON AP-WEB may reflect Web Filter & Security for any deployments that do not include the Content Gateway Web proxy.

These real-time capabilities on the V-Series appliance integrate with industry-leading Websense software to provide web protection with over 90 default URL categories and more than 120 network and application protocols.

- Software on the appliance can be linked with Websense TRITON AP-DATA solutions, to give data protection software access to both Master Database URL categorization and user information collected by Websense web security services.
- Software on the appliance can also be synchronized with the Websense Hybrid Web module, an on-demand, cloud-based service, to apply your organization's policies to off-site users, or to branch offices, remote campuses, and so on.

TRITON AP-EMAIL

When Websense TRITON AP-EMAIL is enabled, the appliance:

- Scans and manages incoming email messages to block spam or virus content per administrator configured policy.
- Integrates with Websense TRITON AP-DATA solutions to help you monitor and restrict transmission of sensitive or inappropriate information via email.

When the subscription is Websense TRITON AP-EMAIL with the Email Hybrid module, the appliance also:

- Provides a hybrid solution that allows the bulk of spam content to be filtered out before the messages reach your network.

Security best practices

Help | V-Series Appliance | Version 8.0.x

- Lock the appliance inside an IT closet or data center and enable a BIOS password. Physical access to the appliance can be a security risk for your network.
- Physical access to the appliance via serial console (KVM) to access the command line interface is protected after **firstboot** is run, by the administrator credentials.
- Ensure that administrator credentials are restricted to a select few persons. This helps prevent unauthorized access to the system.
- Enable troubleshooting ports and permit remote access only when requested to do so by Websense Technical Support. Return these settings to the disabled state immediately after the Websense specialist logs off.

Management consoles

Help | V-Series Appliance | Version 8.0.x

Related topics:

- *Managing appliances in TRITON Manager*, page 4
- *Accessing the V-Series console and other consoles*, page 5
- *Logging on to the V-Series console*, page 6
- *Configuring two-factor authentication*, page 6
- *Disabling and enabling password logon*, page 7

TRITON solutions include a combination of software that runs on-appliance and software that runs off-appliance. When a component is installed on the appliance (based on the appliance mode you selected), all associated services for that component

are also installed. Individual services may be enabled (running) or disabled (not running), based on subsequent configuration choices.

The V-Series console is the management console for the V-Series appliance.

Use the management console to:

- Monitor the status of software modules and appliance resources
- Establish assignments and routes for network interfaces
- Apply patches and hotfixes
- Change passwords
- Perform troubleshooting
- More

TRITON Manager runs off the appliance. It is the unified management console for TRITON web, data, and email modules. It also provides access to the V-Series console and Content Gateway manager (the TRITON AP-WEB proxy component).

You will use the TRITON Manager to perform such activities as setting up users and defining and applying web and email security policies.

This table lists the TRITON security modules and their related console.

Software module	Description	Console name
TRITON Manager	Manages configuration and settings common to all modules. Provides centralized access to consoles.	TRITON Manager or TRITON console
TRITON AP-WEB or Web Filter & Security	Uses policies to handle Internet requests from clients.	Web module of the TRITON Manager
Network Agent	Internet traffic sniffer. Enforces security for protocols other than HTTP, HTTPS, and FTP.	Web module of the TRITON Manager
Content Gateway	Includes proxy software and advanced analytics.	Content Gateway manager
TRITON AP-EMAIL	Filters inbound and outbound email messages.	Email module of the TRITON Manager
TRITON AP-DATA	Provides data loss prevention management.	Data module of the TRITON Manager

Managing appliances in TRITON Manager

Help | V-Series Appliance | Version 8.0.x

The TRITON Manager (TRITON console) provides a facility for managing all Websense appliances in your network. Appliances that are part of your TRITON installation are registered automatically on the TRITON console **Appliances** > **Manage Appliances** page. Information for each appliance includes:

- C interface IP address
- Host name
- Security Mode (Web, Email , or both Web and Email)
- If Web is enabled, Policy source (Full, Limited, or Filtering Only)
- Software version (for example 8.0.0)
- Hardware platform (for example V5000 G2R2, V10000 G2R2)
- Appliance description

See TRITON console online Help for complete details.

Accessing the V-Series console and other consoles

Help | V-Series Appliance | Version 8.0.x

Access to the V-Series console depends on TRITON Manager (console) settings.

- If no special configuration has been set in the TRITON console, you can access the V-Series console from a link on the **Manage Appliances** page in the TRITON console, or directly via the appliance's C interface IP address and port number (described below). You are prompted for credentials.
- If single sign-on is configured for you in the TRITON console, you can access the V-Series console via the Single Sign-On button on the **Manage Appliances** page. You are not prompted for credentials. Alternatively, you can use a browser to go directly to the C interface IP address and port number; you are then prompted for credentials.
- If two-factor authentication (certificate authentication) has been configured on the TRITON console, you must also be configured with single sign-on privileges to access the V-Series console. To access the V-Series console, log on to the TRITON console using your two-factor authentication, and then use the Single Sign-On button on the **Manage Appliances** page. Direct access via the C interface IP address is disabled when two-factor authentication is configured. See *Configuring two-factor authentication*.

For information about configuring single sign-on, see *Configuring an existing appliance for single sign-on* in the TRITON console online Help.

Direct access

As stated above, if two-factor authentication is not configured, consoles can be accessed directly from a browser or through the TRITON console.

To launch a combined Logon Portal that offers access to V-Series console, Content Gateway manager, and the TRITON console, go to:

```
https://<IP-address-of-interface-C>:9447/
```

To launch the TRITON console directly, go to:

```
https://<IP-address-of-TRITON-machine>:9443/triton/
```

To launch Content Gateway manager directly, go to:

```
https://<IP-address-of-interface-C>:8081/
```

All consoles support the following browsers:

- Microsoft Internet Explorer 8, 9, 10, and 11
- Mozilla Firefox versions 4.x to 16.x and later

- Google Chrome 13 and later

> **Note**
> If you are using Internet Explorer, ensure that Enhanced Security Configuration is switched off.
>
> Compatibility View is not supported.

When you log on to the TRITON console, you are taken to the Web module by default. Select Email or Data from the TRITON toolbar to switch to another module.

If you are not using the Websense Web module, you are taken directly to the Email or Data module at logon. Use the buttons in the TRITON toolbar to switch between modules.

Logging on to the V-Series console

Help | V-Series Appliance | Version 8.0.x

If two-factor authentication is not configured, you can log on to the V-Series console by pointing a browser to the Logon Portal (described above), or by going directly to:

```
https://<IP-address-of-interface-C>:9447/appmng/
```

You can also log on to the manager of any V-Series appliance registered with your TRITON Manager by clicking **Appliances** in the TRITON toolbar and clicking the Single Sign-On button, if configured, or the hyperlink IP address.

The user name is **admin**.

The password was set on your appliance when the **firstboot** script was run, or subsequently by an administrator.

To change the console password, see *Account management*.

Configuring two-factor authentication

Help | V-Series Appliance | Version 8.0.x

Two-factor authentication:

- Is configured for and applies to TRITON console log on.
- Requires administrators to perform certificate authentication to log on.
- Can be made to apply to V-Series console and Content Gateway manager by forcing administrators to log on to TRITON console before accessing other consoles.
- Requires single sign-on to be configured for administrators allowed access to the V-Series console and Content Gateway manager.
- Requires that the password logon capability be **disabled** with an appliance Command Line Interface command. This prevents administrators not configured

for single sign-on from accessing the V-Series manager and Content Gateway manager.

Configuration is described in detail in *Configuring Certificate Authentication* in the TRITON console online Help.

Disabling and enabling password logon

Help | V-Series Appliance | Version 8.0.x

V-Series console password logon can be disabled to allow only two-factor authentication or single sign-on access from the TRITON console.

To disable appliance password logon:

1. Set up single sign-on in the TRITON console.
2. If two-factor authentication will be used, set up two-factor authentication in the TRITON console.
3. Access the appliance Command Line Interface and log on with the admin credentials.
4. At the command line, enter:

   ```
   password-logon disable
   ```
5. Log off and verify that direct logon is disabled by entering the IP address of the Logon Portal in your browser. The Logon Portal should not include links to the V-Series console or Content Gateway manager.

To re-enable password logon for all administrators:

1. Access the appliance Command Line Interface and log on with the admin credentials.
2. At the command line, enter:

   ```
   password-logon enable
   ```

> **Note**
> If for some reason the appliance loses its registration with the TRITON console, password login is automatically re-enabled.

Logs and reporting

Help | V-Series Appliance | Version 8.0.x

V-Series appliances keep detailed logs of activity on the system. These logs are designed to assist you and Websense Technical Support when there is unexpected behavior. For more information about V-Series logs, see *Logs*.

Modules on the V-Series appliance by default generate detailed reporting records (usually called **log records**) of module usage and actions. This requires installing a Windows-only reporting component (**Log Server** for TRITON AP-WEB and **Email Log Server** for TRITON AP-EMAIL) on another machine.

To add either Log Server component to your deployment:

- Download the Websense TRITON Setup application, available from www.mywebsense.com.
- Install Log Server on a Windows server with access to:
  - The Microsoft SQL Server instance that will host the Log Database
  - The appliance, so that it can retrieve data from web or email components to create log records

Management reports based on log records can be generated using the reporting tools included in the Web and Email modules of the TRITON Manager

Web and Email module reports

- When you launch the Web or Email modules of the TRITON Manager, a dashboard shows the operating status of Websense software.
  - In the Web module, the Threats dashboard provides information about advanced malware threat detection. Additional Risks, Usage, and System dashboards provide additional security tools, Internet activity monitoring, and system status information.
  - In the Email module, the Today page shows current status, and can display charts of web or email security activities in the network since midnight. The History page shows charts of web or email security activities in the network for up to 30 days.
- **Presentation reports** provide customizable graphical and tabular reports of client Internet activity or message security activity.
- The Web module offers **investigative reports** that allow you to drill-down into your data to find the information of most interest to your organization.
- The Web module also offers **Real-Time Monitor.** Real-Time Monitor allows you to see what traffic is being analyzed by the Filtering Service instances associated with a Policy Server, and what action is applied to each request.

Databases used on V-Series appliances

Help | V-Series Appliance | Version 8.0.x

Websense software handles Internet and email activity based on your active policies **and** information stored in Websense databases that must be updated at regular intervals.

- The Websense TRITON AP-WEB **Master Database** contains URL category information and protocol definitions. It is managed by Filtering Service. Administrators can control how often the database is updated, and whether or not partial, real-time updates are applied between full updates. (See The Websense Master Database for details.)

  A limited, initial version of the Websense Master Database is pre-installed on the appliance, so that traffic handling can begin as soon as you enter a subscription key. Download the full Master Database as soon as possible to enable comprehensive Internet security capabilities. See the *V-Series Appliance Getting Started Guide* after you complete initial setup of the appliance.
- Content Gateway analytic and categorization options rely on a set of databases installed with Websense software. The software checks for updates to these databases at a regular interval. Updates to these databases occur independently of all Master URL Database updates.

  Every time you restart the appliance or the Content Gateway module, a download of these small databases is initiated. If that download fails, a new download is attempted every 15 minutes until a successful download occurs.
- Websense TRITON AP-EMAIL uses a configurable set of antispam and antivirus databases. The software checks for updates to these databases at a regular interval. You can initiate updates manually from within the Email console.
- When TRITON AP-EMAIL is deployed with TRITON AP-WEB, the Email module can also query the URL Master Database to get the category of URLs embedded in email content.

Navigating in the V-Series console

Help | V-Series Appliance | Version 8.0.x

The V-Series console opens showing the **Status > General** page in the content pane. The banner at the top of the page displays the appliance platform, Appliance Controller hostname, icons that indicate the security mode, and a Log Off button.

- To see another page, select any entry in the left navigation pane.
- To get a detailed explanation of the options on any page, go to **Help > Explain This Page**.

The V-Series console offers access to the following pages:

Status

- *General system status*
- *CPU and memory status*
- *Disk use by module*
- *Network bandwidth*

Configuration

- *System configuration*
- *Network interface configuration*
- *Routing configuration*
- *Alerting*
- *Configuring Web components*

Administration

- Patches / Hotfixes – (*Patch management*, *Hotfix management*)
- Backup utility – (*Using the backup utility*)
- *Logs*
- *Toolbox*
- *Account management*

Clustering multiple TRITON AP-WEB appliances

Help | V-Series Appliance | Version 8.0.x

Content Gateway is the web proxy component of TRITON AP-WEB. An important feature of Content Gateway is its ability to link together multiple instances of Content Gateway to form a *managed cluster*. This allows TRITON AP-WEB appliances to quickly scale to increase capacity and system performance. System administration remains simple and can be performed from a single cluster node. Management clustering is fully described in the Content Gateway Help system.

To configure clustering, open Content Gateway manager, click **Get Help!**, and select the **Clusters** topic from the **Contents** tab. Be sure to read the section titled **Adding nodes to a cluster**. Fully familiarize yourself with the feature before enabling it. There are several essential requirements, including that all nodes must be on the same version of Content Gateway, and that clustering must be enabled on each node separately (although, once enabled, all can be administered on any node).

General system status

Help | V-Series Appliance | Version 8.0.x

The **Status > General** page displays first when you log on to V-Series console. It presents the current status of each software module on the appliance.

Use this page to:

- Check for system alerts, including information about new patches.
- Gauge resource use by each module, including:
  - How many CPUs are dedicated to the module.
  - How much memory (RAM) is allocated.
  - Which appliance interfaces are used by the module (for example, C, P1).
  - Which services (daemons), if any, are included in the module.
- Stop and start software services, or restart or disable an entire software module.
- Restart or shut down the appliance itself.

Important

For security purposes, a V-Series console session ends after 30 minutes of inactivity.

However, you can choose to monitor the **Status** pages even after the 30-minute timeout is reached. To do this, in the **Appliance Controller** section, mark the box labeled **Monitor status without timing out**. You are prompted to confirm your selection. Information on all **Status** pages then continues to update normally until you close the browser.

Modules on the V-Series may include:

- The **Appliance Controller** software operates behind the scenes. It manages appliance configuration, downloads and applies patches, accesses the backup utility, requests module restarts, initiates shutdowns, and handles other appliance management tasks.
- **Content Gateway** contains the Websense proxy software and web content scanning and analysis. Several services (daemons) comprise this software.
- **TRITON AP-WEB** is the software that handles web analysis. Several services (daemons) comprise this software.
- **Network Agent** is the Web component that monitors Internet traffic and manages non-HTTP protocols such as instant messaging.
- **TRITON AP-EMAIL** is the software that handles email security. Several services (daemons) comprise this software.

The links and buttons on the page allow you to perform the following tasks:

Button or Link	Description
View Patch	Appears when an alert indicates that a new patch is available. Click the button to go to the **Administration > Patches / Hotfixes** page, where you can view a list of available patches and access the patch management facility.
Restart Appliance	Causes this appliance to be rebooted. All modules are stopped. Modules are then restarted. Modules that are flagged as Disabled are not restarted.
Shutdown Appliance	Causes this appliance and all software modules to be shut down in an orderly fashion.
Restart (Content Gateway)	Causes the Content Gateway module on this appliance (all of its services) to be stopped and then restarted.
Launch (Content Gateway manager)	Launches Content Gateway manager. See *Management consoles*.
Stop Services Start Services (Content Gateway)	Causes all proxy services and content analysis on this appliance to be stopped. Or, if services are already stopped, Start Services causes all services to be started.
Restart (TRITON AP-WEB)	Causes the TRITON AP-WEB module on this appliance (all services in use) to be stopped and then restarted.
Stop Services Start Services (TRITON AP-WEB)	Causes all TRITON AP-WEB services running on this appliance to be stopped. [If this appliance is not designated to be the Full policy source for your network, some services may not be in use.] Or, if services are already stopped, Start Services causes all services to be started.
Restart (Network Agent)	Causes the Network Agent service on this appliance to be stopped and then restarted.

Button or Link	Description
Disable Enable (Network Agent)	The Disable button for Network Agent displays only when Network Agent is provisioned and running on a TRITON AP-WEB appliance. Network Agent cannot be disabled on a Web Filter & Security appliance. Clicking the Disable button causes the Disable Network Agent dialog box to display. The dialog offers 2 options: 1) permanently disable the module, or 2) temporarily disable the module. Not all deployments use Network Agent. Disabling it redistributes system resources -- CPU and memory -- to other modules on the appliance. However, when Network Agent is permanently disabled, the appliance must be **re-imaged** in order to regain the ability to use Network Agent on the appliance. See *Re-enabling Network Agent if permanently disabled*. When Network Agent is temporarily disabled, a flag is set to indicate that Network Agent should be shut down on the appliance and not restarted the next time the appliance is restarted. **Note:** An important side effect of temporarily disabling Network Agent is that it must be re-enabled before you change the policy source, change the C interface IP address, or apply a patch. On average, it takes 10 minutes to re-enable Network Agent. When Network Agent is in the temporarily disabled state, both the Enable and Permanently Disable buttons display. For an introduction to the purpose of Network Agent, see *Network Agent Interface (N)*, page 27.
Stop Services Start Services (Network Agent)	Causes the Network Agent service on this appliance to be stopped. Or, if the service is stopped, Start Services causes the service to be started.
Restart (TRITON AP-EMAIL)	Causes the TRITON AP-EMAIL services on this appliance to be stopped and then restarted.
Stop Services Start Services (TRITON AP-EMAIL)	Causes all TRITON AP-EMAIL services running on this appliance to be stopped. Or, if services are stopped, Start Services causes all services to be started.

Disabling Network Agent

Help | V-Series Appliance | Version 8.0.x

The Network Agent **Disable** option is offered only when Network Agent is provisioned and running on a TRITON AP-WEB appliance. Network Agent cannot be disabled on a Web Filter & Security appliance.

When Network Agent is enabled, CPU and memory is allocated to it. If Network Agent is enabled but not used, those resources are unavailable to other modules on the appliance.

If you do not plan to use Network Agent, you can disable it, thereby reallocating its resources to other modules.

When disabling Network agent, you can disable it either temporarily or permanently.

When Network Agent is permanently disabled, the appliance must be **re-imaged** in order for you to regain the ability to use Network Agent on the appliance.

When Network Agent is temporarily disabled, a flag is set to indicate that Network Agent should be shut down and not restarted the next time the appliance is restarted. When the appliance is restarted, Network Agent resources are reallocated to other modules on the appliance.

Important

A side effect of temporarily disabling Network Agent is that it must be re-enabled before you change the policy source, change the C interface IP address, or apply a patch. On average, it takes 10 minutes to re-enable Network Agent.

When Network Agent is in the temporarily disabled state, both the Enable and Permanently Disable buttons display.

For an introduction to Network Agent, see *Network Agent Interface (N)*, page 27.

Re-enabling Network Agent if permanently disabled

Help | V-Series Appliance | Version 8.0.x

If Network Agent is permanently disabled and you want to re-enable it, you must re-image the appliance. This wipes the current system and restores the original, unconfigured system image. See *Restoring to factory image* in the V-Series Getting Started guide.

After re-imaging, you can apply patches and restore a full backup or module-level backups. If you restore a full backup, the backup must have been made when Network Agent was enabled, otherwise the restore will fail because the configured systems are incompatible.

CPU and memory status

Help | V-Series Appliance | Version 8.0.x

The **Status > CPU and Memory** page provides information about CPU and memory use by each software module running on this appliance, for the previous 60 seconds.

- **CPU Usage** displays:
  - An aggregate of all CPU usage during the previous 60 seconds, based on occupied resources and total available resources for the module
  - The percentage of each available CPU used by the module during the previous 60 seconds
- **Memory Usage** displays the:
  - Percentage of available memory used by the module during the previous 60 seconds
  - Actual memory used by the module during the previous 60 seconds, in megabytes
  - Total memory available to this module during the previous 60 seconds, in megabytes

Disk use by module

Help | V-Series Appliance | Version 8.0.x

The **Status > Disk Usage** page provides a summary of the previous 60 seconds of disk activity, as well as information about overall disk space availability, for each module on this appliance.

- **Disk Activity** shows average input/output operations per second (IOPS) and charts the previous 60 seconds of activity.
- **Usage Statistics** shows disk space used and available within the module.

The sections for the Appliance Controller, TRITON AP-WEB, and Network Agent modules show one summary of information for all components within the module. This is represented as **system** disk activity or usage.

The section for the Content Gateway module may also show information for cache and PreciseID disk activity and usage.

- The cache consists of a high-speed object database called the **object store**. The object store indexes objects according to URLs and associated headers, enabling Content Gateway to store, retrieve, and serve web pages, and also parts of web pages, providing optimum bandwidth savings. If the cache disk fails, Content Gateway goes into proxy-only mode (no caching).
- When Content Gateway integrates with TRITON AP-DATA, PreciseID Fingerprinting is used to detect sensitive information despite manipulation, reformatting, or other modification.

In addition to overall system information, the TRITON AP-EMAIL section also shows disk activity and usage information for MTA, the mail transfer agent responsible for sending, receiving, and directing email messages.

Network bandwidth

Help | V-Series Appliance | Version 8.0.x

The **Status > Network Bandwidth** page provides information about throughput on the appliance network interfaces listed here:

- **Appliance Controller Interface** (C)
- **Content Gateway Interface** (P1) or (P1 and E1)
- **Content Gateway Interface** (P2) or (P2 and E2)
- **Network Agent Interface** (N)
- **TRITON AP-EMAIL** (E1) or (E1 and P1)
- **TRITON AP-EMAIL** (E2) or (E2 and P2)

Interfaces E1 and E2 are included on the V-10000 models only. The disposition of P1, P2, E1 and E2 is dependent on the modules installed or the configuration applied. For information about configuring the interfaces, see *Network interface configuration*. The bandwidth display includes them only if they are enabled.

For each interface, the following information is displayed for the previous 60 seconds:

Inbound/Outbound

- current megabits per second, inbound and outbound, on the interface
- maximum bandwidth capacity in megabits per second

Bandwidth Statistics

- total megabits of data received and sent
- total number of packets received and sent
- packets dropped, inbound and outbound
- total errors, inbound and outbound
- rate in megabits per second, inbound and outbound

System watchdog

Help | V-Series Appliance | Version 8.0.x

V-Series appliances implement a system watchdog daemon to monitor critical system processes and conditions. Should one of the monitored processes or conditions fail or fault, the watchdog service performs a reset or restart.

Monitored processes and states include:

- Appliance kernel -- is the kernel active.
- Domain Agent -- is the Domain Agent running. This is an essential process that is responsible for communicating between the user interface and appliance back-end processes.
- Journal Commit I/O -- detect a “journal commit I/O” error.
- File table -- detect a file table overflow condition.

Watchdog actions are recorded in the system log file, which can be viewed in the V-Series console on the **Administration > Logs** page.

2 Configuration

Help | V-Series Appliance | Version 8.0.x

Use the Configuration section of the V-Series console to:

- Set the appliance time and date, host name, and description (see *System configuration*).
- Define the network interfaces for the appliance (see *Network interface configuration*). Depending on your model, this may include C, P1, P2, N, E1, and E2.
- Optionally specify static routes for Content Gateway, TRITON AP-EMAIL, or for the appliance itself (see *Routing configuration*).
- Set up SNMP alerting (see *Alerting*).
- Identify which computer is hosting security configuration and policies for the network (*Configuring Web components*).

System configuration

Help | V-Series Appliance | Version 8.0.x

Use the **Configuration > System** page to:

- Review basic appliance information, including the current appliance hostname, security mode (Web, Email, or Web and Email mode), version number, hardware platform, system date and time, and uptime.
- See which software modules are installed on the appliance and get their version numbers.

- Stop all Websense services on all servers before setting the system **time and date**.

  Important

  If any Websense services are running, stop all Websense services before changing the time. Then, reset the time **and** make certain that the time is consistent across all servers running Websense services. Finally, restart Websense services.

  If you do not stop the services first, client updates and policy changes entered after the time reset are not saved.

  - Use the **Time zone** list to select the time zone to be used on this system.

    GMT (Greenwich Mean Time), the default, is also known as UTC (Universal Time, Coordinated). 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.
  - Use the **Time and date** radio buttons to indicate how you want to set the date.

    Time is set and displayed using 24-hour notation.

    - To synchronize with an Internet Network Time Protocol (NTP) server (www.ntp.org.), select the **Automatically synchronize** option and enter the address of a primary NTP server. The secondary and tertiary fields are optional.

      Important

      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 the appliance and the NTP server. Ensure that you have outbound connectivity to the NTP servers. Add a firewall rule that allows outbound traffic to UDP port 123 for the NTP server.

      If interface C on this 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.
    - To set the time yourself, select the **Manually set** option and change the value in the Date and Time fields. Use the format indicated below the entry field.
  - Click **OK** to apply and save the changes.
- Set the appliance **hostname**, or system name (1 - 60 characters long).
  - The first character must be a letter.
  - Other characters can be letters, numbers, dashes, or periods.

- The name cannot end with a period.

Important

If this is a TRITON AP-WEB appliance and Content Gateway will be configured to perform Integrated Windows Authentication (IWA), the hostname cannot exceed 11 characters, excluding the domain name.

In addition, the hostname should not be changed after the domain is joined. If it is changed, IWA will immediately stop working and will not work again until the domain is unjoined and then re-joined with the new hostname.

For more information, see the section titled *Integrated Windows Authentication* in Content Gateway manager Help.

- Create or edit a unique **appliance description** to help you identify and manage the system, particularly when there are multiple appliances deployed in a cluster.

  The description is displayed in the appliance list in the TRITON console when the appliance is added there.

In each section that allows changes, **OK** saves and applies the new values. **Cancel** discards changes and restores entry field values to their current settings.

V-Series support for IPv6

Help | V-Series Appliance | Version 8.0.x

V-Series support for IPv6 is provided in combination with TRITON AP-WEB and Web Filter & Security.

IPv6 is not supported with TRITON AP-EMAIL.

For Web Filter & Security, IPv6 support includes:

- Dual IP stack implementation on 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, support includes all of the above, plus:

- 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

See the Administrator Help for the Web module and Content Gateway manager Help for detail pertinent to those components.

IPv6 configuration summary

Help | V-Series Appliance | Version 8.0.x

IPv6 support is disabled by default.

IPv6 is enabled in the V-Series Appliance console at the top of the **Configuration > Network Interfaces > IPv6** page. When it is enabled, all IPv6 support is enabled for all affected capabilities on the appliance.

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

Disabling IPv6 support requires a full restart of the appliance.

When IPv6 is disabled, IPv6 values remain in the configuration files, but are not editable.

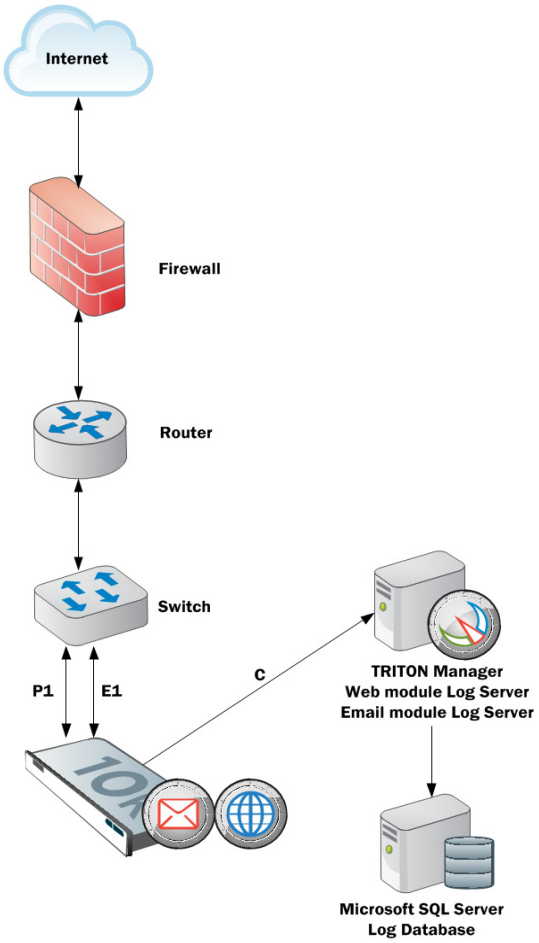
Network interface configuration

Help | V-Series Appliance | Version 8.0.x

Use the **Configuration > Network Interfaces IPv4** and **IPv6** pages to specify the IP address, subnet mask, default gateway, and DNS addresses for each network interface on the appliance.

- *Appliance Controller interface (C)*
- *Content Gateway interfaces (P1 and P2)*
- *Network Agent Interface (N)*
- *TRITON AP-EMAIL interfaces (E1 and E2, or P1 and P2)*

- *Interface bonding*



Appliances with TRITON AP-WEB support IPv6 addresses for C, P1, P2, and N.

Appliances with TRITON AP-EMAIL **do not** support IPv6 addresses for E1 and E2.

For more information about IPv6 support, see *V-Series support for IPv6*.

Click **OK** to save and apply new values in each section.

Appliance Controller interface (C)

Help | V-Series Appliance | Version 8.0.x

The Appliance Controller interface (C):

- Communicates with all Websense management interfaces
- Communicates with the TRITON AP-DATA server
- Provides inter-appliance communication
- Transports (optionally) non-HTTP and non-HTTPS protocol enforcement
- Handles Websense Master Database downloads via the Internet (unless you optionally configure P1 for database downloads. For configuration information, go to www.websense.com/support and search for "V-Series Master Database download").

Initial configuration of the C interface is completed when the appliance is first powered on; a script called **firstboot** prompts you for the values needed to configure interface C.

Important

Changing the C interface IP address significantly impacts the deployment and may require reinstallation of some components.

If your appliance is in production and you need to change the C interface IP address, see *Changing the C interface IP address*, page 31.

To enable the C interface IP address entry field, place the mouse pointer over the iHelp icon and click "Enable IP field" in the pop-up.

Guidelines for configuring network interface C

IP address (C interface)	Required. This interface typically requires continual access to the Internet, though some sites use P1 for all communication with the Internet. If you change the IP address of the C interface, the update process may take about 10 minutes. After the IP address is changed, you are redirected to a logon page. Enter your user name and password. The **Status > General** page will show that the services are starting up. Wait for all services to start.
Subnet mask (C)	Required.
Default gateway (C)	Optional. IP address of the router that allows traffic to be routed outside of the subnet.

Primary DNS (C)	Required. IP address of the domain name server.
Secondary DNS (C)	Optional. Serves as a backup in case the primary DNS is unavailable.
Tertiary DNS (C)	Optional. Serves as a backup in case the primary and secondary DNSes are unavailable.

Content Gateway interfaces (P1 and P2)

Help | V-Series Appliance | Version 8.0.x

Content Gateway Interfaces (P1 and P2) handle traffic directed to and from the Content Gateway proxy module.

- Both the P1 and P2 proxy interfaces 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.
- A typical configuration is to use P1 for both inbound and outbound traffic; P2 is not used.
- Another option is to configure P1 to accept users' Internet requests (inbound only). In this case, P2 is configured to communicate with web servers (outbound).

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).

Guidelines for configuring network interfaces P1 and P2

General guideline	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)
IP address (P1 or P2 interface)	Required.
Subnet mask	Required.
Default gateway	Required. The gateway must be in the same subnet as the IP address of the interface (P1 or P2) used for communicating with the Internet (outbound traffic). If you use both P1 and P2, they must be located in the same subnet. The default gateway is automatically assigned to P2 (which is bound to eth1). Ensure that outbound packets can reach the Internet.
Primary DNS	Required. IP address of the domain name server.
Secondary DNS	Optional. Serves as a backup in case the primary DNS is unavailable.
Tertiary DNS	Optional. Serves as a backup in case the primary and secondary DNSes are unavailable.

Network Agent Interface (N)

Help | V-Series Appliance | Version 8.0.x

Network Agent is a software component 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 Websense software 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.

Guidelines for configuring network interface N

Select an interface to use to send blocking information for non-HTTP and HTTPS traffic	• Select **Interface C** only if you want to use interface C to send blocking information. • Select **Interface N** if network interface N is connected to a bidirectional span port, and you want to use N to transport blocking information. Blocking NIC settings configured in the Web module of the TRITON Manager do not override the settings you enter in this pane. The settings in the V-Series console take precedence.
IP address of interface N	Required. Network Agent should be able to see the outbound and inbound traffic in your network. Network Agent ignores ports 80, 443, 8070, and 8080.
Subnet mask	Required if interface N is selected. Otherwise the subnet mask has a fixed value of 255.255.255.255.
Default gateway	Required if Interface N is checked. Otherwise, the field is disabled.
Primary DNS	Required. IP address of the domain name server.
Secondary DNS	Optional. Serves as a backup in case the primary DNS is unavailable.
Tertiary DNS	Optional. Serves as a backup in case the primary and secondary DNSes are unavailable.

Network Agent can instead be installed on a different server in the network. See the *V-Series Appliance Getting Started Guide* for requirements.

TRITON AP-EMAIL interfaces (E1 and E2, or P1 and P2)

Help | V-Series Appliance | Version 8.0.x

TRITON AP-EMAIL interfaces handle traffic in to and out of the TRITON AP-EMAIL module.

> **Note**
> The names of the interfaces vary depending on the model of V-Series appliance.
>
> - On V10000, E1 and E2 are used.
> - On V5000, P1 and P2 are used.

- Both the E1 and E2 interfaces can be used to accept inbound traffic and send outbound traffic. On V5000, use P1 and P2.
- A typical configuration is to use E1 (P1) for both inbound and outbound traffic; E2 (P2) is not used.
- Another option is to configure E1 (P1) to accept inbound and E2 (P2) to send outbound traffic.
- When you need to support a large volume of outbound traffic, you can configure virtual interfaces on E1 or E2 (P1 or P2). See *Email module virtual interfaces*, page 29.

> **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. Keep this in mind when you configure TRITON AP-EMAIL.
>
> On the V5000, 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 with the Email Hybrid module.

Guidelines for configuring network interfaces E1 and E2

> **Note**
> On a V5000, substitute P1 for E1 and P2 for E2.

If you use both E1 and E2, 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.

IP address (E1 or E2 interface)	Required.
Subnet mask	Required.
Default gateway	Required. The gateway must be in the same subnet as the IP address of the interface (E1 or E2) used for communicating with the Internet (outbound traffic). If you use both E1 and E2, 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.
Primary DNS	Required. IP address of the domain name server.
Secondary DNS	Optional. Serves as a backup in case the primary DNS is unavailable.
Tertiary DNS	Optional. Serves as a backup in case the primary and secondary DNSes are unavailable.

Email module virtual interfaces

Help | V-Series Appliance | Version 8.0.x

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.

To add virtual IP addresses to E1 or E2:

1. Go to **Configure > Network Interfaces > Virtual Interfaces** and click **Add**.
2. Select E1 or E2. If E2 has not been configured, it is not offered.
3. In the Virtual IP address entry field enter one IPv4 address per line.
4. Click **Add Interfaces**.

To remove virtual IP addresses:

1. On the **Configure > Network Interfaces > Virtual Interfaces** page, select the check box to the left of the entries you want to remove and then click **Delete**.
2. Confirm your action.

Interface bonding

Help | V-Series Appliance | Version 8.0.x

V10000 appliances that run only one module—TRITON AP-WEB or TRITON AP-WEB with the Web Hybrid module—can bond interfaces for failover or load balancing. Configuration details are provided below.

Interface bonding is not supported on V5000 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 only

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 (P1 and P2) independently. You do not have to bond at all.

If you do bond an interface (P1 or P2), choose one mode for that bonding (either active/standby or load balancing). You do not have to choose the same bonding mode for both.

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 (E1 and E2) independently. You do not have to bond at all.

If you do bond an interface (E1 or E2), choose one mode for that bonding (either active/standby or load balancing). You do not have to choose the same bonding mode for both.

Ensure that all interfaces are cabled properly before bonding.

Changing the C interface IP address

Help | V-Series Appliance | Version 8.0.x

If possible, retain the current C interface IP address. The number of activities that must be performed and the service disruption can be significant.

Sometimes it is necessary to change the C interface IP address. What is affected and what must be done depends on the configuration of your appliances and the details of your deployment.

In most cases, off-box components that depend on or directly service an appliance should be uninstalled prior to changing the C interface IP address and reinstalled after the IP address change is complete. These components include:

- TRITON Manager
- Filtering Service
- Network Agent
- Real Time Monitor
- DC Agent
- Logon Agent
- eDirectory Agent
- Radius Agent
- Remote Filtering Service
- Sync Service
- Linking Service

Important

It is strongly recommended that you back up your appliance and all affected off-box components before making any changes.

Follow the steps in the scenario below that matches your deployment.

Scenario 1: One appliance, TRITON AP-WEB only with TRITON Manager and Log Server

Scenario 2: One or many appliances, TRITON AP-EMAIL only with TRITON Manager and Log Server

Scenario 3: One appliance, TRITON AP-WEB and TRITON AP-EMAIL with TRITON Manager and log servers

Scenario 4: Multiple appliances in a cluster, TRITON AP-WEB only, TRITON Manager and Log Server

Scenario 5: Multiple appliances in a cluster, TRITON AP-WEB only, off-box Policy Broker, TRITON Manager, and Log Server

Scenario 1: One appliance, TRITON AP-WEB only with TRITON Manager and Log Server

Summary of steps:

1. If Web DLP is configured, in the Content Gateway manager, manually unregister Content Gateway with TRITON AP-DATA.
2. On the Log Server host, stop the Log Server service.
3. On the TRITON Manager host, uninstall TRITON Manager and associated components (see the component list, above). Make a list of uninstalled components.
4. On the appliance, change the C interface IP address.
5. Reinstall TRITON Manager and associated components.
6. On the Log Server host, change the IP address of the Policy Server entry in websense.ini to the new C interface IP address and restart Log Server.
7. If Web DLP is used, restart the Content Gateway module to automatically re-register with the TRITON AP-DATA components.

For detailed step-by-step instructions, go to the Websense Technical Library and search for the article titled *Changing the C interface IP address: step-by-step*.

Scenario 2: One or many appliances, TRITON AP-EMAIL only with TRITON Manager and Log Server

Summary of steps:

1. If Email DLP is used, unregister Email DLP.
2. On the appliance, change the C interface IP address.
3. In the Email module of the TRITON Manager, change the appliance IP address to the new value.
4. If Email DLP is used, re-register Email DLP.

For detailed step-by-step instructions, go to the Websense Technical Library and search for the article titled *Changing the C interface IP address: step-by-step*.

Scenario 3: One appliance, TRITON AP-WEB and TRITON AP-EMAIL with TRITON Manager and log servers

Summary of steps:

1. If Web DLP is configured, in the Content Gateway manager, manually unregister Content Gateway with TRITON AP-DATA.
2. If Email DLP is used, unregister Email DLP with the TRITON AP-DATA components.
3. On the Log Server host, stop the Log Server and Email Log Server services.
4. On the TRITON Manager host, uninstall TRITON Manager and associated components (see the component list, above). Make a list of uninstalled components.
5. On the appliance, change the C interface IP address.
6. Reinstall TRITON Manager and associated components.
7. On the Log Server host, change the IP address of the Policy Server entry in websense.ini to the new C interface IP address and restart Log Server.
8. In the Email module of the TRITON Manager, change the appliance IP address to the new value.
9. If Email DLP is used, re-register with TRITON AP-DATA components.
10. If Web DLP is used, restart Content Gateway to automatically re-register with the TRITON AP-DATA components.

For detailed step-by-step instructions, go to the Websense Technical Library and search for the article titled *Changing the C interface IP address: step-by-step*.

Scenario 4: Multiple appliances in a cluster, TRITON AP-WEB only, TRITON Manager and Log Server

Covered under this scenario:

1. Changing the C interface of the Full policy source appliance
2. Changing the C interface of User directory and filtering appliances
3. Changing the C interface of Filtering only appliances

Summary steps for changing the C interface of the Full policy source appliance:

1. If Web DLP is configured, in the Content Gateway manager, manually unregister Content Gateway with TRITON AP-DATA.
2. On the Log Server host, stop the Log Server service.
3. On the TRITON Manager host, uninstall TRITON Manager and associated components (see the component list, above). Make a list of uninstalled components.

4. Document the Policy Source settings of all appliances in the cluster and then on the User directory and filtering and Filtering only appliances change the policy source setting to Full policy source.
5. On the original Full policy source appliance, change the C interface IP address.
6. On each of the User directory and filtering and Filtering only appliances, change the policy source setting from Full policy source to the original setting, pointing the appliance to the new Full policy source C interface IP address.
7. Reinstall TRITON Manager and associated components.
8. On the Log Server host, change the IP address of the Policy Server entry in websense.ini to the new C interface IP address and restart Log Server.
9. If Web DLP is used, restart Content Gateway to automatically re-register with the TRITON AP-DATA components.

Summary steps for changing the C interface of the User directory and filtering appliance:

1. Uninstall off-box components that are registered to the User directory and filtering appliance whose C interface IP address will change (e.g. Network Agent).
2. Temporarily make Filtering only appliances that depend on the User directory and filtering appliance whose C interface IP address will change, Full policy source appliances.
3. Change the C interface IP address of the User directory and filtering appliance.
4. Return the policy source setting of the Filtering only appliance, pointing them to the new User directory and filtering C interface IP address.
5. Reinstall off-box components that are registered to the User directory and filtering appliance.

Summary steps for changing the C interface of the Filtering only appliance:

1. Uninstall off-box components that are registered to the Filtering only appliance whose C interface IP address will change (e.g. Network Agent).
2. Change the C interface IP address.
3. Reinstall off-box components that are registered to the Filtering only appliance.

For detailed step-by-step instructions, go to the Websense Technical Library and search for the article titled *Changing the C interface IP address: step-by-step*.

Scenario 5: Multiple appliances in a cluster, TRITON AP-WEB only, off-box Policy Broker, TRITON Manager, and Log Server

Note

No appliance is set to Full policy source.

Summary of steps:

1. If Web DLP is configured, in the Content Gateway manager, manually unregister Content Gateway with TRITON AP-DATA.
2. Uninstall off-box components that are registered to the appliance(s) whose C interface IP address will change (e.g. Network Agent).
3. Document the Policy Source settings of all appliances in the cluster and then change the policy source setting of each to Full policy source.
4. Change the C interface IP address (or addresses, if more than one appliance must change).
5. Return the policy source settings of the appliances to their original mode, pointing them to the new C interface IP address of a changed appliance if appropriate (if the appliance is a Filtering only appliance and the C interface change was to the User directory and filtering appliance it pointed to).
6. Reinstall off-box components that are registered to appliances in the cluster.
7. If Web DLP is used, restart Content Gateway to automatically re-register with the TRITON AP-DATA components.

For detailed step-by-step instructions, go to the Websense Technical Library and search for the article titled *Changing the C interface IP address: step-by-step*.

Routing configuration

Help | V-Series Appliance | Version 8.0.x

Use the **Configuration > Routing** page 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.
- Module routes from appliance modules through appliance interface C to subnets. IPv6 module routes are **not** supported.

Configuring static routes

- Static routes can be specified for any active interface on the appliance, except N, which is dedicated to Network Agent and cannot be routed.
- The same route cannot be added for 2 different interfaces on the same module. If attempted, the appliance displays an error.
- Static routes that are defined for an interface that is later made inactive remain in the routing table, and are displayed in gray to indicate that the routes are inactive.
- Static routes that become invalid because the IP address of the interface changes are disabled and displayed in red.
- 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.

- When a static route is added, imported, or deleted, the services associated with the module that manage the specified interface must be restarted. For example, if static routes are added to interface P1, when the additions are complete, all Content Gateway services must be restarted.
- The static route table has a maximum limit of 5000 entries.

Adding static routes

Static routes can be added one at a time, or many at a time using an import file.

When a static route is added, data entered in each field is validated by the appliance, and an error message is displayed if there is an inconsistency in the route.

To add static routes:

1. Go to the **Configuration > Routing** page, select the IPv4 or IPv6 tab, and click **Add/Import** under **Static Routes**.
2. **To manually add a single route**, select the **Add individual route** radio button, enter values for all fields, and then click **Add Route**.

Destination Network	Required. Specify the subnet IP address for which traffic will be routed.
Subnet Mask (IPv4) or Subnet prefix length (IPv6)	Required. The subnet mask or prefix for the network where the clients reside (such as 255.255.0.0, or 64)
Gateway	Required. IP address providing access from the proxy subnet to the client subnet. This address must be on the same subnet as the appliance.
Interface	Required. The appliance interface to be used for the static route. Only active interfaces are offered in the drop down list.

3. **To add multiple routes using an import list file**:
   a. Prepare the import file. See **Import file specifications**, below.
   b. Select the **Import route file** radio button.
   c. Specify the full path and file name, or **Browse** to locate the file. Click **Import Route** to import the routes specified in the file.

      The appliance reads the file, validates each route, and reports errors for lines that are invalid.

      Duplicate route entries are ignored; duplicate entries are not created.

      If the number of routes in the file, combined with the number of existing routes exceeds the 5000 route table limit, the import fails. No routes are added and an error message displays.

Import file specifications:

1. The file must be a plain text file. (Most routers export route tables to a plain text file.)
2. The file can contain comment lines. Comment lines begin with "#".
3. A line that defines a route must include the following 4 fields in the order shown. Each field must be separated by a space.

   For IPv4:

   ```
   destination netmask default-gateway interface
   ```

   Destination is a subnet address or host IP address.

   Netmask determines the proper value of *destination*.

   Default-gateway is the next hop.

   Interface is the appliance interface through which traffic is routed. The specified interface must be enabled. If it is disabled, the appliance reports an error and does not add the route.

   For IPv6:

   ```
   destination prefix-length default-gateway interface
   ```

   Destination is a subnet address or host IP address.

   Prefix-length determines the proper value of *destination*.

   Default-gateway is the next hop.

   Interface is the appliance interface through which traffic is routed. The specified interface must be enabled. If it is disabled, the appliance reports an error and does not add the route.

Deleting static routes

1. In the Static Routes table, select the routes to be deleted:
   - To select 1 route, click the box to the left of the entry you want to delete.
   - To select multiple entries, click the box to the left of each entry you want to delete.
   - To delete all routes, click the box to the left of the label **Destination Network**.
2. Click **Delete**.

Exporting the route table

To export the route table to a text file, click **Export Table**. Use the Browse dialog to specify a location and name for the file.

All routes in the table, whether enabled or disabled, are exported.

The file is formatted as described above for import files.

Configuring component routes

In some deployments it is necessary or desirable to route some web or email traffic through the appliance C interface (typically web and email traffic is routed through

separate, dedicated interfaces (P1/P2, E1/E2) and C is reserved for management traffic). However, some sites might want to route authentication (or other) traffic through the C interface. This is accomplished by defining component routes on the **Configuration > Routing** page.

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

Adding a component route

1. In the Component Route section of the **Configuration > Routing** page, click **Add**.
2. Specify a value for each field and click **Add Route**.

Module	Required. Select a module from the drop-down list. The list displays only modules installed on the appliance. The Network Agent module may be installed, but will not appear in the list.
Destination subnet	Required. Specify the subnet IP address for which traffic will be routed.
Subnet mask	Required. The subnet mask for the destination subnet.

Note

It is the responsibility of the administrator to verify that the endpoint is available on the subnet.

Deleting a component route

1. In the Component Routes section, select the routes to be deleted.
   - To select 1 route, click the box to the left of the entry you want to delete.
   - To select multiple entries, click the box to the left of each entry you want to delete.
   - To delete all routes, click the box to the left of the label **Module**.
2. Click **Delete**.

Alerting

Help | V-Series Appliance | Version 8.0.x

Use the **Configuration > Alerting** page to enable and configure SNMP alerting.

There are 2 methods of SNMP alerting that you can enable on the **Setup** tab:

- Allow your SNMP manager to poll the appliance for standard SNMP counters (see *Enable SNMP polling (monitoring)*).
- Configure the appliance to send SNMP traps for selected events to your SNMP manager (see *Enable SNMP traps*).

  After enabling the SNMP trap server on the appliance, use the **Alerts** tab to configure which events cause a trap to be sent. See *Enable specific alerts*, page 40.

Enable SNMP polling (monitoring)

1. Under Monitoring Server, click **On**.
2. Select the **SNMP version** (v1, v2c, or v3) used in your network.
   - With SNMP v1 and v2c, a suffix (-proxy, -web, -na, or -email) is appended to the community name to indicate the originating module for the counter.
   - With SNMP v3, you can specify the context name (PROXY, WEB, NA, or EMAIL) to poll counters for each module.
3. If you selected v1 or v2c, provide the **Community name** for the appliance, and then click **OK**.

   You have completed your SNMP monitoring configuration.
4. If you selected v3, select the **Security level** (None, Authentication only, or Authentication and Encryption) used in your network, and the **User name** to associate with SNMP communication.
5. If you selected a security level that includes authentication, also enter and confirm the **Password** for the selected user name, then select the **Authentication protocol** (MD5 or SHA).
6. If you selected authentication and encryption, select the **Encryption protocol** (DES or AES), and then enter and confirm the **Encryption key** used for encryption.
7. Click **OK** to implement your changes.

Enable SNMP traps

Before enabling the appliance to send SNMP traps, download the **appliance MIB file** using the link in the Trap Server section of the **Configuration > Alerting** page. The MIB file must be installed in your SNMP manager before it can interpret traps sent by the appliance.

When you are ready for the appliance to start sending SNMP traps:

1. Under Trap Server, click **On**, and then select the SNMP version (v1, v2c, or v3) used in your network.
2. For SNMP v1 or v2c, provide the following information:
   - The **Community name** to associate with traps sent by the appliance
   - The IP address and port used by your SNMP manager.
3. To verify your configuration, click **Send Test Trap**. If the test trap succeeds, click **OK** to apply and save your changes. See *Enable specific alerts*, page 40, to configure which events cause a trap to be sent.

   If there is a problem sending the test trap, verify the community name, IP address, and port, and make sure that the network allows communication between the appliance C interface and the SNMP manager.
4. For SNMP v3, enter the **Engine ID** and **IP address** of your SNMP manager, as well as the **Port** used for SNMP communication.
5. Select the **Security level** (None, Authentication only, or Authentication and Encryption) used in your network, and the **User name** to associate with SNMP communication.
6. If you selected a security level that includes authentication, enter the **Password** for the selected user name, and then select the **Authentication protocol** (MD5 or SHA).
7. If you selected authentication and encryption, select the **Encryption protocol** (DES or AES), and then enter the **Encryption key** used for encryption.
8. To verify your configuration, click **Send Test Trap**. If the test trap succeeds, click **OK** to implement your changes. See *Enable specific alerts*, page 40, to configure which events cause a trap to be sent.

   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.

Enable specific alerts

Help | V-Series Appliance | Version 8.0.x

The appliance can send traps for each of its modules: Appliance Controller, Content Gateway, TRITON AP-WEB, Network Agent, and TRITON AP-EMAIL. The Alerts tab of the **Configuration > Alerting** page lists the alerts associated with only the modules that you have enabled.

A table for each module lists:

- The hardware or software **Event** that triggers the alert (for example, a network interface link going down or coming up, or a Websense service stopping).
- The **Threshold**, if applicable, that defines the alert condition (for example, CPU usage exceeding 90%, or free disk space reaching less than 10% of the total disk size).
- The **Type** of alert (system resource or operational event).

- Whether or not an SNMP trap is sent when the event occurs or the threshold is reached.

To enable all alerts for a module, select the check box next to **SNMP** in the table header. All check boxes in the column are selected.

Otherwise, mark the check box next to an event name to enable SNMP alerts for that event. To disable alerts for an event, clear the associated check box.

Time-based thresholds: Most of the events that have a configurable threshold also have a configurable time-based threshold, specified in minutes. When the time-based threshold is set and **both thresholds** are exceeded, an alert is sent. To enable time-based thresholds, select the **Enable time-based thresholds** check box at the top of the page. The time-based threshold is enabled on every event for which it is configurable.

Event-cleared alerts: In addition to generating event condition alerts, you can configure alerts to be sent when conditions return below the threshold. These are called **event-cleared alerts**. To enable event-cleared alerts, select the **Generate event-cleared alerts** check box at the top of the page.

The following events do not generate event-cleared alerts:

- Hostname change
- IP address change
- Scheduled backup failure
- SNMP authentication failure

When you have finished configuring alerts, click **OK** to implement the changes.

Configuring Web components

Help | V-Series Appliance | Version 8.0.x

Be sure that you have identified which machine will be the **policy source** machine before starting to complete this section.

- The **policy source** is a machine that runs Policy Broker (which includes the Policy Database); an instance of Policy Server; and usually also an instance of Filtering Service (which facilitates category updates via the Websense Master Database).
- The **policy source** thus becomes the machine from which global configuration and security policy information is distributed to other Websense appliances and server-based components. The **policy source** machine may run other Websense components as well, to provide various services, based on your deployment plan.

If a Windows or Linux server will be the **policy source** machine in your network, set it up first, so that you can point the V-Series appliances and other Websense servers to it.

Note that Policy Broker can be deployed in a standalone configuration (only one Policy Broker) or in a replicated configuration (one primary Policy Broker and one or more replicas). In a replicated configuration, Policy Broker cannot reside on a

Websense appliance. The primary Policy Broker and all replica instances must be hosted by a Windows or Linux server.

1. Use the **Configuration > Web Components** page to specify which Web components are active on this appliance, and where the appliance gets Web global configuration and security policy information. Also specify the TRITON Manager location.
2. Under **Policy Source**, select which Web configuration is used on this appliance: **Full policy source** (default; see *What is a policy source?*), **User directory and filtering**, or **Filtering only** (see *What if an appliance is not the policy source?*). If this is a Full policy source appliance, it acts as both the Policy Broker and a Policy Server.
3. If this is a **User directory and filtering appliance**, it also includes a Policy Server. Enter the IP address of the Policy Broker appliance or server.
4. If this is a **Filtering only** appliance, enter the IP address of a Policy Server. It does not have to be the IP address of the Policy Broker machine.
5. The TRITON Manager (management consoles) must be installed on an Windows Server 2008 R2 64-bit or Windows Server 2012 machine. Identify this machine here by IP address.
6. Click **OK** to save and apply your changes.

What is a policy source?

Help | V-Series Appliance | Version 8.0.x

Every TRITON AP-WEB deployment must include a **policy source**. This is an appliance or other server that hosts these components: Websense Policy Broker and the Policy Database it creates, plus an instance of Policy Server. All other Websense appliances and other Websense servers point to this machine and receive regular updates from it. This appliance (or other server) is called the **policy source**.

Websense Policy Broker is the component that controls access to global configuration information and policy data consumed by other components. Policy Broker can be deployed in a standalone configuration or in a replicated configuration.

- In a **standalone** configuration, there is one Policy Broker for the entire deployment. All Policy Servers connect to the same Policy Broker.
  In a standalone deployment, Policy Broker can reside on a Windows or Linux server, or a Websense appliance.
- In a **replicated** configuration, there is one **primary** Policy Broker, to which configuration and policy changes are saved, and one or more **replica** instances, each with its own read-only copy of the configuration and policy data. Each Policy Server can be configured to determine whether it attempts to connect to the primary Policy Broker or a replica instance at startup.

  In a replicated configuration, Policy Broker cannot reside on a Websense appliance. Both the primary and replica instances must be hosted by a Windows or Linux server.

When Policy Broker replication is enabled, if the primary Policy Broker machine fails, all components connect to a replica Policy Broker instance and continue to run normally, using the read-only configuration and policy data stored by the replica.

- When a TRITON AP-WEB only appliance is configured as a policy source, all available Web components may run on that appliance, including.
  - Filtering Service
  - Policy Database
  - Policy Broker
  - Policy Server
  - User Service
  - Directory Agent (required for hybrid service)
  - State Server (optional; disabled by default)
  - Multiplexer (disabled by default; unavailable when the appliance is Filtering only)
  - Usage Monitor
  - Control Service
  - Content Gateway module
  - Network Agent module (optional)

  Windows-only services, like Log Server, TRITON Manager, and optional services, like transparent identification agents, must run on other machines.
- A non-appliance policy source is a server hosting **Policy Broker**. The Policy Database is automatically created and run on the Policy Broker machine. This machine typically also includes a Policy Server instance, and may include additional Websense software components.

The Policy Database holds all security policies (including client definitions, filters, and filter components) for all appliances and all domains in the network. It also holds global configuration information that applies to the entire deployment.

What if an appliance is not the policy source?

Help | V-Series Appliance | Version 8.0.x

A Websense V-Series appliance that is not serving as the policy source can be designated to run either **User directory and filtering** or **Filtering only**.

- A **User directory and filtering** appliance is a lightweight version of the policy source machine. It runs:
  - Policy Server
  - User Service
  - Usage Monitor
  - Filtering Service
  - Control Service

- Directory Agent
- Content Gateway module
- Network Agent module (optional)

Having User Service and Policy Server on remote appliances means that you are able to obtain local network user names. Latency between User Service and Policy Server is eliminated, because both run on the same appliance.

Whenever you make a policy change, that change is immediately updated on the policy source appliance. The change is pushed out to User directory and filtering appliances within 30 seconds.

These appliances can continue handling traffic for as long as 14 days if their connection with the policy source machine is interrupted. So even if a network connection is poor or is lost, traffic management continues as expected.

A **User directory and filtering** appliance is configured to point to the Full policy source for updates.

- A **Filtering only** appliance does not run Policy Server. It runs only:
  - Filtering Service
  - Control Service
  - Content Gateway module
  - Network Agent module (optional)

  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.

  These appliances require a continual connection to the centralized policy server, not only to stay current, but also to continue handling traffic. If the connection to the policy server becomes unavailable for any reason, traffic handling on a Filtering only appliance can continue for up to 3 hours.

  If the Policy Server machine is on a remote network, with a WAN connection, it can be difficult to obtain user name/IP address maps for the local users.

User directory with V-Series appliances

Help | V-Series Appliance | Version 8.0.x

If your organization relies on user identification or authentication, each appliance that is running Websense User Service must be configured to talk to a user directory. Multiple appliances can talk to the same user directory, or to different user directories.

Preparing for a hybrid configuration

In TRITON AP-WEB environments with the Web Hybrid module, some users' traffic may be handled by the hybrid (cloud) service. In this situation, an interoperability component on the appliance called **Directory Agent** is required to enable user-, group-, and domain- (OU) based security.

Directory Agent must be able to communicate with:

- A supported LDAP-based directory service:
  - Windows Active Directory® (Mixed Mode)
  - Windows Active Directory (Native Mode®)
  - Oracle (Sun Java™) System Directory
  - Novell eDirectory
- Websense **Sync Service**

After deployment, use Web module of the TRITON Manager to configure User Service and Directory Agent.

- User Service configuration is performed on the **Settings > General > Directory Services** page.
- Directory Agent configuration is performed on the **Settings > Hybrid Configuration > Shared User Data** page.
  - You can have multiple Directory Agent instances.
  - Each Directory Agent must use a unique, non-overlapping root context.
  - Each Directory Agent instance must be associated with a different Policy Server.
  - All Directory Agent instances must connect to a single Sync Service. (A deployment can have only one Sync Service instance.)
  - You must configure the Sync Service connection manually for all supplemental Directory Agent instances (these are the Directory Agents running on User Directory and filtering, and Filtering only appliances). Communication is configured automatically for the Directory Agent instance that connects to the same Policy Server as Sync Service. See Administrator Help of the Web module for details.

You can configure Directory Agent to use a different root context than User Service, and to process its directory data differently than User Service. Also, with Windows Active Directory, if User Service is configured to communicate with multiple global catalog servers, Directory Agent can communicate with all of them.

Redundancy

Help | V-Series Appliance | Version 8.0.x

Internet usage management requires interaction between several Websense software components:

- User requests for Internet access are proxied by Content Gateway.
- User requests for Internet access may also be monitored by Network Agent.
- The requests are sent to Websense Filtering Service for processing.
- Filtering Service communicates with Policy Broker to apply the appropriate policy in response to the request.

In some networks, additional machines may be used to deploy additional instances of Content Gateway, Filtering Service, Network Agent, or other components. For example, in a large, segmented network, you may need a separate Network Agent for each segment. Or, you might deploy Logon Agent on a separate computer, to enable transparent identification of users logging on to Windows domains.

Websense Policy Broker (the component that controls access to global configuration information and security policy data consumed by other components) can be deployed in a standalone configuration or in a replicated configuration.

- In a **standalone** configuration, there is one Policy Broker for the entire deployment. All Policy Servers connect to the same Policy Broker.
  In a standalone deployment, Policy Broker can reside on a Windows or Linux server, or a Websense appliance.
- In a **replicated** configuration, there is one **primary** Policy Broker, to which configuration and policy changes are saved, and one or more **replica** instances, each with its own read-only copy of the configuration and policy data. Each Policy Server can be configured to determine whether it attempts to connect to the primary Policy Broker or a replica instance at startup.

  In a replicated configuration, Policy Broker cannot reside on a Websense appliance. Both the primary and replica instances must be hosted by a Windows or Linux server.

Check the Websense Deployment and Installation Center for component distribution options. Contact your Websense Sales Engineer, or your authorized Websense reseller, for assistance in planning a more complex deployment.

3 Administration

Help | V-Series Appliance | Version 8.0.x

Websense, Inc., maintains a customer portal at mywebsense.com where you can download product updates, get patches and hotfixes, access customer forums, read product news, and access other technical support resources for your Websense software and appliances.

As a best practice, create your MyWebsense account when you first set up the appliance, so that you can:

- Immediately apply any patches made available since your appliance was assembled.
- Get access whenever you need support or updates.

Administration options

Help | V-Series Appliance | Version 8.0.x

The Administration pages enable you to:

- Install software patches (see *Patch management*).
- Install software hotfixes (see *Hotfix management*).
- Prepare and restore backups of your appliance configuration, Web modules, and Email module (see *Using the backup utility*).
- Access system logs for all active modules (see *Logs*).
- Customize block pages, enable remote access to the appliance command-line interface, and launch the command-line utility (see *Toolbox*).
- Change the V-Series console or Content Gateway manager **admin** password (see *Account management*).

Patch management

Help | V-Series Appliance | Version 8.0.x

V-Series appliances are kept up to date with an easy-to-use patch management facility.

Go to the **Administration > Patches / Hotfixes > Patches** page to check for, download, and install patches.

- Appliances automatically check for new patches once a day. The time of the check is randomized, cannot be configured, and is different for every appliance.
- To manually check for new patches, use the **Check for Patches** button.
- When a new patch is available, the patch version number, description, and status are displayed in the **Available patches** table and an alert is displayed on the **Status > General** page.
- After a patch is downloaded it can be copied to another location on your network where it can be easily uploaded to multiple appliances.
- If the appliance management interface (C) does not directly connect to the Internet, you can configure a proxy server through which the appliance checks for patches.
- The Patch History table provides a history of patches that have been applied to the appliance.

See:

Patch update options, page 49

Patch history, page 50

Best practices for appliance patches

- A new appliance at your site should immediately be patched to the latest version.
- Keep all V-Series appliances on your network at the same version.
- Install software patches as soon as they become available.

Patch process for appliances

Patch discovery is performed automatically every 24 hours at a random time, or manually with the **Check for Patches** button.

Patch download and installation is initiated manually by the appliance administrator.

- Use the **Administration > Patches / Hotfixes** page to download and install each patch on the appliance, during a low-activity period on your network.
- Install patches in consecutive sequence.
- On the **Patches** page, the “Appliance current version” number is the current appliance version (reflects the latest patch installed).

- Be sure that all Websense modules running off the appliance, such as Log Server, are upgraded to the appropriate level each time you patch the appliance. See the patch release notes for details
- The online V-Series Compatibility Matrix shows a table of the Websense software module versions that are compatible with each appliance version.
- Multiple appliances may be installed in your network. However, they must all be running the same version of Websense software modules. Websense, Inc., does not support running different versions of the software on different appliances on one network. Analysis results are not expected to be consistent in that scenario.

Patch update options

Help | V-Series Appliance | Version 8.0.x

- Available patches are listed in the **Available patches** table.
- For each available patch, a version number, description, and status is given. There is also a link to the patch release notes.

Important

It is very important to read the release notes. In addition to a summary of changes contained in the patch, there is information about impacts to other modules and an estimate of the time it will take to apply the patch.

The following options are available:

Download	Click **Download** to start downloading an available patch. In the Status field, a progress bar displays the progress of the download. Another patch can be selected, and the download initiated, while the first download is underway. Such requests form a sequential download queue. When the patch download is complete: • The **Download** button is replaced by **Install** and **Delete** buttons. (See below.) • A **Save to network location** link is included after the patch description. Click the link to copy the patch file to another location on your network. This can be helpful if you have multiple appliances and do not want to download the patch from Websense separately for every appliance. Instead, on each appliance simply use the **Upload Patch Manually** function to upload the patch from the network location. It is recommended that patches be downloaded and applied in numeric sequence. In many cases, this is a requirement.
Pause	When a download is underway, a **Pause** button displays. Click **Pause** to temporarily halt the download.
Cancel	When a download is underway, a **Cancel** button displays. Click **Cancel** to end the download process.

Resume	When a patch download has been paused, a **Resume** button displays. Click **Resume** to continue a paused download.
Install	When a patch has been downloaded and verified (a checksum is performed as part of the download process), and is ready for installation, the **Install** button is enabled. **IMPORTANT:** Before installing a patch, it is important that you **read the patch release notes**. **IMPORTANT:** If Network Agent is temporarily disabled and you **do not** want to permanently disable it (which requires re-imaging the appliance to regain its use), you must re-enable Network Agent before installing the patch. See *Re-enabling Network Agent before installing a patch*, page 51. Click **Install** to install the patch. A series of pages prompt for confirmation and provide status. You are notified if a restart is required after installation. After the restart, the patch is removed from the patch queue and logged in the Patch History table. The new appliance version number is reflected in the **Appliance version** field. If an earlier patch has not been installed but is required, you receive a message in the **Status** column indicating which earlier patch is required, and the **Install** button for the dependent patch is disabled. Install the earlier patch first. If a patch installation fails, any installed files from that patch are immediately uninstalled and a message displays indicating that the patch installation failed. You can try installing it again. If that fails, delete the patch, then download it again and re-attempt the installation.
Delete	Click **Delete** if you want to delete a patch.
Check for Patches	Click the **Check for Patches** button to manually check for new patches.
Upload Patch Manually	Click **Upload Patch Manually** to upload a patch from another location on your network. This can be a convenient and efficient method of distributing a patch among multiple appliances in a cluster or where multiple appliances have access to a local network. For instructions on copying a patch file from an appliance to another location in the network, see the entry for **Download**, above.

Patch history

Help | V-Series Appliance | Version 8.0.x

The **Patch History** table on the **Administration > Patches / Hotfixes > Patches** page displays a list of all patches installed on the appliance. For each patch, you see:

- Version number
- Date and time of patch installation
- Comments that confirm the success or failure of patch installation
- A link to patch log file, showing patch details

Re-enabling Network Agent before installing a patch

Help | V-Series Appliance | Version 8.0.x

Follow these steps if Network Agent is temporarily disabled, you don't want to permanently disable it, and you want to install a patch. (For more information about temporarily and permanently disabling Network Agent, see *Disabling Network Agent*, page 13.

1. If you have initiated an installation on the **Patches** page, and the **Network Agent Disable** dialog box has displayed, and you **do not** want to permanently disable Network Agent, select **Cancel** to close the dialog box and then go to the **Status > General** page. In the **Network Agent** area, click **Enable Module** and then **OK** to confirm the action. The appliance automatically restarts.
2. If you have **not** initiated an installation on the **Patches** page, go to the **Status > General** page and in the **Network Agent** area click **Enable Module** and then **OK** to confirm the action. The appliance automatically restarts.
3. After the appliance has restarted, log on, go to the **Administration > Patch / Hotfixes > Patches** page, and perform the patch installation.
4. When the patch installation is complete, if you want to again temporarily disable Network Agent, return to the **Status > General** page and disable Network Agent.

The reason that Network Agent must be re-enabled prior to patch installation (if it is not permanently disabled) is that if Network Agent is stopped and the patch includes updates to Network Agent, the updates are not made to the stopped module. Thus, if it is re-enabled some time in the future, it may be incompatible with other modules on the system.

Hotfix management

Help | V-Series Appliance | Version 8.0.x

Related topics:

- *Hotfix application process*, page 52
- *Hotfix installation*, page 53
- *Hotfix history*, page 54

When necessary, Websense, Inc. releases a targeted *hotfix* to address a specific issue in an appliance module. In most cases, you receive notification of hotfixes in a Websense Technical Alert email, or (in response to a specific problem that you have reported) a Technical Support Agent recommends a specific hotfix.

The V-Series console **Hotfixes** page is your facility for finding, installing, uninstalling, and maintaining a history of hotfix application.

Go to the **Administration > Patches / Hotfixes > Hotfixes** page to manage hotfixes.

- In the majority of cases, you are notified of hotfixes through:
  - A Websense Technical Alert email, or
  - A Websense Technical Support Agent. The Agent will provide the name of a specific hotfix to address the problem you reported.
- 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.
- As a best practice, unless otherwise instructed by a Websense Technical Support Agent, do not install a hotfix for an issue that you have not encountered.
- Hotfix names are constructed: *XXX*-#.#.#-###:

  For example: Proxy-7.8.0-001
- The Hotfix facility 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 dependents are installed.

Hotfix application process

Following is a summary. For complete details, see *Hotfix installation*.

1. In the **Hotfix Installation** area, enter the name of the hotfix and click **Find**. If the hotfix is not found, review the notification from Websense and check that the name is entered correctly. If the name repeatedly returns not found, contact Websense Technical Support.
2. When a hotfix is found, a pop-up displays that includes a description of the hotfix and other pertinent information. If the description is what you expect, click **Download** to download the hotfix to the appliance. Otherwise, click **Cancel**.
3. After the hotfix is downloaded, a description and status display in the **Downloaded hotfixes** table. Confirm that the hotfix has no dependencies and is ready for installation. If the hotfix is dependent on another hotfix, you must download and install that hotfix first.
4. Click **Install** to install the hotfix.

If you have several appliances and do not want to download the hotfix from Websense.com multiple times, you can use the **Save to network location** link to copy the downloaded hotfix to a convenient location on your network, and then, on each appliance, use the **Upload Hotfix Manually** button to upload the file to the appliance.

For procedural information, see:

Hotfix installation, page 53

Hotfix history, page 54

Hotfix installation

Help | V-Series Appliance | Version 8.0.x

Related topics:

- *Hotfix management*, page 51
- *Hotfix application process*, page 52
- *Hotfix history*, page 54

Use the Hotfix Installation area to:

- Search for and download a hotfix
- Install a hotfix
- Delete a hotfix that has not yet been installed
- Copy a hotfix to a network location
- Upload a hotfix from a network location

The following options are available:

Hotfix ID entry field	Specify the exact name of the hotfix to be searched for in the Websense.com hotfix repository. Inclusion of leading or trailing zeros is required. The format is: *XXX*-#.#.#-### For example: Proxy-7.8.0-001
Find button	After the hotfix name has been entered, click **Find** to direct the Appliance manager to go to Websense.com to search for the hotfix. If the hotfix is found, a **Hotfix Details** pop-up dialog box displays with a description of the hotfix, and a **Download** and **Cancel** button.
Downloaded hotfixes table	This tables maintains a complete list of hotfixes downloaded to the appliance but not yet installed. A record of installed hotfixes is maintained in the Hotfix History section.
Hotfix ID	The hotfix ID.

Description	A high-level description of the hotfix that usually includes: • The name • A short description of the problem that the hotfix addresses • The module the hotfix applies to • Relative severity (high, moderate, low) • The release date • A link to the official **Release notes** (hosted on Websense.com) • A **Save to network location** link that opens a dialog that allows you to save the hotfix to a location on your network.
Status	States whether the hotfix is ready for installation or has a dependency on another hotfix that must be installed first.
Action	Includes the **Install** button to initiate installation, and a **Delete** button to remove the hotfix from the appliance prior to installation. To uninstall and remove a hotfix, see the uninstall function that is accessed from the Hotfix History area.
Upload Hotfix Manually	Use this button to upload a hotfix from the appliance to a location on your network.

Hotfix history

Help | V-Series Appliance | Version 8.0.x

Related topics:

- *Hotfix management*, page 51
- *Hotfix application process*, page 52
- *Hotfix installation*, page 53

Use the Hotfix History section to:

- View the current appliance version
- View a record of installed hotfixes
- Uninstall hotfixes
- View a record of uninstalled hotfixes

The following options are available:

View drop down list	From the drop-down list, select **Installed hotfixes** to populate the table with a list of hotfixes that have been installed, or that you attempted to install unsuccessfully. Select **Uninstalled hotfixes** to populate the table with a list of hotfixes that have been uninstalled, or that you attempted to uninstall unsuccessfully.
When **Installed hotfix** is selected from the **View** drop down list	
Radio button adjacent to the **Hotfix ID**	Select the radio button to activate the **Uninstall** button. If the hotfix has dependencies that prevent it from being uninstalled, a message is displayed below the table.
Hotfix ID	The hotfix ID.
Name	The name of the hotfix and a link to the Release Notes.
Module	The name of the effected appliance module.
Date Installed	The day and year that the hotfix was installed.
Status	Indication of whether the installation succeeded or failed. If the installation failed, a link is provided to the installation log file.
Uninstall button	Use this button to initiate uninstallation of the selected hotfix.
When **Uninstalled hotfix** is selected from the **View** drop down list	
Hotfix ID	The name of the hotfix.
Reason	A reason that you provide for uninstalling the hotfix. It is easy to lose track of why a hotfix was uninstalled. Recording a clear description here can save repeated errors and lost time in the future.
Date Uninstalled	The day and year that the hotfix was uninstalled.
Status	Success or failure status of the uninstall action. Occasionally a hotfix may fail to uninstall. One reason may be that uninstallation is dependent on uninstalling another hotfix or set of hotfixes.

Patches and hotfixes proxy settings

Help | V-Series Appliance | Version 8.0.x

If the appliance management interface (C) does not directly connect to the Internet, you can configure a proxy server through which the appliance checks for patches and hotfixes.

Use proxy server	Select the check box to enable or disable the option.
Proxy IP address and port	Specify the IP address and port number of the proxy to be used.
User name/ password (optional)	Optionally, authenticate the proxy connection with a user name and password.
Test Connection	Click **Test Connection** to test the connection to the specified proxy.

Using the backup utility

Help | V-Series Appliance | Version 8.0.x

Related topics:

- *Scheduling backups*, page 58
- *Full appliance configuration backups*, page 59
- *Component configuration backups*, page 60
- *Restoring a backup file*, page 61

Use the Backup tab of the **Administration > Backup Utility** page to initiate configuration backups, schedule recurring backups, or manage existing backup files. To restore an appliance or module configuration from an existing backup file, click the Restore tab, and then see *Restoring a backup file*, page 61.

Two types of backup are available on the V-Series appliance:

- A **full appliance configuration** backup saves all appliance settings, as well as configuration and policy information for all active modules (for example, TRITON AP-WEB and TRITON AP-EMAIL). Websense recommends running a full backup on every appliance in your network on a regular basis.

  Note that the full backup file may be smaller than the module backup files, because it is compressed.

- A **component configuration** backup saves all configuration information for the selected module. This includes any client and policy data stored on the selected appliance.

> **Note**
>
> Component configuration backup does not include a Content Gateway option.
>
> Content Gateway only backups (snapshot) can be performed in Content Gateway manager. Snapshots must be performed manually; there is no scheduling facility.

Backup types and backup status information are shown in the Perform Backup list. To start or schedule a backup, first select the backup type, and then click either **Run Backup Now** or **Configure Backup Schedule** (for information about scheduling backups, see *Scheduling backups*, page 58).

You must initially set up the backup function; it is not automatic. Once you schedule backups, however, those backups will continue to run at regular intervals without requiring further intervention. To stop a scheduled backup from recurring, click **Cancel Scheduled Backup**.

The Local Backup Files list shows all backup files stored on the current appliance. Select a backup type from the **View backups for** list to change the type of backup file shown.

Each entry in the list includes the following information:

- The date and time of the backup
- The name of the backup file

For full appliance configuration backup files, the following information is also included:

- The patch version of the appliance on which the backup was run. When you restore from a backup, the backup file must be the same version as the appliance you are restoring.
- The host name of the backup source.
- A comment on the policy information in each backup file.
  - **Email mode** indicates a full backup of an TRITON AP-EMAIL appliance.
  - **Full policy source** (TRITON AP-WEB mode) or **Web (policy source) and Email** (Web and Email mode) is the default comment if the backup was generated on the policy source appliance.
  - **User directory and filtering** (TRITON AP-WEB mode) or **Web (user/filtering) and Email** (Web and Email mode) is the default comment if the backup was generated on an appliance configured to run Filtering Service and User Service.

- **Filtering only** (TRITON AP-WEB mode) or **Web (filtering only) and Email** (Web and Email mode) is the standard comment if the backup was generated on a Filtering only appliance.

Up to 20 appliance backup files and 20 backup files for each module can be stored on the appliance. When the twenty-first backup file is created, the oldest file is automatically deleted.

To download a backup file to another machine, click the file name, then browse to path where you want to save the file.

To delete local backup files manually, mark the checkbox next to the backup file name in the Local Backup Files list, and then click **Delete**.

Scheduling backups

Help | V-Series Appliance | Version 8.0.x

Related topics:

- *Using the backup utility*, page 56
- *Full appliance configuration backups*, page 59
- *Component configuration backups*, page 60
- *Restoring a backup file*, page 61

Use the **Backup Utility > Configure Backup Schedule** page to specify how frequently and at what time of day the selected backup type is performed, and to select a location for storing backup files. Schedule each applicable backup type (full appliance, web, or TRITON AP-EMAIL separately.

To schedule backups:

1. Select a **Backup frequency**: daily, weekly, or monthly.
   - For weekly backups, select which day of the week the backup is run.
   - For monthly backups, select which day of the month the backup is run. You cannot schedule backups to run on the 29th, 30th, or 31st day of the month, because not all months have those days.
2. Specify a **Start time** for the backup process. Ideally, select a time when the appliance is unlikely to be under heavy load.

   Enter the time in 24-hour format (where 00:00 indicates midnight, and 12:00 indicates noon).
3. Provide a **Storage location** for the backup files. Only one remote backup location can be configured for each backup type.
   - Select **Appliance** to have the file stored locally. A maximum of 20 backup files can be saved, and the backup file directory cannot be renamed, moved, or deleted.

Backup files saved to the appliance can be viewed on the Backup Utility page, under Local Backup files.

- Select **Remote machine** to store the backup file on another machine in the network, then indicate whether to use a **Samba file share** or **FTP server** and provide the following connection information:
  a. The **IP address/hostname** of the remote machine, and the connection **Port** to use.
  b. The **Default directory** in which backup files will be created. A different subdirectory will be created automatically for each backup file type.

  Important
  If you want to create backup files for multiple appliances on the same remote machine, be sure to use a separate directory for each appliance's backup files.

  This avoids the possibility of conflicts that could lead to files being mistakenly overwritten or deleted.

  c. The **User name** and **Password** to use when connecting to the remote machine. If a network logon is used, also provide the **Domain** in which the account resides.
  d. Click **Test Connection** to make sure the appliance can communicate with the remote machine and write to the specified location.
  e. If you want remote backup files to be automatically deleted after a specified time period, mark the **Delete backup files that are older than** check box, and then select a time period from the list.

4. Click **OK** to save your changes and return to the Backup Utility page. The new backup schedule is displayed in the Perform Backup list.

Full appliance configuration backups

Help | V-Series Appliance | Version 8.0.x

A full appliance configuration backup saves all appliance settings, as well as saving configuration and policy data for all active modules (TRITON AP-WEB, TRITON AP-EMAIL, or both) on the appliance. If you have multiple appliances, run backups on each one. The backup file includes data for only the appliance on which it is created.

Note
If you have Websense software components installed off the appliance—like Log Server or the TRITON Manager—Websense recommends that you run the Backup Utility on those machines at approximately the same time that you back up your appliance. When you restore the system, this allows you to restore from a time-compatible set of backups on all machines.

Full appliance configuration backup files for TRITON AP-WEB appliances include:

- All configuration files for the appliance on which the backup is run, including configuration files for the V-Series manager
- A snapshot, including all configuration data, of Content Gateway
- All configuration settings for TRITON AP-WEB including:
  - Global configuration information, stored in the Policy Database (if Policy Broker is running on the selected appliance)
  - Local configuration information, such as Filtering Service and Log Server settings, stored in the **config.xml** file (if Policy Server is running on the selected appliance)
  - Websense component initialization (.ini) and configuration (.cfg) files

Full appliance configuration backup files for TRITON AP-EMAIL appliances include:

- All configuration files for the appliance on which the backup is run, including configuration files for the V-Series manager
- Policy and configuration data for TRITON AP-EMAIL

For appliances running in Web and Email mode, both sets of information are included in backup files.

Component configuration backups

Help | V-Series Appliance | Version 8.0.x

Component configuration backups save all configuration information, including policy data, for the selected module.

- Web configuration backups performed on the *full policy source* appliance include all information stored in the Policy Database.
- TRITON AP-EMAIL configuration backups can be performed only if the Email module is enabled on the selected appliance.
- Backup operations for Content Gateway are managed through Content Gateway manager. Click the Content Gateway manager link at the top of the Backup Utility page to open the console and initiate backups.

Restoring a backup file

Help | V-Series Appliance | Version 8.0.x

Related topics:

- *Using the backup utility*, page 56
- *Scheduling backups*, page 58
- *Full appliance configuration backups*, page 59
- *Component configuration backups*, page 60

When you initiate the restore process, all current settings for the appliance or module are erased. Backup files stored on the appliance are not affected. When you are restoring the full appliance configuration, at the end of the restore process, the appliance restarts. The appliance is not restarted after restoring a module.

To restore an appliance or module to a saved configuration:

1. Stop all Websense software components running off the appliance.

   For example, stop Log Server, Sync Service, Linking Service, transparent identification agents, all components associated with the TRITON Manager, and the integrated TRITON AP-DATA Server.
2. Open the V-Series manager on the appliance whose configuration you want to restore and go to the **Administration > Backup Utility** page.
3. Click the **Restore** tab, then select the configuration type that you want to restore from the **Select restore mode** list. Note that when you restore a full appliance configuration:
   - The current appliance version must match the version associated with the backup file. (The appliance version is displayed on the **Restore** tab.) Thus, a version 8.0 backup can only be restored on an appliance that is at version 8.0.
   - The current appliance policy source mode (Full policy source, User directory and filtering, or Filtering only) must match the policy source mode in effect when the backup file was created.
   - In most circumstances, the current appliance mode (Email, Web, Web and Email) must match that of the backup file. (For example, a backup from a TRITON AP-EMAIL-only appliance must be used to restore a TRITON AP-EMAIL-only appliance.)

     There is one exception. If you are running in Web and Email mode on a V10000 appliance, you can restore a Web full backup.
   - 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 G2R2 must be used to restore a model V10000 G2R2 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 and makes use of unique ID numbers from that appliance.

4. Click **Run Restore Wizard**. The restore wizard opens.
5. Select a radio button to indicate where the backup file is stored, and then click **Next**.
   - **This remote machine: <***host name or IP address***>**: Retrieve the file from the default location on the specified machine. The default location is the path specified in the backup schedule for the selected backup type.
   - **This appliance**: Use a backup file that was saved locally.
   - **Another location (browse for file)**: Use a file saved on any accessible machine in the network.
6. Select or specify the file to use.
   - If you selected the default local or remote backup file location, you are given a list of available backup files to use. Select an entry in the list, and then click **Next**.
   - If you selected another location, browse to the path on the remote machine where the backup file is located, and then click **Next**.
7. Verify the details on the Confirm page, and then click **Restore Now**. The appliance is restored to the selected configuration.

   If you have initiated a full appliance configuration restore, the appliance is restarted during the restore process.
8. Before starting the off-box components, ensure that the system time of all TRITON component hosts is synchronized. On the appliance, either set the time manually, or, if an NTP server is configured, click OK to trigger an update with the NTP server.
9. Start the Websense components that are running off the appliance.

   Note that 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.

Logs

Help | V-Series Appliance | Version 8.0.x

Websense Technical Support may request log files to assist you with troubleshooting. This page provides access to these log files for viewing and download.

> **Note**
>
> Network Agent generates a log file only if you have enabled logging on the Web module of the TRITON Manager.
>
> If you want to examine Network Agent log files in the V-Series console, first log on to the Web module of the TRITON Manager and navigate to **Settings > Network Agent > Global**. Then scroll down to **Additional Settings** to enable logging of protocol traffic and specify a logging interval.

Select the module for which you want to view logs:

- Appliance Controller
- Content Gateway
- TRITON AP-WEB
- Network Agent
- TRITON AP-EMAIL

If you are reviewing the Appliance Controller log, next select the date range.

- Use the drop-down list to choose the date range.
- Log files are available in weekly increments for up to 5 weeks.

Then select the view option. Select either:

- View last __ lines

  Indicate how many lines of the log you want to see in a pop-up window:
  - last 50 lines
  - last 100 lines
  - last 500 lines
- Download entire log file

Click **Submit** to begin the process of gathering the requested log file.

If you are downloading the entire log file, use the **File Download** dialog box to navigate to the save location.

Toolbox

Use the **Administration > Toolbox** page to set up customized block pages, access basic Linux commands, and assist with troubleshooting.

Web block pages

Help | V-Series Appliance | Version 8.0.x

The appliance hosts a set of default Web block pages. These are displayed to end users each time a web request is blocked.

Block pages are constructed from HTML and JavaScript files. By default, the block page has 3 main sections:

- The header explains that the site is blocked.
- The top frame contains a block message showing the requested URL and the category of the URL.
- The bottom frame presents any options available to the user (go back to the previous page, continue to the site, use quota time to access the site, use different credentials to try to access the site).

If the site is blocked because it belongs to a category in the Security Risk class, a special version of the block page is displayed.

Block pages are described in detail in the section titled Block Pages, in Administrator Help for the Web module.

To verify the behavior and appearance of Web block pages, use the links at testdatabase.websense.com to attempt to access test sites in categories that your organization blocks.

Use the **Administration > Toolbox** page to determine whether to:

- Use the block pages (both standard and security) provided with your TRITON AP-WEB software (**Default block page**).
- Edit the block page files to suit the needs of your organization (**Custom block page**).

Customizing block pages

When you select **Custom block page**, a copy of the default block page files is created in an editable directory on the appliance. The default block page files are neither moved nor deleted, so that you can revert to them at any time.

After selecting the custom block page option:

1. Select the files you want to change, and then click **Download File(s)**. The files are copied to a location on your computer that you specify. The available files are:

File Name	Contents
block.html	Contains the text for the top frame of the block message, which explains that access is restricted, lists the requested site, and describes why the site is restricted.
blockFrame.html	Text and button (Go Back option) for sites in blocked categories.
blockStyle.css	Cascading style sheet containing most block page styles.
continueFrame.html	Text and buttons for sites in categories to which the **Confirm** action is applied.
master.html	Constructs the information frame for the block page, and uses one of the following files to display appropriate options in the bottom frame.
messagefile.txt	Contains text strings used in block pages
moreInfo.html	Content for the page that appears when a user clicks the **More information** link on the block page.
webDLPPolicyViolation.html	Provides block page content when TRITON AP-DATA components block content from being posted to or downloaded from the Web.
quotaFrame.html	Text and buttons for sites in categories to which the **Quota** action is applied.
security.js	A JavaScript file used in construction of a security block page.

   - When you select a single file, its details are displayed, including its default use, last modification date, and size.
   - If you select more than one file to download, the files are packaged into a single ZIP file.
2. Make modifications locally.

Important

Do **not** change the default file names.

   - To replace the Websense logo with another image, see *Changing the block page logo*.
   - If the information that you want to display in the block message is longer than the space provided, see *Changing the size of the message frame*.
   - If you want to start again from the original, default set of block page files, see *Starting over*.

- Additional information about customizing block pages can be found in the "Block Pages" section of the Administrator Help for the Web module.

3. Click **Upload File(s)** to place the modified files and any supporting graphics files on the appliance.
   - The edited files can refer to custom graphics files (like logos). If you use custom graphics, be sure to upload these additional graphics files to the editable directory.
   - If you have more than 5 files to upload, select the first 5 files to be uploaded, and then click **Add More Files**. You can upload a maximum of 10 files at a time.
4. Click **Apply Changes**. This restarts Filtering Service.
5. To test the customized block pages, go to testdatabase.websense.com and try to access test sites in categories blocked by your organization's policies.
6. Return to Step 2 if adjustments are needed.

Changing the block page logo

The **master.html** file includes the HTML code used to display a Websense logo on the block page. To display your organization's logo instead:

1. Download the **master.html** file to a temporary directory.
2. Locate an image file for your organization's logo, and copy it to the same location.
3. Open **master.html** in a text editor, such as Notepad or vi (not an HTML editor), and edit the following line to replace the Websense logo with the image name for your organization's logo:

   ```
   <img title="Websense" src="/Images/wslogo_block_page.png"
   ...>
   ```

   - Replace the value of the **title** parameter to reflect the name of your organization.
   - Change the path to indicate that your image file is located in the **Custom** folder (not in the Images folder).
   - Replace **wslogo_block_page.png** with the name of the image file containing your organization's logo.

     The result will look something like this:

     ```
     <img title="ABC_Corporation" src="/en/Custom/
     myimage.png" ...>
     ```

     Note that parameter and folder names are case-sensitive.
4. Save and close the file.
5. Upload both the image file (containing your logo) and the edited copy of **master.html** to your V-Series appliance, and then click **Apply Changes**.

Changing the size of the message frame

Depending on what information you want to provide in the block message, the default width of the block message and height of the top frame may not be appropriate. To change these size parameters:

1. Download the **master.html** file.
2. Open the file in a text editor, such as Notepad or vi (not an HTML editor).
3. To change the width of the message frame, edit the following line:

   ```
   <div style="border: 1px solid #285EA6;width: 600px...">
   ```

   Change the value of the **width** parameter as required.
4. To cause the top frame of the message to scroll, in order to show additional information, edit the following line:

   ```
   <iframe src="$*WS_BLOCKMESSAGE_PAGE*$*WS_SESSIONID*$" ...
      scrolling="no" style="width:100%; height: 6em;">
   ```

   Change the value of the **scrolling** parameter to **auto** to display a scroll bar when message text exceeds the height of the frame.

   You can also change the value of the **height** parameter to change the frame height.
5. Save and close the file.
6. Upload the file to your V-Series appliance, and then click **Apply Changes**.

Starting over

If you need to start over with a default block page file at any time, click the **default files** link under the Upload and Download buttons. This allows you to download a copy of the default block page files to your local machine.

Edit the files you want to change, and then upload the edited files to the appliance.

Appliance command line

Help | V-Series Appliance | Version 8.0.x

On the appliance **Toolbox** page, the **Appliance command line** section provides:

- The ability to turn on and off SSH remote access to the appliance **command line interface** (the same shell used to run the **firstboot** script). SSH access allows administrators to log on to the appliance command line shell from machines on the network that have a route to the appliance.
- Access to a **command line utility** that is embedded within V-Series console. The command line utility provides convenient access to common troubleshooting commands.

SSH Remote Access

Use the **Remote Access** option to enable and disable SSH access to the appliance command line interface.

To connect to the appliance command line shell when SSH access is enabled:

- Use a terminal emulator that supports SSH.
- SSH to the IP address of the C interface.
- Use your V-Series manager administrator logon credentials when prompted.

- Run the “help” command to see the available commands.

Following is a list of command line commands. The debug-util sub commands are also available in the V-Series console in the *Command line utility* and are described in detail there.

admin email
debug-util controller
debug-util email
debug-util na
debug-util view
debug-util proxy
debug-util web
firstboot
help
history
ip address
ip dns
ip gateway
local-access
module disable
module enable
module restart
module start
module stop
password-logon disable
password-logon enable
patch delete
patch list
policy-source
quit
reload
remote-access disable
remote-access enable
reset password
show cpu
show disk-io
show disk-space
show interface c
show memory

show module
show module service
show password-logon
show patch
show patch history
show platform
show policy-source
show remote-access
show remote-access history
show security-mode
show smtp server
show ssh
shutdown
smtp server
ssh disable
ssh enable

Command line utility

Use the **Command Line Utility** to run troubleshooting, debugging, and utility commands. Results are displayed in the **Console output** section of the page. You can download the output file for the command last executed.

Click **Launch Utility** to open the command utility.

The **Component** drop down list includes an entry for each module installed on the appliance. Select the module that you want to work with:

- Appliance Controller
- Content Gateway
- TRITON AP-WEB or Web Filter & Security
- Network Agent
- TRITON AP-EMAIL

Select the command you want to run from the **Command** drop-down list, enter appropriate parameters as described below, and then use the **Run** and **Stop** buttons as appropriate:

Command	Description	Parameters
arp	Displays the kernel ARP table for the selected module.	None.
cache-user-names	Applies to the Web module only. Use it to turn on, off, or query the status of caching of user names resolved from IP addresses by Content Gateway. Cached entries are valid for 10 minutes.	[Action]: Enter **enable** to turn on user name caching. Enter **disable** to turn off user name caching. Enter **status** to display the status of user name caching.
content-line -r	Applies to the Content Gateway module only. Use it to display the current value of a configuration variable in Content Gateway's records.config file.	[Variable Name]: Enter the name of the configuration variable for which you want to retrieve a value. **Example**: `proxy.config.vmap.enabled` This variable returns "0" or "1". "0" indicates that the virtual IP manager is disabled; "1" indicates that it is enabled. For a complete list of valid configuration variables, click the link **Content Gateway variables** and navigate to the records.config topic. [You may be asked for credentials if you have not logged on to the proxy console earlier in the session.]
content-line -s	Applies to the Content Gateway module only. Use it to set the value of a configuration variable in Content Gateway's records.config file. With this command, you can make changes to Content Gateway variables without restarting the proxy. To activate the changes, run `content_line -x` (see below).	[Variable Name]: Enter the name of the variable you want to modify. [Value]: Enter the value you want to supply the variable. **Example**: Enter the variable name **proxy.config.arm.enabled** and the value "1" or "0". This enables or disables the ARM, which is used for transparent proxy caching, IP spoofing, and ARM security. For a complete list of valid configuration variables, click the link **records.config**. [You may be asked for credentials if you have not logged on to the proxy console earlier in the session.]

Command	Description	Parameters
content-line -x	Applies to the Content Gateway module only. Use it to read and apply the values of all configuration variables in Content Gateway's records.config file. If you have used `content_line -s` to change the setting of any variables in the file records.config, you can activate your changes immediately (without restarting the proxy) by running this command.	None.
debugging reset	Reset the debugging level to factory status.	None.
debugging status	Show the debugging level status.	None.
dig -t mx	Applies to the Email module only. This command returns information on the specified MX server.	[Domain name]: enter the domain name of the MX server you want to query.
dig -t txt	Applies to the Email module only. This command returns the SPF information from the specified server.	[Domain name]: enter the domain name of the server you want to query for SPF records.
dig -x	Applies to the Email module only. This command returns the PTR information for the specified IP address.	[IP address]: enter the IP address for the server you want to query for PTR information.
directory-agent-service	Applies to the Web module only. This command disables and enables the directory agent service.	[Action]: Enter **enable** to enable the directory agent service. Enter **disable** to disable the directory agent service.
email-subscription-reset	Applies to the Email module with the Email Hybrid module only. This command clears all TRITON AP-EMAIL subscription information. After the command is run, the user must re-enter the subscription key. **Note**: If the network is unreachable, the command takes 30 minutes to timeout.	None
email shell debug module	Applies to the Email module only. Debugs the specified TRITON AP-EMAIL module. You must click **Stop** to end the debug session.	[Expression]: Enter the name of the module you want to debug. Click the information icon for examples. Separate multiple entries with a comma. Examples: filter event all, config_daemon event all

Command	Description	Parameters
ethtool	Displays the current Ethernet card settings of the specified network interface (NIC) device. This includes: • Supported ports • Supported link modes • Auto-negotiation support • Advertised link modes • Advertised auto-negotiation • Speed • Duplex • Port • PHYAD • Transceiver • Auto-negotiation setting • Wake-on support • Wake-on status • Link detection Use **ethtool** to verify local network connectivity. For example, if the ping command fails, use this to determine if you are using the right IP address.	None.
ethtool -k	Displays offload parameters, including checksum, for the selected network interface (NIC) device. This can be used to investigate a variety of problems. For example, if your NIC settings are right, but you are having duplex issues, you know you need to change your duplex settings.	None.
ifconfig	Use to troubleshoot network interface issues. Helps you identify IP issues and check subnets and network interfaces. Displays status information about the specified network interface (NIC), including but not limited to: • IP and broadcast address • subnet mask • number of packets received and transmitted • number of bytes received and transmitted	[Interface]: Enter the NIC for which you want settings. Click the information icon for valid NIC values. Enter **all** to display all interface status. Example: eth0 or eth1
maillog download	Applies to the Email module only. Downloads the specified maillog file.	[File name]: Enter the file name for the mail log you want to download.
maillog show	Applies to the Email module only. Displays all available maillog file names, along with starting and ending timestamps and file size.	None.

Command	Description	Parameters
multiplexer	Enables and disables the Multiplexer service that supports SIEM integrations. See Administrator Help for the Web module. Multiplexer service will not run on a Filtering only appliance. Instead it transparently uses the Multiplexer service running on the Policy source machine.	[Action]: Enter **enable** to enable the Multiplexer service. Enter **disable** to disable the Multiplexer service.
nc -uvz	The netcat (nc) utility. Attempts to read and write data across a network using user datagram protocol (UDP) to the specified server. Use it for functional tests of components and verification of connectivity. Use it to check data going across a UDP network. If you are having problems loading a Web page, or are getting a block, this command can help determine the problem. If you see a reset coming from the proxy, you can determine which DOM/module it is coming from. **-u** Run netcat in UDP mode **-v** Run netcat in verbose mode. **-z** Run netcat in zero I/O mode (used for scanning).	[Destination]: Enter the IP address of the server with which you want to communicate. [Port]: Enter the port number of that server.
nc -vz	The netcat (nc) utility. Attempts to read and write data across a network using transmission control protocol (TCP) to the specified server. Use it for functional tests of components and verification of connectivity. **-v** Run netcat in verbose mode. **-z** Run netcat in zero I/O mode (used for scanning)	[Destination]: Enter the IP address of the server with which you want to communicate. [Port]: Enter the port number of that server.

Command	Description	Parameters
netstat -neatup	Displays a list of open sockets on the selected module, appended with the process column. **-n** Displays active TCP connections. However, addresses and port numbers are expressed numerically, and no attempt is made to determine names. **-e** Displays ethernet statistics, such as the number of bytes and packets sent and received. **-a** Displays all active TCP connections and the TCP and UDP ports on which the computer is listening. **-t** Indicates which open ports are using TCP. **-u** Indicates which open ports are using UDP. **-p** Limits display of statistics or state of all sockets to those applicable to protocol.	None.
netstat -ng	Displays multicast group membership information about the selected module. **-n** Displays active TCP connections. However, addresses and port numbers are expressed numerically, and no attempt is made to determine names. **-g** Shows the multicast group memberships for all interfaces.	None.

Command	Description	Parameters
netstat - nItup	Use one of the netstat commands if you are having network connection and routing issues. **netstat -nItup** displays the following: • the amount of traffic in your network. • all active TCP connections and the TCP and UDP ports on which the computer is listening. Addresses and port numbers are expressed numerically, and no attempt is made to determine names. • Ethernet statistics, such as the number of bytes and packets sent and received. **-n** Displays active TCP connections and the ports they use when they connect. (This is useful if, for example, Filtering Service is not filtering. You can look at the connection the module is using here. If it is not the IP and port of the Filtering Service machine, you have found the source of the problem.) **-I** Shows the state of a particular interface, such as eth0 or eth1. **-t** Indicates which open ports are using TCP. **-u** Indicates which open ports are using UDP. **-p** Limits display of statistics or state of all sockets to those applicable to protocol.	None.

Command	Description	Parameters
netstat -s	Displays summary statistics for each protocol on the selected module. By default, statistics are shown for the IP, ICMP, TCP, UDP, and TCPEXT protocols. This includes such things as: • IP - the number of packets received, forwarded, and discarded for each protocol. • ICPM - the number of messages received, failed, sent. • TCP - the number of active and passive connection openings and failed connection attempts. • UDP - the number of packets received and set. • TCPEXT - statistics about SYN cookies, ACKs, packets received and queued, retransmits, and DSACKs. This is just a sampling. Many more statistics are shown.	None.
nslookup	Use this for DNS resolution problems. For example, if a particular Web site is not loading, perform an nslookup on it to view its IP address. **nslookup** lets you query DNS servers to find DNS details, including IP addresses of a particular computer, MX records for a domain, and the DNS servers of a domain.	[Host]: Enter the hostname (for example myintranet.com) or IP address of the host for which you want DNS information. [DNS server]: Enter the hostname or IP address of the DNS server for the appliance.
pem settings download	Applies to the Email module only. Downloads Personal Email Manager configuration settings, log files, and end-user personal Always Block/Permit files.	None.
ping, ping6	Checks that a hostname or IP address exists, can accept requests from the selected module, and that DNS is resolving. Use this to test connectivity to another host— for example, the TRITON AP-DATA server or TRITON Manager machine—and determine response time. Use **ping** for IPv4 addresses, and **ping6** for IPv6 addresses. **Note: ping6** is not supported in the TRITON AP-WEB module.	[Destination]: Enter the hostname (for example myintranet.com) or IP address of the host you want to test.

Command	Description	Parameters
ping -I, ping6 -I	Checks that a network interface can communicate with a hostname or IP address and that DNS is resolving. Use this to test connectivity to another host— for example, the TRITON AP-DATA server or TRITON Manager machine—from one of the appliance NICs. Use **ping** for IPv4 addresses, and **ping6** for IPv6 addresses. **Note: ping6 -I** is not supported in the TRITON AP-WEB module.	[Interface]: Enter the name of the NIC you want to test. Click the information icon for valid NIC values. **Example**: eth0 [Destination]: Enter the hostname or IP address of the host you want to test.
policy-broker-token	Pertains only to the Web module. Use this command to retrieve the Policy Broker token for this appliance. This may be needed to configure support for Remote Filtering. See the Websense Technical Library for more information.	None.
print-bypass	This command applies only to the Content Gateway module. When Content Gateway is in transparent proxy caching mode, use this command to see which source and destination IPs the proxy is bypassing. If sites are not loading correctly, this helps you identify if a site is loading from your cache or going directly to the site for download. All entries in the source and destination bypass tables for the proxy are printed to the output console. For more information on source and destination bypass, see the **Configuration Files > bypass.config** section of the Content Gateway manager Help system.	None.
proxy-net-check	This command applies only to the Content Gateway module. Use it to display diagnostics for Content Gateway, such as: • interface status • connection to DNS name servers • connection to Policy Server • gateway packet loss • ping statistics for various modules • Internet connectivity • filtering status This command is useful for investigating latency issues, outages, or filtering problems, among other things.	None.

Command	Description	Parameters
route -A inet6 -n	Display the contents of the selected module's kernel IP routing table IPv6 entries in numeric format. This is useful in complex network environments—for example, those with proxy chaining—to see if the environment is set up properly.	None.
route -n	Display the contents of the selected module's kernel IP routing table in numeric format. This is useful in complex network environments—for example, those with proxy chaining—to see if the environment is set up properly.	None.
route add	This command applies only to the Content Gateway module. This command supports all of the add route parameters that are supported on the **Configuration > Routing** page of the V-Series manager. In addition, this command supports the ability to specify the maximum segment size (MSS).	[Route type]: Enter the route type. The host route is for routing to individual hosts. The net route is for an entire network or subnet. [Target]: Enter the target network address or host IP address for the route. [Netmask]: Enter the netmask for the for the target network or host. [Gateway]: Enter the IP address of the next hop router. [Interface]: Enter the appliance interface to use for this route. [Mss]: Enter the maximum segment size to use for this route. Expressed in octets.
state-server	Applies to the Web module when the appliance is configured as a Full policy source or User directory and filtering system. In multiple Filtering Service deployments, Websense State Server is required for proper application of time-based filtering actions (Quota, Confirm, Password Override, and Account Override). See **Policy Server, Filtering Service, and State Server** in Administrator Help for the Web module.	[Action]: Enter **enable** to enable the state server service. Enter **disable** to disable the state server service.

Command	Description	Parameters
sysctl-tcp-timestamps	Pertains only to the Content Gateway module. View or change the setting for TCP time stamps. Edit this setting if you are experiencing performance problems with specific Web sites that do not properly support TCP time stamps. The operating system sets this kernel setting during installation. If the setting was changed and you are experiencing site latency with other sites—those that work best with TCP time stamps— return the setting to its default value and consider routing traffic to the problematic sites around the proxy. Be sure to choose a setting that works well for the sites that are most important to you. The setting affects the use of time stamps by the kernel for all TCP connections.	[Value]: Enter “0” to disable the current time stamp setting, and restore it to its default. Enter “1” to re-enable a custom setting. Enter “view” to view the current setting.
sysctl-tcp-window-scaling	Pertains only to the Content Gateway module. View or change the setting for TCP window scaling. Edit this setting if you are experiencing performance problems with specific Web sites that do not properly support TCP windows scaling. The operating system sets this kernel setting during installation. If the setting was changed and you are experiencing site latency with other sites—those that work best with TCP windows scaling— return the setting to its default value and consider routing traffic to the problematic sites around the proxy. Be sure to choose a setting that works well for the sites that are most important to you. The setting affects the use of windows scaling by the kernel for all TCP connections.	[Value]: Enter “0” to disable the current window scaling setting, and restore it to its default. Enter “1” to re-enable a custom setting. Enter “view” to view the current setting.

Command	Description	Parameters

tcpdump	Use for any Web traffic issues to get packet captures—for example, if a site will not load or if you are having authentication problems.
	tcpdump intercepts and displays packets being transmitted or received by the specified network interface. Use the Expression field to select which packets are displayed.
	The output from **tcpdump** can help you determine whether all routing is occurring properly, to and from the interface. The output is verbose; it displays the data of each package in both hex and ASCII; and it includes a link-level header on each line.
	Note: If you do not stop the tcpdump command manually, 10,000 packets are captured, the maximum allowed.
		[Interface]: Enter the name of the NIC you are debugging. Click the information icon for valid NIC values.
		Example: eth0
		[Expression]: Enter a boolean expression that filters the packets to those of interest. Click the information icon for examples.
		Example 1: To capture all TCP traffic to and from the proxy on port 8080, enter this expression:
		`tcp port 8080`
		Example 2: To capture all TCP traffic to the site google.com, enter this expression:
		`tcp and dst host google.com`
		Example 3: To capture all TCP traffic from a specific end-user machine, enter this expression:
		`tcp and src host user.websense.com`
		Note: You can enter a hostname if it is resolvable by a DNS server, but the output uses IP addresses either way.

tcpdump -w	Use this to dump traffic (raw packets) from the specified NIC to a file. To download the file, click the link, **Download output file for last command**, after running the command. This link is under the console output window. Websense Technical Support may request this file on occasion.	[Interface]: Enter the name of the appliance NIC you are debugging. Click the information icon for valid NIC values. [Expression]: Enter a boolean expression that filters the packets to those of interest. Click the information icon for examples. Enter **all** to capture all packets. **Note:** You can enter a host name if it is resolvable by a DNS server, but the output uses IP addresses either way.
top -bn1	Displays all operating system tasks that are currently running on the selected module. Use this to help troubleshoot CPU and memory issues. **-b** Run in batch mode. **-n** Update the display for a number of iterations, then exit. **-1** Do not display idle processes.	None.

Command	Description	Parameters
traceroute, traceroute6	Use this to determine the route taken by packets across a network to a particular host. If some machines are not getting filtered or blocked, or if traffic is not even getting to the appliance, this shows the devices (or hops) that are between the machines that may be blocking access to the host. Use **tcpdump** to get a packet capture from each device. If you are having latency issues, **traceroute** can also help identify the causes. Use **traceroute** for IPv4 addresses, and **traceroute6** for IPv6 addresses. **Note: traceroute** is of limited utility if an IP address is being spoofed. **Note: traceroute6** is not supported in the TRITON AP-WEB module.	[Destination]: Enter the hostname or IP address of the host destination you are investigating
user-group-ip-precedence	Applies to the Web module only. Use this command to change the precedence of identification attributes applied to: filtering policy, Delegated Administrator (DA) role identification, protocol policy, and quota time available. By default, the precedence attributes are, in descending order: User > Computer > Network > Group > Domain When user-group-ip-precedence is enabled, the precedence order is: User > Group > Domain > Computer > Network	[Action]: Enter **enable** to modify the precedence order to: User > Group > Domain > Computer > Network Enter **disable** (default) to set the precedence order to: User > Computer > Network > Group > Domain Enter **status** to display the current setting. **WARNING:** Changing the state of user-group-ip-precedence causes Filtering Service to stop and restart.

Command	Description	Parameters
wget	Use to initiate a non-interactive download of files from the Web, so you can diagnose connectivity issues. Use **wget**, for example, if you have configured the proxy, but cannot access the Web. **wget** simulates the proxy going out and retrieving the Web site. This command supports HTTP, HTTPS, and FTP protocols.	[URL]: Enter the URL of the Web site from which you want to download files.
wget-proxy	Use to test connectivity between the specified URL and the proxy (file download not supported). Use **wget**, for example, if you have configured the proxy, but cannot access the Web. **wget** simulates the proxy going out and retrieving the Web site. This command supports HTTP, HTTPS, and FTP protocols.	[URL]: Enter the URL of the Web site to which you want to test connectivity. [Proxy IP]: Enter the proxy IP address. This is the IP address of the P1 interface on most appliance configurations. [Port]: Enter the port on which the proxy expects this traffic. 8080 is configured for HTTP by default. 8070 is configured for HTTPS by default. [User name]: Enter the user name of the client, if required for authentication. [Password]: Enter the password of the client, if required for authentication. Enter 'none' in both fields if user name and password are not applicable.

Technical Support tools

Help | V-Series Appliance | Version 8.0.x

When you collaborate with Websense Technical Support or a Websense partner to examine possible causes for network issues, these built-in tools can assist with troubleshooting:

- *Troubleshooting ports*
- *Appliance Configuration summary*
- *Remote access*

Troubleshooting ports

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TRITON AP-WEB provides the option to open troubleshooting ports temporarily, so that various troubleshooting tests can be run. (This facility is not available for TRITON AP-EMAIL.)

Use this tool only when directed to do so by Websense Technical Support.

Check **Enable troubleshooting ports**, and then click **Save** to cause the special ports to be enabled.

Important

Be sure to **clear** the check box and click **Save** to disable the ports when Technical Support is done using them. Do not leave these ports open and unattended.

Appliance Configuration summary

Help | V-Series Appliance | Version 8.0.x

The configuration summary tool gathers data from the appliance and generates an archive file that can be sent to Websense Technical Support for analysis and debugging. The process takes 1 to 2 minutes.

When Websense Technical Support requests this file:

- Click **Generate File**.
- When the file is ready, a message appears at the top of the page: Configuration summary has been successfully collected. Click the link in the message to download the archive file to your desktop.
- You can then open the file or save it.
- Your technician will provide an FTP site for secure file transfer to Websense Technical Support.

Remote access

Help | V-Series Appliance | Version 8.0.x

Enable remote access only at the request of Websense Technical Support.

- When you click **On** and then click **Save**, a passcode is generated and displayed on screen.
- Provide the passcode to your Websense Technical Support technician. This enables SSH, so that the technician can log on to your appliance.
- Each time you allow remote access to the appliance and a Websense technician logs on, a record is added to the **Remote access logon history** at the bottom of the **Toolbox** page.
- When the technician is done, be sure to click **Off** and click **Save** to disable the access.

Account management

Help | V-Series Appliance | Version 8.0.x

Use the **Administration > Account Management** page to:

- Change the password for accessing V-Series manager (*Changing the V-Series manager password*)
- Change the password for accessing Content Gateway manager (*Content Gateway manager password reset*)
- Specify the admin notification email address and SMTP server for password recovery email messages (*Setting the admin notification email address*)
- From the list of available languages, select the language in which the Help system will display (*Help system language*).

Changing the V-Series manager password

Help | V-Series Appliance | Version 8.0.x

1. Enter the current password.
2. Enter the new password.
3. Confirm the new password.

Click OK to save the new password.

Cancel discards all changes entered since the last **OK** action and restores the entry fields to the last saved values.

Setting the admin notification email address

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Use these settings to define and validate the email address and SMTP server used when V-Series manager password recovery is performed. For a description of the password recovery mechanism, see *V-Series manager password reset*.

1. Specify the email address to which password recovery email messages are sent.
2. Specify the SMTP server IP address and port.
3. If the SMTP connection requires authentication, provide the account name and password.
4. Validate the SMTP settings with the Test Connection button.

Click OK to save the new values.

Cancel discards all changes entered since the last **OK** action and restores the entry fields to the last saved values.

Content Gateway manager password reset

Help | V-Series Appliance | Version 8.0.x

This option is available only when Content Gateway is run on the appliance.

1. Click **Reset Password** to reset your proxy password.
2. The new password appears at the bottom of the screen. Write it down.
3. As soon as you navigate away from the **Account Management** page in V-Series manager, your reset password is no longer displayed.
4. Log on to Content Gateway manager with the new password.
5. Go to **Configure > My Proxy > UI Setup > Login** to change the new password to the desired string.

V-Series manager password reset

Help | V-Series Appliance | Version 8.0.x

If you forget or misplace the V-Series console logon password, there are 2 ways to establish a new password. Both are initiated on the logon portal.

Click **Forgot my password**.

- If a notification email address and SMTP server have been configured, a temporary password is mailed to the email address. Log on using the temporary password within 1 hour and reset your password. See, *Setting the admin notification email address*.
- If a notification email cannot be sent, an error message displays and you are advised to contact Websense Technical Support. A security code is also provided. Make a note of it; it is required by Websense Technical Support to generate a new password.

Help system language

Help | V-Series Appliance | Version 8.0.x

From the **Language** drop down list, select the language in which you would like Help system information to be displayed, and click OK to apply your selection.